The McGraw-Hill Companies

Cases in Strategic Management

Amita Mital

The McGraw-Hill Companies

Cases in Strategic Management

The McGraw-Hill Companies

Cases in Strategic Management

Amita Mital
Associate Professor
IIM, Lucknow

Tata McGraw-Hill Publishing Company Limited
NEW DELHI

McGraw-Hill Offices

New Delhi New York St Louis San Francisco Auckland Bogotá Caracas
Kuala Lumpur Lisbon London Madrid Mexico City Milan Montreal
San Juan Santiago Singapore Sydney Tokyo Toronto

The McGraw-Hill Companies

Tata McGraw-Hill

Published by the Tata McGraw-Hill Publishing Company Limited,
7 West Patel Nagar, New Delhi 110 008.

ISBN (13) 978-0-07-066027-4
ISBN (10) 0-07-066027-1

Managing Director: *Ajay Shukla*
General Manager—Publishing (B&E/HSSL and School): *V Biju Kumar*
Editorial Manager—B&E: *Tapas K Maji*
Junior Editorial Executive: *Hemant K Jha*
Junior Executive—Editorial Services: *Anubha Srivastava*
General Manager Marketing—Higher Education & School: *Michael J. Cruz*
Asst. Product Manager: *Vijay Sarathi Jagannathan*
Controller—Production: *Rajender P Ghansela*
Asst. General Manager—Production: *B L Dogra*
Senior Production Executive: *Medha Arora*

Typeset at Buk Print, B-180A, Gurunanakpura, Laxmi Nagar, Delhi 110 092 , and text and cover printed at
India Binding House, Sector-65, NOIDA 201 301

Cover Design: K Anoop

RALCRDRYRZCZA

The McGraw-Hill Companies

The McGraw-Hill Companies

To

The Memory
of
My Father

Preface

Regardless of how good a swim instructor you are, you can't teach a person to swim in the parking lot of a swimming pool.

—Norman Kunc

The case method plays a major role in contemporary teaching of Strategic Management. It is an effective means of introducing management students to common business situations and practices. Indian business students, academicians and practitioners have to rely largely on cases written in the US or European context. Often Indian students find it difficult to relate to US or European contexts and hence appreciation and application of these cases is limited. This is mainly due to paucity of Strategic Management cases in the Indian context. The collection of Strategic Management cases in this book, all from the Indian context, offer students a broad exposure to business problems, issues, policies and practices, which are appealing to students and stimulating to teach. The cases are from diverse industries such as footwear, brewing, gems and jewelry, greeting cards, logistics, media, petroleum, real estate, telecom, retail, wind energy, and white goods. The 2005 to 2007 timeframe makes them quite contemporary. The cases are undisguised and have been class tested to ensure that they are interesting and effective for illustrating Strategic Management concepts. Almost all cases provide complete financial information about the firms.

The Case Instructor's Manual, in the companion website of the book, provides a comprehensive teacher's note for all cases. This includes detailed analyses and questions for classroom discussion and suggests supporting supplementary reading material. However, preparing a case is only the first step in developing it as an effective teaching tool. The case becomes more effective as it gets repeatedly revised based on experience gained in using it and the subsequent research. I welcome and invite your valuable suggestions and feedback on the cases based on your class experience, which will be extremely useful in making these cases more effective. Thank you for using this book.

Amita Mital

The McGraw-Hill Companies

Acknowledgements

The motivation for this book came from students. The support of several eminent academic and industry stalwarts has helped in bringing out this book in its present form. I am grateful to Dr. Ram S. Tarneja, Chairman, Bombay School of Business, who provided valuable suggestion based on his rich and vast experience in industry and academics. I express my sincere gratitude to Dr. Krishna Kumar, Director, Indian Institute of Management, Kozhikode; Fr. Casimir Raj, Director, XLRI School of Business and Human Resources, Jamshedpur and faculty members at Indian Institute of Management, Lucknow who freely shared their ideas, helping me to continuously refine my thinking, which went a long way in completing this work.

Special thanks to Mr. Tapas Maji, Editorial Manager, McGraw-Hill Education (India Ltd.) for his patience and forbearance, Ms. Anubha Srivastava for her tremendous support during the editing stage and to Mr. Hemant Jha and the editorial team who worked with utmost grace and professionalism. I am also thankful to Ms. Medha Arora and Mr. B L Dogra for their contribution to the book. I also express my deep gratitude to the reviewers whose comments and suggestions helped in making the work more meaningful and student friendly.

Finally, I would like to give special thanks to my family and friends for the unstinted support provided by them while I was writing the book.

Amita Mital

Contents

Introduction

For both the instructor and the student, case learning requires sailing a very narrow channel between the rocks of over-control and the shallows of ambiguity. The promise of the case method, for those who successfully thread their course in this careful manner, is not that it will produce an excellent administrator. Rather, the student, with the discussion leader's aid, will, over time, produce this transformation and embody the differences rather than being 'taught' by them. In the case method, birds learn to fly; with other techniques, they are often given an airline pass.

Thomas V. Bonoma

WHAT IS A CASE?

A case typically is a record of a business issue that actually has been faced by business executives, together with the surrounding facts, opinions and prejudices

upon which executive decisions or have to depend (Gragg, 1954). It is a description of an actual situation, commonly involving a decision, a challenge, an opportunity, a problem, or an issue faced by a person (or persons) in an organisation (Leenders, Erskine, Leender, 1997). It is a partial, historical, clinical study of a situation that has confronted a practicing administrator or managerial group. Presented in narrative form to encourage student involvement, a 'case' provides data—substantive and process—essential to an analysis of a specific situation, for the framing of alternative action programmes, and for their implementation recognising the complexity and ambiguity of the practical world (Barnes, Christensen and Hansen, 1994). Business cases imitate or simulate real situations, which are fluid and involve uncertainty (Ellet, 2007).

WHY USE CASES?

The case method of management instruction is based upon the belief that management is a skill rather than a collection of techniques or concepts. The best way to learn a skill is to practice in a simulation-type process (Shapiro, 1984). Cases permit students to learn by doing, by taking on the roles of persons in specific organisations. The most fundamental contribution that the case method has made to teaching has been its rationale that "active" or "participative" learning is much more effective than its traditional "passive counterpart—the lecture approach (Cinneide, 1997). Case method provides an opportunity to become involved in decisions faced in organisations, to take ownership, feel the pressure, and recognise the risk of one's decisions (Leenders, Erskine, Leender, 2001). Students accumulate experience while addressing issues across a range of functional areas, different levels of responsibility and different types of organisations in vast geographical settings. Thus, students practice the art and science of management in a laboratory setting, minimising the risk of wrong decisions to real organisations. They are also a good tool to understand theory and its application. Over the course of time, students also become comfortable in handling unstructured and ambiguous business situations where decisions are often made with less than perfect information.

The case method is engaging, enjoyable and educational. It generates a moderate degree of competition among students, between faculty and students, and between the real and the student-developed solution. The effect is that everyone, including the faculty, learns about the case (Berger, 1983). The case system initiates students into the ways of independent thought and responsible judgment. It places them in the active role, open to criticism from all sides. It puts the burden of understanding and judgment upon them. It provides them a platform to deal with their contemporaries constructively and provides an opportunity for collective learning (Gragg, 1954). In the process, students develop self-confidence in decision-making and are better equipped to face the challenges of competition when they enter the corporate world.

TYPES OF CASES

Cases can be of different types and can be used in a variety of ways. They could be descriptive accounts of empirical research, or case histories. They could also be problem-solving cases which include multiple, inter-related factors and complex situations with no unambiguous right solution. They may be based on single functions such as marketing or finance, or multi-functional, which require a comprehensive analysis across various domains for its solution. Some are based on real companies while others are hypothetical or armchair cases arising from imagination or general business knowledge of the authors (Oldham and Forrester, 1981). Heath (2002) and, Lundberg, Rainsford, Shay and Young (2001) have categorised cases into the following types:

Iceberg Case

This type of case requires the student to apply one or more conceptual models that prompt to seek additional relevant information, "below the surface', not provided in the case itself. Mostly, there is a quick introduction to

a situation that may or may not require a decision. Students are urged to consider what additional information they might like to have and where and how they might be able to obtain it. These cases force the students to think through and compare alternatives, applying conceptual models. The intended learning outcomes are problem identification, information gathering and assessment, and application of conceptual models, ideas or theories.

Incident Case

This is a short case that describes a single incident in somewhat specific detail, circumscribed by time and place. The historical, organisational and environmental context are played down or ignored. Such cases can be used during a session to illustrate a concept, or raise an issue for discussion. They can be read quickly and do not normally require pre-class preparation. They are often displayed on the projector or on a flip-chart. These are also useful to introduce new students to the case method. The students compare the incident with either generally accepted practices or their own experiences.

Head Case

In this form, the case describes the interactions, activities, thoughts or feelings of one or more principal actors. Moderate to high amount of information is provided, although it may be loosely structured. The students are expected to understand the behaviour of the actor(s) and see how it manifests itself in a patterned action and interaction.

Illustrative Case

In this form, the case describes an event or process factually and the information is well-structured to illustrate the situation. The students are expected to understand the business practices and how they are applied in the real world. It brings reality into the classroom and demonstrates that textbooks and lectures may not always work out as flawlessly as implied in the class.

Background Case

The purpose of background cases is to impart information in a way that has greater interest than a conventional reading. Students associate more readily with data presented in case form than they would with a document. A background case can be used as a framework within which other cases explore specific issues.

Application or Exercise Case

The application case applies specific techniques to a situation, particularly quantitative techniques and financial analysis. It provides a lot of information, which is largely unstructured. The case is used to generate interest in the class rather than strictly adhere to problem-solving.

Situation Case

The situation case provides a specific situation facing a person or organisation and requires the student to evaluate the situation and/or the decisions of the protagonist and present his or her views on how the situation could have been handled in a better manner.

Complex Case

This style of case includes several complex and significant situations embedded in a story. The student is required to extract the vital issues from the case and focus on those for solving the problem. The multiple issues may also be interdependent and may require the student to find linkages between the issues and their impact on each other.

Decision Case

A case in this form requires a student to take a decision on what he/she would do under the situation described therein, and formulate an action plan to implement it. The student is expected to develop a set of alternatives and evaluate them before exercising judgment in selecting the best alternative, having the highest probability of success.

Prediction Case

These cases are written in series and provide information in a structured format. The students make a sequence of predictions about the protagonist's performance using some conceptual model. Part A of the case is distributed to the students and they make a prediction. Part B is distributed next and the case discussion focuses on the accuracy of prediction—why they were correct, or why they were not predicted correctly. It focuses on what aspects the students overlooked while making predictions and see how the use of "models" can improve accuracy of predictions.

STRATEGIC MANAGEMENT CASES

The case method has come to play a major role in the teaching of Strategic Management (Alexander, O'Neill, Snyder and Townsend, 1986). A Strategic Management case describes a firm's external environment and internal condition, and raises issues regarding its vision, mission, strategies and objectives. Most of the information provided is factual, supplemented with some market opinions, protagonist's judgments, and organisational beliefs and culture. Strategic Management Cases are quite comprehensive when compared to cases in functional areas and generally include some information of functional areas such as finance, marketing, R&D, operations and information systems. The case is a snapshot taken at a point in time (Corey, 1996) that throws up a critical issue related to the firm. The student is expected to apply Strategic Management concepts in arriving at a solution to the problem. Thus, the case material is a "rich soil for investigating strategic realities" (Mintzberg and Quinn, 1991).

Based on a study of Business Education Teachers Association, Jennings (1996) identified that the major objective of using case method is to illustrate and describe real world business situations. Cases are also used as a tool for strategic analysis and strategic thinking. They are used to assist integration, develop understanding of interactions and relationships between various business functions, and between theory and practice. Cases are also effective in developing interpersonal skills and information-handling skills. Case exercises can also be structured to provide opportunities for reporting group work and role playing.

THE NATURE OF CASES

In business education, the case method has been closely identified with the Harvard Business School. Most of the business schools in the United States have adopted the pedagogy, and use of case studies is quite common. Participant-centred learning, the foundation of the case method, is an important part of the educational process at many leading business schools. Most of the Business Schools in India that have adopted the case method of

teaching have also adopted cases from Harvard Business School and European Case Clearing House. Many of these cases are very comprehensive and provide sharp focus on relevant issues. However, sometimes, students in the Indian context, who may not have any international exposure, find it difficult to relate to the business situation of a developed economy as compared to a growing economy in which they are living. This is often one of the reasons instructors also shy away from using the case method. This case-book attempts to bring students as well as instructors into a comfort zone where they can relate to the organisations being studied and also have a better grasp of the business environment in which decisions are being made. The purpose is to facilitate understanding of concepts in this comfort zone and once understood, they could be applied to any other context in which students start working after completing the course. With this in mind, the cases are drawn from twelve different industry sectors and range in difficulty from extremely easy to moderately difficult.

A suggested chronological order for the cases has been provided so that they fit with the Strategic Management topics as they appear in most of the textbooks. Instructors and students would find that each of these cases focus on specific Strategic Management issues and would fit with one of the chapters of the text. A summary of each case is given followed by a case grid that appears at the end of this section.

Archies *vs.* Vintage—Are We in the Business of Greetings?

This is a simple case designed for the introductory session. By the end of the discussion, students would be able to understand the relationship between Corporate Vision, Mission and Strategy. The discussion may also bring forth the inevitability of a firm's response to changing business environment and how it forces managers to stand back and review whether the firm is fulfilling its basic objective. The case outlines the growth of two entrepreneurial firms that started in 1979 and 1983, respectively. Archies Greetings and Gifts started by Anil Moolchandani with an investment of Rs 1000/- for selling posters through mail order, went on to become India's most well-known greetings and gifts company. However, over a period of 25 years, the growth in the greetings segment slowed down, particularly with the advent of internet, while the market for gifts was picking up. This led the entrepreneur to rethink whether by focusing more on gifts rather than greetings, he could continue profitably in the *Business of Emotions* or would that digress from its original vision and mission.

Vintage Cards and Creations was the brainchild of Anil Kapur and Rajesh Vaishnav when a few cards made by them were appreciated by the customers for quality and design. Initially, it was a part-time business, but soon became a full time occupation with local artists enlisted to create new designs, and distributors and retail outlets targeted for expansion and future growth.

Archies proactively responded to technology changes occurring in the greeting-card market with the advent of e-cards and SMS/MMS formats replacing the traditional greeting card, by diversifying into gifts, as they were another means of expressing emotions. Vintage, on the other hand did not respond to change and found itself burdened with a huge inventory of cards with no market for them. The case also brings out the imperative need to adapt to changes, with discontinuities in technology and demography.

Gitanjali—A Gem in India's Crown?

This case is designed for the sessions on Industry Structure Analysis, Business Level Strategy and Strategy of Cooperation, and to understand partnering advantage. The case outlines the business of Gitanjali Gems, an integrated diamond and jewellery manufacturing firm, established in 1986. The firm was part of the Gitanjali Group, which was one of the earliest diamond houses in India that started in 1966 and was accorded DTC sight holder status in 1967. Gitanjali's travail to this position was based on its internal competence as well as partnering advantage. It brings out how single or dominant business firms compete for a leadership position in the industry. It also brings out the reason for creating strategic alliances. It illustrates the use of vertical and

horizontal complementary strategic alliances at the business level and diversifying and synergistic alliances at the corporate level, while highlighting the role of cross border alliances. Using another perspective, the case could be used for discussing competitive advantage of India in diamond processing using Michael Porter's Diamond Framework. If the case is being used as a comprehensive case towards the end of the course, questions relating to external analysis, internal analysis and resource based view may also be taken into consideration.

Delhi Land and Finance—Strategy or Serendipity

The case is designed for use in the session on Resource Based View, normally covered in the "Internal Analysis of the Firm". The case outlines the growth of a real-estate firm over a span of six decades. DLF was established by Raghvendra Singh in pre-independent India who started off as a coloniser in Delhi. The founder figured that partition would lead to mass migration and the new migrants would need homes. He built 21 of Delhi's landmark residential colonies between 1947 and 1961, by persuading farmers to sell their holdings on credit as he had limited financial resources. The firm went through some phases of regulatory discontinuities, during which time delving in unrelated businesses and exiting them, as they were unprofitable, before emerging as India's leading real estate player. Sitting on a wealth of land resources and development capabilities, it emerged as India's largest real estate development firm.

This case provides insights for students to identify and examine the internal resources of the organisation; classify and assess resources; understand what makes a resource valuable; and analyse how resources provide and sustain competitive advantage.

Gati Limited—At the Threshold of a Big Leap

The case focuses on differentiation strategy of Gati and its positioning in a highly fragmented market. The development of Indian "express delivery" industry during the eighties saw the eminent entry of professional players into this market, though the industry had been in existence for a considerable time. "Express industry" comprised courier companies providing express and door-to-door pick up and delivery services for documents and non-documents shipments other than freight, to various domestic and international destinations. In an industry comprising about 2000 players, with 98% in the unorganised sector, Gati was incorporated in 1995 and positioned itself to provide cost-efficient and flexible express services ranging from traditional point-to-point transportation to complex end-to-end integrated logistics and supply-chain management solutions. The case presents facts that could be evaluated along the various components of the firm's value chain to bring out where and how its stands apart from other players. By the end of the discussion, students would be able to understand how firms can build advantage by differentiating themselves to provide superior customer value, using either the Balanced Score Card or Porter's Value Chain as a tool. The case exposes students to a decision situation, giving them the changing dynamics of the industry, which they analyse and propose a future course of action for Gati.

Tech Mahindra Ltd.

This case is designed for use in the "Business Strategy" module of the Strategic Management course. The case is intended to facilitate a discussion on business growth through focus and synergy. The case outlines the rapid shift in the competitive structure of the telecommunications industry and the changing scope of business of Tech Mahindra, which was one of India's top software exporters providing services to the telecommunications industry. Historically, the telecommunications industry was based upon monopoly control at the national level. However, by the end of the 21st century, the state owned TSPs were privatised and competition increased

due to liberalisation. In addition, the global rollout of mobile services transformed the industry and in a span of four years, the wireless telecommunication service market grew at a CAGR of 23% and crossed US$550 billion in revenues. These changes in the telecommunications service market led to the evolution from pure voice towards converged networks and a quadruple play of voice, video, data, and content. TSPs in both fixed and mobile markets were required to invest in the next generation technology to remain competitive. The convergence and evolution of next generation networks created challenges for TEMs in the form of maintaining and enhancing traditional equipment, while satisfying the demand for next generation equipment. At the same time, competition in the telecommunications service industry was becoming a key driver of demand for IT services and software. Pressure on margins caused TSPs to focus on reducing cost and IT became a critical element in determining cost efficiency of TSPs. The case enables the students to understand the role of environmental variables and firm competencies and positioning in influencing growth of a firm; understanding how firms build their strengths and capabilities for organisational effectiveness; examining how capabilities are leveraged to tap environmental opportunities; and understanding how organisations prepare themselves to face future competition.

CyberMedia—The Leadership Quest

This case focuses on the diversification aspect of corporate level strategy. The case outlines the growth of an entrepreneurial firm that started in 1982 by a first generation entrepreneur, Mr. Pradeep Gupta to publish a specialised magazine for the IT sector. The firm went on to become South Asia's largest specialty media house with nine publications in the IT, ICT and Biotechnology areas. It captured an end-to-end media value chain including the internet, events, and television by focusing on high growth areas. In 2005, 23 years after its inception, it was on the threshold of going global. At this juncture, while Pradeep Gupta was confident that the globalisation track was the way to growth, other board members were contemplating whether it really made sense for the company to expand globally. This strategy analysis and choice is the phase of the strategic management process when business managers examine and choose a business strategy that allows their business to maintain or create sustainable competitive advantage. The case provides an opportunity to students to evaluate and determine which value chain activities provide the basis for distinguishing the firm in the customer's mind and examine strategic choice by addressing two basic issues—what strategies are most effective at building sustainable competitive advantage of business and whether a firm should diversify. The case also brings out how a firm creates value by sharing or transferring core competence by diversifying into related areas.

Suzlon Energy Limited—Riding on the Wind

This case is designed for use in the vertical integration aspect of the "Corporate Strategy" module. The case outlines the growth of a firm that ventured in wind energy to meet its energy requirement for the textile business. Within a span of 10 years, the company has grown to become India's leading manufacturer of Wind Turbine Generators, with accumulated sale of 1126 MW and 42.8% of the total capacity installed in India, mainly in the states of Tamil Nadu, Karnataka, Maharashtra, Rajasthan and Gujarat. Besides manufacturing WTGs, they were also involved in wind resource mapping, identification of suitable sites and technical planning of wind power projects, and provide after sale O&M services for WTGs, thereby establishing it among the top 10 players globally. It is credited with making the world's largest wind park at Dhule in Maharashtra. From the design to the manufacturing and the actual operation of the sites, everything was done in-house through wholly owned subsidiaries. The case enables the students to articulate the economic and strategic rationales for vertical integration; discuss the notion of asset specificity as explanations for and against vertical integration;

examine how broad scope can be a competitive advantage/disadvantage depending on the industry; and analyse the industry value chain to determine sources of competitive advantage at each stage.

Rewrite Rules at Pantaloon

This case is designed for the sessions on Business Level Strategy formulation and Operations Strategy. It outlines the growth of Pantaloon, one of India's largest organised modern format retailers, established in 1997. The firm retailed a range of branded and Private Label apparel, footwear, perfumes, cosmetics, jewellery, leather products and accessories, home products, books, music and toys with over 2,70,000 SKUs, complemented by services offerings. In a short span of nine years, the business grew from one store in Kolkata in 1997 occupying an area of 8,000 sq. ft. to 72 stores, and 22 factory outlets located in multiple cities occupying an aggregate area of 21,07,608 sq. ft. The firm focused on Lifestyle segment through 14 Pantaloon stores, 3 Central Malls, 2 aLL, 2 Fashion Station and 1 MeLa store. In the value offering to mass customers, the firm had 21 Big Bazaar and 30 Food Bazaar outlets. Focus on customers, supported by systems and processes and a committed work force were the key factors that contributed to the success and helped in scaling up as the firm grew. The case allows for detailed exploration of fit between business strategy and operational strategy and the role of coordination mechanisms in business operations.

Bata India Limited—Repositioned or Still Footweary

This is a simple case designed for understanding strategic control and the importance of continuous improvement. The case tracks the development of Bata India Ltd. as India's largest manufacturer and marketer of footwear products in the organised sector over a period of seven decades. Bata India was part of the Bata Shoe Organisation, Toronto. Though the company was the leader in footwear, by the end of 1994, there were indications of decline as profit dropped from Rs. 20 crore to Rs 95 lac within a year. This was attributed to environmental contingencies. However, the parent company BSO stepped in to reposition Bata India as an affordable, market-driven fashion-conscious lifestyle brand and to streamline the whole business to improve the performance of the company. It is universally accepted that failure to achieve objectives often reflects shortcomings of a firm's control system. While the traditional approach relied on feedback control, contemporary approaches stress feed-forward control. Strategic Control is concerned with tracking strategy as it is implemented, detecting problems or changes in its underlying premises, and making necessary adjustments. The case helps in understanding a few sets of questions: Are we moving in the proper direction? Are things falling in place? Should we adjust the strategy? How are we performing in terms of cost, revenue, cash flows? Are operational changes required?

United Breweries Ltd.

This case is designed for the sessions on Mergers and Acquisitions and Strategic Alliance. The case traces the growth of United Breweries since its inception in 1915. United Breweries became the leader in the brewing industry in India with a turnover of Rs. 673 crore, by entering strategic alliances with several brewers including Scottish & Newcastle, one of Europe's leading brewers, and horizontally acquiring India's second largest player Shaw Wallace. The case illustrates concepts such as merger motives and role of alliances in firm growth, particularly cross-border growth.

ONGC—Towards a Brighter Tomorrow

This case is designed for use in the "Strategy Implementation" module. The case traces the development of the Indian upstream petroleum industry over a period of five decades. Prior to 1955, the industry had modest

growth in exploration, development, and production of petroleum. ONGC was set up by the Government of India to plan, promote, organise and implement programmes for the development of Petroleum Resources and the production and sale of petroleum and petroleum products. ONGC was instrumental in transforming the country's limited upstream sector into a large viable playing field. Beginning in the early 1990s, as India's reliance on oil imports increased, the Government embarked on a series of reforms aimed at partially de-regulating the oil and gas sector. By 2001, ONGC had reached a stage where it could not afford to stagnate; it had either to grow or fall by the wayside. From a slow-moving, rule-bound organisation, ONGC had to become more goals oriented, accountable, and responsive. Mr. Subir Raha, Chairman cum Managing Director, identified three core objectives that could put the company in the same league as giants like Exxon and British Petroleum. Proactively responding to the policy changes, ONGC also launched Corporate Rejuvenation Campaign in August 2001 by restructuring the organisation, and reorientation of the corporate mindset. The case delves upon various challenges faced by the organisation in implementing these far-reaching changes. It is intended to facilitate a discussion of strategy implementation through capability building, instituting best practices and support systems; and developing a strategy-supportive corporate culture.

Whirlpool of India—White Goods Splashed in Red

The case focusses on how companies can remain profitable in a closed and protected economy, but have to necessarily change if they have to face competition from global players and survive. It focusses on how a company that could not face the challenge of deregulation and globalisation lost its entity and a major Global player built on its weakness to establish a stronghold on Indian soil. The case traces the history of Whirlpool of India since its inception as a refrigerator manufacturer in 1960. The company followed a philosophy of vertical integration and also entered a few unrelated businesses but exited soon after entry. However, the growth soon came to end with the change in Government policies. India undertook a cascading set of economic reforms beginning in June 1991. Industrial controls over most investments, diversification, and expansion were removed; import controls were dismantled; and foreign investment restrictions ended in an effort at intensifying competition. In this scenario, modernisation and upgrading technology were the bare necessities for survival rather than competitive excellence. Whirlpool of India found itself lacking in competitiveness. The company had to face acute recession coupled with increased competition, credit squeeze and high interest cost, which resulted in the company reporting a net loss in 1993. In 1994, Whirlpool Corporation, USA was seriously considering establishing a direct presence in India. In 1994, it acquired a majority stake (51%) in the company. The management was reorganised with nominees of Whirlpool Corporation having majority presence on the Board of the company and a major downsizing exercise was undertaken in which the employees of the Indian company were shed-off. The company continued to make losses, but Whirlpool U.S. had achieved its objective of gaining a major presence in India. This case brings out the importance of analysing and understanding the firm's external environment. It reflects how changes in legislation and government policies can suddenly bring in environmental discontinuities, to which firms are not prepared to respond. The global players, with more financial and technological resources, can easily drive out these players and establish a stronghold in lesser-developed economies. It exposes students to the fact that not all theory of the developed world may be replicated in lesser-developed countries, and different types of strategies are often required for survival.

Dealing with the cases, students would realise that each situation is unique and requires a different pattern of analysis. The intention is not to develop a single best solution for each case, but to enter into discussion about the various alternatives with other students and develop sound analytical skills. It also helps in clarifying one's understanding and refining one's judgment in a collective setting. The experience itself would be useful in practice, later in life.

REFERENCES

Alexander, Larry D., O'Neill, H.M., Synder, N.H. and Townsend, J.B. (1986), How Academy Members teach the Business Policy / Strategic Management Case Course, *Journal of Management Case Studies*, Vol. 2, No. 3, pp. 333-344

Barnes, Louis B., Christensen, C. Roland and Hansen, Abby J. (1994), Teaching and the Case Method (3rd Ed.), Harvard Business Scholl Press, Boston, Massachusetts

Berger, Michael A. (1983), In Defence of the Case Method: A Reply to Argyris, *Academy of Management Review*, April, Vol. 8, No. 2, pp. 329-333

Bonoma, Thomas V. (1989), Learning with Cases, Harvard Business School

Charan, Ram (1976), Classroom Techniques in Teaching by the Case Method, *Academy of Management Review*, July; Vol. 1, No. 3, pp. 116-123

Cinneide, Barra O. (1997), The Role and Effectiveness of Case Studies: Student Performance in Case Study vs. Theory Examinations, *Journal of European Industrial Training*, Vol. 21, No. 1, pp. 3-13

Corey, E. Raymond (1996), The Use of Cases in Management Education, Harvard Business School

Corey, E. Raymond (1999), A Note on Case Learning, Harvard Business School

Ellet, William (2007), The Case Study Handbook, Harvard Business School Press, Massachusetts,

Gragg, Charles I. (1954), Because Wisdom Can't be Told. In McNair, M.P. (Ed.), The Case Method at the Harvard Business School, McGraw Hill, New York

Hammond, John S. (2002), Learning by the Case Method, Harvard Business School

Heady, Ron and Smith, Mark (2000), Business Policy Case Content: A Fit with Theory and Practice?, *Journal of Education for Business* Vol. 75, No.3, pp. 138-141

Heath, John (2002), *Teaching and Writing Case Studies*—A Practical Guide (2nd Ed), The European Case Clearing House, England

Jennings, David (1996), Strategic Management and the Case Method, *Journal of Management Development* Vol. 15, No. 9 pp. 4-12

Leenders, Louise A. Mauffette, Erskine, James A. and Leenders, Michiel R. (1997), *Learning with Cases* (2nd Ed.), Ivey Publishing, Canada

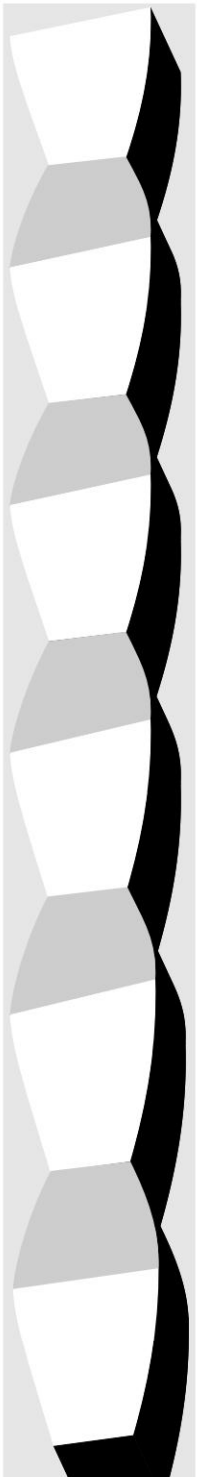
Leenders, Louise A. Mauffette, Erskine, James A. and Leenders, Michiel R. (2001), *Writing Cases* (4th Ed.), Ivey Publishing, Canada

Lundberg, Craig C., Rainsford, Peter, Shay, Jeff P. and Young, Cheri A. (2001), Case writing reconsidered, *Journal of Management Education*, 25; 4; pp. 450-463

Mintzberg, Henry and Quinn, J.B. (1991), *The Strategy Process, Concepts, Contexts and Cases*, Prentice Hall, Englewood Cliffs, New Jersey

Oldham, Margaret and Forrester, Jerry (1981), The Use of Case Studies in Pre-experience Business Education: Part 1—The Case Method, *The Vocational Aspect of Education* Vol. XXXIII, No. 85, pp 27-29

Shapiro, Benson P. (1988), An Introduction to Cases, Harvard Business School



CASE GRID

	Archies Vs. Vintage	*Gitanjali*	*Delhi Land & Finance*	*Gati*	*Tech Mahindra*	*Cyber Media*	*Suzlon Energy*	*Pantaloon Retail*	*Bata India Ltd*	*United Breweries*	*ONGC*	*Whirlpool*
Strategic Vision/Mission	■											
Industry and Competitive Analysis		■		■								
Building Resources and Capabilities			■		■							
Cost Leadership								■				
Differentiation				■	■							
Merger and Acquisition										■		
Cooperative Strategy		■								■		
Vertical Integration							■					
Alliances		■				■				■		
Diversification						■						
Turnaround												■
Strategic Control and Improvement									■			
Strategy Implementation											■	

The McGraw-Hill Companies

Case 1

Archies *vs.* Vintage—Are We in the Business of Greetings?

On the eve of Christmas in 2006, Anil Moolchandani, Chairman of Archies Greetings and Gifts, in his office at New Delhi was wondering what the festive season would bring this time. For the past 6 years, he had seen the profitability of his company decline from 18% in 2000 to a bare 7.8% in 2006. Rajesh Vaishnav, one of the promoters of Vintage Cards, 1,400 kms. away, at his headquarters at Pune was even more worried. His company had a consolidated loss of more than Rs. 9.5 crore. If the trend of e-greeting, SMS and MMS greetings continued, the greeting card business was perhaps edging towards doom.

ARCHIES GREETINGS & GIFTS

Archies Greetings and Gifts Ltd (AGGL), set up as a partnership firm in 1979 by Anil and Jagdish Moolchandani, was India's largest manufacturer and distributor of greeting cards, posters, soft toys, gift items, cassettes/ CDs and stationery items. Anil, a graduate from Delhi University, could have managed the family business of *saris* but his heart was not in it. He was obsessed with

maintaining high standards and while helping out in the family business of *saris*, he realised that they were unable to match the standards, hence opted out of it (Business India, 1996).

His heart, instead, was in the business of hearts—greeting cards that appealed to emotions. As a teenager, Anil was interested in pop music and collecting posters. In early 1970s, there were hardly any trendy posters to decorate rooms, the only source of posters being a magazine, Junior Statesman that carried posters of pop stars and celebrities. In 1977 there was only one company making posters in India, Chellsons in Sivakasi, Tamil Nadu. They had only one distributor in Mumbai and there were no other shops for selling the posters. That's what goaded Anil to translate his hobby into his own business of selling greeting cards and posters through mail order in 1979. In the same year, he started selling songbooks, starting with writing the lyrics of hit songs by ABBA. This was followed by lyrics of other classics to complete the range. With increasing consumer awareness and taste, they started with the yearbook containing the hits of each year with an annual average sale of 10,000 copies. (Business India, 1996).

The cards business started in 1980. At that time cards were priced on the basis of their size rather than design. In 1984, Anil decided to understand the Asian markets and the importance of display soon took ground. Thus the concept of Archies Galleries and Archies Card Shops came into being. Archies Gallery started with the objective of brand building. The first Archies Gallery came up in 1987 in a 1,000 sq. ft. rented shop at Kamla Nagar, in the heart of Delhi University campus. The shop contained cards, gifts and posters. Card buying became an enjoyable experience for university students and youngsters. The concept clicked well and the firm could break even in the first year itself, with sales touching Rs 22 lac. The same year they started franchising their name to others who had the inclination to go into this business (Business India, 1996). Incentives to franchisee stores ensured their commitment and sustained interest (http://www.myiris.com/shares/company/ snapShotShow.php? icode=ARCGREGI&select=1 accessed on 05.04.06)

Innovative products were constantly introduced and special offers and promotional schemes were launched to drive volumes. Archies expanded from the first greeting card shop with an initial capital of just Rs 1,000 to sell song books and posters, to a network of 450 plus outlets comprising Archies Galleries, Card Shops, and Paper Rose shops - the last being retailers who were converted to being exclusive Archies outlets. The company had a turnover of Rs 73 crore in 2005 (Business Line; 2005-a). Production was centralised in New Delhi, producing 2.5 lac greeting cards per day. Archies had a market share of 50% in the organised sector (The Hindu. Jul 4, 2004; pg 13).

For 26 years the company remained the undisputed leader in the cards and gifts business in India. The very mention of greeting cards brought to mind the name 'Archies'. In 1996, when Hallmark entered the Indian market, Anil was far from perturbed. He is noted to have said, "It does not pose a threat to us; in fact, we need more companies to strengthen the market" and went ahead with new launches (Business India, 1996).

By 2005, Archies had far outgrown the identity of a cards and gifts retailer to be perceived as company offering complete gifting solutions. Archies got into merchandise gifts business, including gifts, posters, stationery items, cassettes and CDs in 1995, which contributed 30% of the turnover, while the remaining 70% was from cards (Business Line; 1998). Archies focused on this business with the aim to earn 50% revenues from this business. Though the margins were lower, because gifts were outsourced, the business was growing at 50% against that of cards, which was growing at 15-20%. Besides, gifts provided support to franchisee stores to run the show. In terms of value, this business had more potential than cards.

Archies was considered by all stakeholders, employees, suppliers, business associates, franchisees and customers, as a people's company. In 1989, Archies tied-up with HelpAge, a global network of

non-profit organisations, founded in April 1978, and working for the cause and care of the disadvantaged older persons in India. HelpAge India launched its 2002-2003 collection of greeting cards in association with Archies Greetings and Gifts Ltd. in August 2002. Film and theatre actress, Zohra Sehgal and shooter Jaspal Rana unveiled the collection. September 9 started being celebrated as Grandparents Day as a tribute to senior citizens (Business Line; 2002-a). Archies, along with HelpAge India, synergised the manufacturing and marketing of greeting cards. Every year, a growing number of corporates such as Sony Corp, Shell Gas, ICICI, Honda Motors and Reliance Industries were resorting to HelpAge India products to wish not only their own employees and associates, but also their clients (Business Line. Jul 3, 2004). Being able to improve the quality of lives of over 8 million destitute senior citizens of the country, spread more smiles per card. (www.myiris.com/shares/company/writeDet.php accessed on 05.04.06).

To promote sales, the company started the concept of occasion cards, which was erstwhile not so popular in India. Valentine's Day cards were introduced during early 1990s and accounted for 7% of the total revenue of Archies. They started creating occasions, so that people found a reason to greet each other and keep in touch. Cards for *Rakshabandhan, Holi, Eid*, Mother's Day (Business India; 1999), Father's Day (Financial Express;1999-b), Husband' Day, *Karvachauth* (Business India, 2001), Valentine's Day, Forgiveness Day (Business India, 1996) etc., gained momentum and gradually accounted for 25% of total sales. Friendship day cards were launched in 2001 and became a big occasion to be celebrated. 30% revenues came from season's greetings and 45% from everyday cards. Cards in regional languages were also launched for certain occasions (Business Line; 1999 and Business Standard; 2005).

The relationship with American Greetings, inc. started in 1993 as a simple Licencing Agreement, to source American Greeting designs and sell them as Paper Rose cards in India. This evolved to one where Archies had access to all the various brands under the American Greetings umbrella, including Gibson, Hanson graphics, Expressions gifts and Carlton cards. Access to all these brands also meant access to all the product categories under them including plush toys, giftware and stationery product lines.

In 2001 Archies tied up with CRY (Child Relief and You), an eminent Indian child rights organisation which believed that every child was entitled to basic rights of survival, protection, development and participation, for printing and distributing CRY greeting cards and stationery products. AGGL also entered into alliances with Cadbury India and Taneja Mines. The company used its network to retail the chocolates and other products of Cadbury India and the Divinity range of products of Taneja Mines.

In financial year 2002, the company expanded its product portfolio to include perfumes and a range of gift articles. Archies identified its perfume business to drive up the sales volumes for the company and targeted the perfume business to contribute 50% of its turnover by 2008 (http://www.myiris.com/shares/company/snapShotShow.php?icode=ARCGREGI&select=1 accessed on 05.04.06). It launched an entirely new division called Kids Stationery, for marketing a new range of stationery products like crayons packaged in attractive boxes, pencils, erasers and rulers (Business Line; 2002-b). In April 2002, AGGL entered into a marketing and branding tie-up with Normak Fashions, manufacturers of women's fashion jewellery to push Normak's 'Estelle' line of jewellery through Archies' 150 exclusive outlets across the country under the 'Archies' brand name. At a later date, the network would be expanded to include 400 Archies franchisee outlets to retail the Splendour range of affordable and classy jewellery from Normak (Business Standard; 2002).

With these alliances in place, Archies sold cards with Gibsons, Paper Rose and Paper Magic labels owing to its licencing partnerships with Gibson Greetings (USA), American Greetings Corp. (USA) and Portal Publications (USA) respectively (The Franchising World; 2005). It had an agreement with

'Feelings' (retail chain of cards and gifts), under which the latter sold only Archies range of products called Archies Feelings. In 2004, the company tied up exclusively with world's premiere stuffed toys & gift company 'Russ' of England and also with 'Florence' of Italy for limited edition of their porcelain figurines (http://www.domain-b.com/companies/companies_a/archies/20051220_retail.html accessed on 18.12.06). Russ products were a little beyond the Indian market, which was extremely price sensitive and not that discerning about quality. Further, the company also planned to look beyond plush toys to the vast range of porcelain gifts, ceramic mugs and exquisite designer range of coordinated gifts. They also tied up with Kathreen Francour (an international photographer) to introduce a new range of innovative designer cards.

Archies also tied-up with Walt Disney in the merchandise and gifts space. The paper products and gifts were sourced through vendors for sale under the Disney label at exclusive corners within Archies stores in Bangalore and the four metros. Archies collaborated with Simon Elvin, greeting cards player from the UK, to add to its portfolio (Retail Biz; 2004). The idea behind forging such alliances was to have more designs and give variety, which was very important in the market. In most cases a royalty of 5% was paid.

To further promote sales, Archies used props and promotional items in feature films, starting with *Maine Pyar Kiya*. The success of the endeavour led to Archies props in other films including *Hum Aapke Hain Kaun*, *Tera Jadoo Chal Gaya* and *Yeh Hai Prem*.

As a first mover in the 300 crore industry (organised sector), Archies had the advantage of a vast network comprising 450 plus franchisee stores all over the country. Archies had multi-brand stores, exclusive stores and company-owned stores. It had a network of Archies galleries, Card Shops and paper rose shops with 55 company owned stores, and 425 franchise stores in 180 cities across 6 countries including Sri Lanka, Bangladesh, Nepal, Muscat, United Arab Emirates and Bahrain (USP Age; 2004; Economic Times; 1999). Another 133 stores were in the pipeline, to be opened over a period of two years. AGGL opened 11 Vision 2000 stores that offered the entire range of products (Financial Express; 1999-a). Archies planned to set up a chain of 100 company-owned stores called Vision 2000 by 2007 (Business Line; 2004). These stores would display the entire range of products unlike franchisee stores, which had limitation of size. While an average franchisee store was spread over 500 sq. ft, company owned stores had 1,000 sq. ft. and above. 30% of the sales came from franchisees and another 230% from C&F agents.

Some of the distributors were converted into C&F (Cost & Freight) agents to exhibit the range of products to consumers. Usually distributors, facing problems of space and finance, adopted to pick and choose the products because they had to pay for it. In such situations, it was difficult to sustain in terms of creativity. Therefore, it was decided to go in for agents who would house all the products of all ranges at Archies' cost and let consumers and retailers choose what they wanted. Besides, margins were higher in the case of C&F agents because Archies made all the investments on inventory. Archies was focused on setting up more Vision 2000 stores (http://www.myiris.com/shares/company/writeDet.php?icode=arcgregi#fut accessed on 05.04.06).

Archies also formed a 100% subsidiary Archiesonline.com at a cost of Rs 2 crore, for e-cards and e-commerce and tied up with Yahoo to "e-tail" its cards and gift items. This virtual store was a total replica of an Archies gallery on the net with the USP on third party gifting (Business India; 2001). The aim was to reach the end customer directly rather than through a distributor. Soon when they realised that though a large number of cards were sent on the net, they were not getting any returns, hence the site was converted into a paid site. It was India's first site and the world's first e-greetings site to go paid. A membership package was introduced at Rs 400 having a perceived value of Rs 700. Under the package the user could send 100 e-cards in a year free of charge and get a discount card that allowed discount shopping at Archies and

Planet M (Business India, 2001). It focused on single-point sourcing and fulfilment in the first phase from Delhi, and multi-point sourcing and fulfilment in the second phase, covering C&F (Cost & Freight) agents. If the response was favourable, the system would be extended to franchisees. Under this business the card/gift could be ordered either on the Internet or through kiosks. Indian customers were feel-conscious hence they had the option of ordering from a kiosk. Payments could be made either at the counter or through credit cards on the Net.

Archies was planning to launch a new chain of retail stores named as 'Stupid Cupid' dealing in fashion accessories and premium gifts to provide more choice to the company's prospective customers (Business Line; 2005-b). The company would be opening five stores by the end of 2006 and another 10 stores by 2007. Initially, the stores would be opened in Delhi and NCR and thereafter spread to Mumbai, Kolkata, Bangalore and other metros. The new stores would be opened in a phased manner over the two-year period extending till end of 2007 and Archies booked retail space for 133 stores in upcoming shopping malls across the country (http://www.domain-b.com/companies/companies_a/archies/20051220_retail.html accessed on 18.12.06). The company was looking for new growth horizons by adopting a multi-brand strategy targeted at various price points. With brand launches and new products, the thrust was on reaching every individual, satisfying various emotions and being within varying budgets to ensure an Archies card in every hand. By 2005, 40% of the turnover of Archies came from the gifts division (http://www.domain-b.com/companies/companies_a/archies/20051220_retail.html accessed on 18.12.06).

With several growth opportunities on the cards, the board members wondered whether Archies had strayed from its mission of being in the *business of emotions.* But Anil saw Archies moving from a single product focus company to a serious player in many other related categories encompassing human expressions:

> We are in the Business of emotions, and Emotions never die.
> We have been churning out a thousand Reasons to smile.
> And to Celebrate. Not just moments, but life as a whole.
> Throughout this while, we have Innovated better ways of Expressing one's emotions.
> Rendered voice, to many a feeling. Crafted words, for many an Emotion.
> Words that have built many a new relationship. Voices that have Strengthened many a bonding.

Vintage Cards & Creations

Vintage was founded as a partnership firm in 1983 by Anil Kapur and Rajesh Vaishnav for manufacturing and marketing greeting cards. Initially it was a part-time business, but within a year it became a full time occupation. The idea of setting up the business came when a few cards made by the partners were appreciated by the customers for quality and design. Over the next 10 years, they concentrated on developing local artists to create new designs and also on appointing distributors and setting up retail outlets for future growth. By 1992, Vintage had a collection of 3,000 designs, 26 distributors and 3,000 independent retail outlets.

To meet future growth requirements, the company entered into an agreement with Hallmark cards, one of the world's largest greeting cards company based in the United States in 1992 to use its brands, trademarks and intellectual property. Thus, Vintage got exclusive right to use copyrights in the manufacture, distribution and sale of products in India and non-exclusive rights in Sri Lanka, Bangladesh and Nepal. Vintage also had access to Hallmark's design studio and library. Hallmark executives visited India regularly to monitor quality

control, to train product and sales staff and advice on marketing strategies leading to increasing market share and shelf space.

In consultation with Hallmark, Vintage laid down stringent control standards and consistency parameters for franchise outlets. All franchise outlets were 600-700 sq. ft. stocking a wide range of Hallmark products alongside other non-competing products. All stores had a glow-sign with "Hallmark Cards & Gifts" and specially designed interiors, which were air-conditioned, well-lit and had soft music to provide a soothing ambience.

Vintage entered into an agreement with Walt Disney Consumer Products to use materials like Mickey, Minnie, Donald Duck, Jungle Book, Aladdin and Alice in Wonderland for use in greeting cards, posters, autograph books, address books, telephone books and gift wraps. The company also entered into a licensing agreement with Verkerke to use Verkerke designs and "Brownsword", "Gordon Fraser Gallery" and "Forever Friends" trademarks. Cards were personalised in association with American Marketing Group machine with machines for personalising positioned in high traffic areas of the country. Another brand licensing agreement with Mattel Inc. U.S.A. gave them rights for the "Barbie" brand.

In 1996 the franchise stores were increased to 67. In 1997–98, the company expanded it production capabilities and commissioned a plant at Goa. The plant had facilities for precise cutting, folding, and manufacture of cards, PVC bags and packing. The franchise stores were increased to 135, an increase of 68 stores within the span of a year. By the end of 1999, the company had a franchise network of 221 outlets spread over 94 cities. Apart from these, the company had 47 wholesale distributors and 8,000 retailers. Vintage also tied up with Cancer Patients Aid Association to establish its presence in the corporate segment. By 2001, the company had introduced cards in Hindi and Marathi and expanded the franchise network to 343 stores across 115 cities.

In the year ending March 2001, the company had accumulated inventory of cards equal to $1^{1}/_{2}$ years of sale and inventory of posters, exceeding four years (Exhibit 4). Anil Kapur resigned from the directorship of the company in October 2001. The company decided to close the Pune plant and the entire production was shifted to the Goa plant. For the first time, the company suffered an operating loss of Rs 5.53 crore in 2003. By 2005, the company had reached a situation where it was unable to pay statutory dues such as Tax Deducted at Source, Provident Fund Contribution and Contribution to Employees State Insurance Scheme. It sold its entire inventory to its distributor, M/s Sahil Distributors at 12.5% of the M.R.P. The survival of the company itself was at stake.

While Anil Moolchandani of Archies was confident that Santa would bring cheer with the stupid cupid taking off well and turnover improving, Rajesh was not even sure whether he would be able to take care of the statutory dues.

Exhibit 1—Archies—Segment wise break-up of Sale

	Greetings	Gifts	Stationery
Mar-00	49.33	10.23	
Mar-01	44.23	10.01	
Mar-02	37.97	10.92	
Mar-03	36.76	17.1	10.67
Mar-04	34.39	21.48	9.14
Mar-05	32.8	28.57	10.1
Mar-06	33.93	38.04	10.66

Exhibit 2—Income Statement of Archies Greetings & Gifts

	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Income											
Sales	85.36	74.3	67.22	76.5	80.6	68.43	71.52	60.28	46.05	34.09	28.03
Other Income	0.23	0.42	0.26	0.44	0.41	0.33	0.62	0.54	0.29	0.22	0.11
Change in stocks	6.99	0.86	2.51	–0.06	9.15	10.93	6.1				
Finished goods	6.73	0.83	2.54	–0.17	8.83	10.69	6.14				
Semi-finished goods	0.26	0.03	–0.03	0.11	0.32	0.24	–0.04				
Non-recurring		0.02	0.25	0.13		0.03	0.01	0.01		0.04	
Gain on sale of assets			0.11	0.1				0.01			
Gain on sales of investment			0.01			0.03	0.01				
Tax refunds/ adjustments			0.02	0.03							
Other non recurring		0.02	0.11							0.04	
Expenditure											
Raw materials, stores, etc.	37.94	29.86	27.9	34.12	40.48	36.67	36.41	33.33	29.45	24.65	21.5
Raw materials	14.4	13.11	14.25	16.28	18.4	23.01	24.04	27.8	29.35	24.57	21.2
Stores & spares	0.33	0.29	0.3	0.18	0.17	0.23	0.15	0.09	0.1	0.08	0.03
Packaging expenses											0.27
Purchase of finished goods	23.21	16.46	13.35	17.66	21.91	13.43	12.22	5.44			
Wages & salaries	8.63	6.65	6.36	6.8	6.07	5.02	3.68	1.36	1	1.41	1.25
Energy (power & fuel)	2.33	1.68	1.26	1.24	1.28	0.77	0.61	0.37	0.29	0.26	0.11
Other operating expenses	3.73	4.72	4.3	3.14	3.28	5.05	4.84	4.82	3.4	0.33	0.25
Royalty/ knowhow	0.86	0.67	0.65	0.57	0.46	1.05	1.05	0.87	0.55	0.19	0.22
Insurance premium	0.32	0.27	0.24	0.25	0.23	0.21	0.1	0.08	0.06	0.03	0.02
Indirect taxes	0.02		0.04	0.06	0.01						
Excise duties				0.04							
Other indirect taxes	0.02		0.04	0.02	0.01						
Repairs & maintenance	4.81	3.51	2.01	2.22	2.28	2.08	1.03	0.44	0.4	0.38	0.11
Plant & machinery	0.66	0.5	0.32	0.21	0.22						0.07
Other repairs	4.15	3.01	1.69	2.01	2.06	2.08	1.03	0.44	0.4	0.38	0.04
Advertising & marketing expenses	11.97	10	11.59	13.94	14.55	9.64	6.32	4.07	2.61	1.51	1.03
Advertising	2	2.29	2.64	4.89	4.39	3.35	4.13	4.03	2.52	1.42	0.91
Marketing	9.97	7.71	8.95	9.05	10.16	6.29	2.19	0.04	0.09	0.09	0.12
Distribution	1.06	1.11	0.89	2.55	1.8	0.63	0.44	0.17	0.17	0.18	0.02
Provision for doubtful/ bad debts	0.59	0.11	0.05	0.46	0.15						
Amortisation	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.13	0.13	0.13	
Miscellaneous expenses	8.26	5.81	4.83	4.93	5.99	3.58	2.71	2.44	1.53	1.21	0.93
Less: Expenses capitalised											
Non-recurring expenses	0.04	0.21	0.75	0.08	0.01	0.04	0.12	0.06		0.03	
Loss on sale of assets	0.04	0.19	0.23	0.08		0.04	0.01	0.06		0.03	
Loss on sale of investment							0.11				
Prior period taxes		0.02	0.25		0.01						

(*Contd*)

(*Contd*)

	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996
Others non-recurring expenses			0.27								
PBDIT	13.17	11.9	10.22	7.43	14.22	16.2	22.05	13.64	7.36	4.26	2.94
Financial charges	0.75	0.63	0.6	0.86	0.96	0.97	0.23	0.12	0.18	0.36	0.31
Interest	0.47	0.43	0.43	0.66	0.79	0.82	0.04		0.09	0.25	0.25
On short term loans	0.52	0.43	0.43	0.66	0.79	0.82	0.04		0.09	0.25	0.25
On long term loans	–0.05										
Other financial charges	0.28	0.2	0.17	0.2	0.17	0.15	0.19	0.12	0.09	0.11	0.06
Interest capitalised	0.05										
PBDT	12.42	11.27	9.62	6.57	13.26	15.23	21.82	13.52	7.18	3.9	2.63
Depreciation	2	1.62	1.56	1.51	1.37	1.18	0.98	0.77	0.58	0.43	0.23
PBT	10.42	9.65	8.06	5.06	11.89	14.05	20.84	12.75	6.6	3.47	2.4
Tax provision	3.7	3.62	2.98	1.95	4.37	4.9	7.43	3.93	1.85	0.99	0.72
Corporate tax	3.21	3.2	2.98	1.65	3.81	4.9	7.43	3.93	1.85	0.99	0.72
Deferred taxes	0.24	0.42		0.3	0.56						
Other direct taxes	0.25										
PAT	6.72	6.03	5.08	3.11	7.52	9.15	13.41	8.82	4.75	2.48	1.68

Exhibit 3—Income Statement of Vintage Cards & Creations

	Mar '06	Mar '05	Mar '04	Mar '03	Mar '02	Mar '01	Mar '00	Mar '99	Mar '98	Mar '97
Income :										
Operating Income	3.26	4.01	3.47	6.47	12.10	14.79	24.69	19.94	16.75	4.51
Sales Manufacture	3.26	4.01	3.46	6.38	11.93	14.47	22.40	19.30	16.75	4.51
Sales Trading	0.00	0.00	0.00	0.00	0.00	0.00	1.43	0.00	0.00	0.00
Royalty & Tehnical knowhow	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00
Miscellaneous Services Income	0.00	0.00	0.01	0.10	0.16	0.32	0.86	0.63	0.00	0.00
Expenses :										
Material Consumed	0.48	5.04	1.78	5.00	4.03	4.13	7.68	6.45	5.15	0.35
Raw Materials Consumed	4.29	0.80	1.00	0.82	2.18	4.68	5.98	5.25	6.09	0.48
Purchase of trading goods	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.00	0.00	0.00
Decrease/(Increase) in inventory	–3.81	4.24	0.78	4.18	1.85	–0.55	0.40	1.20	–0.94	–0.13
Manufacturing Expenses	1.00	0.67	1.02	0.89	1.82	1.86	3.85	2.66	0.00	0.00
Power & Fuel expenses	0.02	0.02	0.05	0.06	0.07	0.07	0.00	0.00	0.00	0.00
Misc.mfg.expense	0.98	0.65	0.97	0.84	1.75	1.79	3.85	2.66	0.00	0.00
Personnel Expenses	0.66	0.63	0.83	1.77	2.27	2.62	2.17	1.87	1.39	0.55
Wages & Salaries paid	0.66	0.63	0.74	1.56	1.99	2.30	1.88	1.64	1.39	0.55
Provident Fund/Gratuity	0.00	0.00	0.07	0.15	0.19	0.20	0.17	0.13	0.00	0.00
Staff Welfare expenses	0.00	0.00	0.03	0.06	0.09	0.12	0.13	0.09	0.00	0.00
Selling Expenses	0.00	0.00	0.21	0.12	0.41	0.99	2.42	2.12	0.00	0.00
Advertising Expenses	0.00	0.00	0.02	0.03	0.08	0.77	2.22	1.67	0.00	0.00
Other Selling Expenses	0.00	0.00	0.20	0.08	0.29	0.22	0.20	0.46	0.00	0.00

(*Contd*)

(*Contd*)

	Mar '06	Mar '05	Mar '04	Mar '03	Mar '02	Mar '01	Mar '00	Mar '99	Mar '98	Mar '97
Other Indirect Taxes	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00	0.00	0.00
Adminstrative Expenses	11.09	3.02	0.58	4.22	2.66	3.07	6.20	2.37	6.52	2.84
Rates & Taxes	0.00	0.00	0.00	0.00	0.04	0.07	0.09	0.03	0.00	0.00
Rent paid	0.00	0.00	0.09	0.10	0.11	0.15	0.10	0.10	0.00	0.00
Auditors Remunerartion	0.00	0.00	0.02	0.04	0.03	0.03	0.04	0.03	0.00	0.00
Insurance premium paid	0.00	0.00	0.03	0.06	0.13	0.13	0.23	0.20	0.00	0.00
Travelling expenses	0.00	0.00	0.07	0.16	0.25	0.76	0.83	0.67	0.00	0.00
Other Administration expenses	11.09	3.02	0.38	3.85	2.09	1.94	4.91	1.35	6.52	2.84
Cost of Sales	13.23	9.36	4.42	12.01	11.20	12.68	22.32	15.48	13.06	3.74
Operating Profit	–9.97	–5.35	–0.95	–5.53	0.90	2.11	2.37	4.46	3.69	0.77
Other Recurring Income	3.52	4.33	0.44	0.07	0.06	0.29	0.06	0.07	1.35	0.04
Interest Income	0.00	0.00	0.00	0.06	0.06	0.03	0.06	0.07	0.00	0.00
Miscellaneous Income	3.52	4.33	0.44	0.01	0.00	0.27	0.00	0.00	1.35	0.04
Adjusted PBDIT	–6.45	–1.02	–0.51	–5.47	0.96	2.40	2.43	4.53	5.04	0.81
Financial Expenses	0.02	0.01	0.91	1.31	1.34	1.15	0.25	0.04	0.02	0.44
Interest charges	0.02	0.01	0.90	1.29	1.29	1.11	0.24	0.00	0.02	0.44
Bank & financial charges	0.00	0.00	0.01	0.01	0.05	0.04	0.02	0.04	0.00	0.00
Depreciation	0.26	0.25	0.34	0.34	0.34	0.76	0.57	0.49	0.61	0.23
Adjusted PBT	–6.73	–1.28	–1.76	–7.12	–0.71	0.50	1.60	3.99	4.41	0.13
Tax Charges	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.08
Adjusted PAT	–6.75	–1.28	–1.76	–7.12	-0.71	0.50	1.60	3.99	4.19	0.06
Non Recurring Items	0.00	-0.12	0.01	0.10	0.04	–8.92	0.03	–0.03	0.00	0.00
Profit on sale/discard of assets	0.00	0.00	0.01	–0.01	0.00	–0.03	0.00	–0.03	0.00	0.00
Profit on sale/reval. of Investment	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Gains/loss on exchange rate	0.00	0.00	0.00	0.00	0.04	0.02	0.03	–0.01	0.00	0.00
Extra ordinary income	0.00	–0.12	0.00	0.00	0.00	–8.91	0.00	0.00	0.00	0.00
Other Non Cash adjustments	0.00	0.00	0.48	0.09	0.85	–2.78	–0.56	–0.01	0.04	0.00
Credit balances written back	0.00	0.00	0.46	0.03	0.21	0.00	0.00	0.00	0.00	0.00
Taxes previous year	0.00	0.00	0.00	0.00	0.00	–2.28	0.00	0.00	0.00	0.00
Other prior period adj.	0.00	0.00	0.02	0.06	0.63	–0.50	–0.56	–0.01	0.04	0.00
Reported Net Profit	–6.75	–1.28	–1.27	–6.93	0.30	0.66	1.07	3.95	4.19	0.06
Earnings Before Appropriation	–6.75	–1.40	–12.33	–11.06	–4.13	–4.31	7.94	8.05	4.23	0.06
Equity Dividend	0.00	0.00	0.00	0.00	0.00	0.00	0.76	0.61	0.09	0.02
Dividend Tax	0.00	0.00	0.00	0.00	0.00	0.00	0.08	0.06	0.01	0.00
Retained Earnings	–6.75	–1.40	–12.33	–11.06	–4.13	–4.31	7.10	7.37	4.13	0.04
Trans. to General reserve	0.00	0.00	0.00	0.00	0.00	0.00	0.20	0.50	0.00	0.00
Net transfer to P & L Account	–6.75	–1.40	–12.33	–11.06	–4.13	–4.31	6.90	6.87	4.13	0.04

Exhibit 4—Inventory Position of Vintage Cards & Creations

March 2000	Opening Stock		Closing Stock		Sale	
	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)
Cards	928	242.7	712	175.9	3373	1926.6
Posters	330	37.5	314	40.4	318	84.6
Others		28.5		39		228.3
Total		308.7		255.3		2239.5

March 2001	Opening Stock		Closing Stock		Sale	
	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)
Cards	712	175.9	3220	716.23	1976	1068.16
Posters	314	40.4	519	54.54	121	27.99
Others		39		210.19		349.51
Total		255.3		980.96		1445.66

March 2002	Opening Stock		Closing Stock		Sale	
	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)
Cards	3220	716.23	17696	702.46	13239	950.69
Posters	519	54.54	546	84.31	187	37.13
Others		210.19		156.26		205.04
Total		980.96		943.03		1192.86

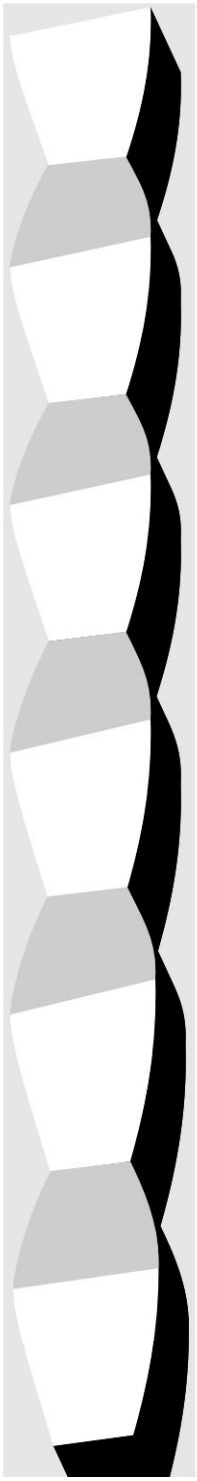
March 2003	Opening Stock		Closing Stock		Sale	
	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)
Cards	17696	702.46	11396	389.8	5485	489.29
Posters	546	84.31	400	48.29	61	20.89
Others		156.26		119.42		127.47
Total		943.03		557.51		637.65

March 2004	Opening Stock		Closing Stock		Sale	
	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)
Cards	11396	389.8	10602	371.66	7098	297.71
Posters	400	48.29	371	42.27	29	4.34
Others		119.42		84.71		43.95
Total		557.51		498.64		346

March 2005	Opening Stock		Closing Stock		Sale	
	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)	Quantity ('000s)	Value (Rs Lakhs)
Cards	10602	371.66	2829	59.26	11640	327.15
Posters	371	42.27	230	16.66	71	8.44
Others		84.71		10.64		65.58
Total		498.64		86.56		401.17

REFERENCES

Annual Reports Archies Greetings and Gifts
Annual Reports Vintage Cards and Creations
Business India. Oct 7-20, 1996; Pg 167; Looking Beyond Cards
Business India. May 3-16, 1999; Pg 106; Card Sharp
Business India. Sep 3-16, 2001; Pg 89; Greetings Beyond the Card
Business Line. Dec 15, 1998; Pg 17; Archies: Good Luck on the Cards
Business Line. May 19, 1999; Pg 6; Archies picks up Local Lingo for Cards
Business Line. Aug 22, 2002-a; Pg 6; HelpAge, Archies Unveil Cards for Grandparents
Business Line. Sep 30, 2002-b; Pg 5; Archies upbeat on 7 % Growth in Bottom-line
Business Line. Sep 10, 2003; Pg 6; Archies Launches New Range of HelpAge Cards
Business Line. Jul 3, 2004; Pg 9; Archies to Revamp Image with New Retail Identity
Business Line. Nov 29, 2005-a; Pg 8; Archies to Open 150 Outlets to Boost Card Sales
Business Line. Dec 21, 2005-b; Pg 8; Archies to Launch New Retail Chain
Business Standard. Apr 17, 2002; Pg 3; Normak Fashions in Tie-up with Archies
Business Standard. Nov 21, 2005; Pg 9; Rural Markets Offer Greeting Card Firms a New Lease
Economic Times. May 24, 1999; Pg 11; Archies Goes Global, Opens Outlet in Abu Dhabi
Economic Times. Aug 14, 2004; Pg 7; Archies Ties up with Disney for Merchandise
Financial Express. May 8, 1999-a; Pg 3; Archies Opens Vision-2000 Store in Bangalore
Financial Express. Jun 18, 1999-b; Pg 3; Archies Launches Father's day cards
http://www.domain-b.com/companies/companies_a/archies/20051220_retail.html accessed on 18.12.06
http://www.myiris.com/shares/company/snapShotShow.php?icode=ARCGREGI&select=1 accessed on 05.04.06
http://www.myiris.com/shares/company/writeDet.php? icode=arcgregi#bus accessed on 05.04.06.
http://www.myiris.com/shares/company/writeDet.php?icode=arcgregi#fut accessed on 05.04.06.
http://www.vintagegreetingsindia.com/finance.htm accessed on 18.12.06
http://www.vintagegreetingsindia.com/unaudit.htm accessed on 18.12.06
Retail Biz. Aug 31, 2004; Pg 6; Archies ties up With Disney, Simon Elvin
The Franchising World. Feb 14, 2005; Pg 34; Archies Ltd
The Hindu. Jul 4, 2004; Pg 13; Archies aims 15% Jump in Profit
USP Age. Nov 30, 2004; Pg 56; One from the Heart



Case 2

Gitanjali—
A Gem in India's Crown?

Since 1966, Gitanjali has come a long way. Our strength and success can be attributed to our efficient management, modern operation systems, uncompromising quality control and dynamic workforce; but above all, it is our desire and vision that has accentuated our growth.

Mehul Choksi
Chairman, Gitanjali Gems Ltd.

Mehul C. Choksi was contemplating expansion of his firm Gitanjali Gems. The Company was incorporated on August 21, 1986 as a private limited company and subsequently converted into Gitanjali Gems Limited. Gitanjali Gems was an integrated diamond and jewellery manufacturing company and one of the largest manufacturer and retailer of diamonds and jewellery in India. Its operations included sourcing of rough diamonds from primary and secondary source suppliers in the international market, cutting and polishing them for exports, and the manufacture and sale of jewellery (diamond and other) through retail operations in India as well as internationally. Choksi was focusing on setting up a diamond manufacturing facility at Hyderabad and an additional one at Mumbai; expansion of retail operations, and investments in subsidiaries,

joint ventures and associate companies. The project was expected to cost approximately Rs.300 crore (Business Line, 2005; Economic Times, 2005-b).

INDUSTRY

The diamond-manufacturing industry in India was one of the largest components of the global trade in diamonds. Until the 18th century, India was the only known source of diamonds in the world. India occupied a prominent place in the global diamond industry and established its position as the largest exporter of cut and polished diamonds in the world. In fact, the gems and jewellery industry formed the single largest component of merchandise exports in the country.

The Diamond Manufacturing Industry

The diamond manufacturing industry was dependent on the supply of rough diamonds. Australia, Botswana, Russia, and South Africa were the major suppliers of rough diamonds and constituted most of the diamond-mining market, which was estimated at 137.2 million carats in 2003. India had a very small share in diamond production with about 1 million carats per year (**Exhibit 1**).

Australia produced approximately 25% of diamonds mined worldwide, while Botswana and South Africa produced approximately 22% and 9%, respectively. The De Beers Consolidated Diamonds Company, South Africa, the largest diamond miner in the world, dominated production of rough diamonds. It had mines in Botswana, Namibia, South Africa, and Tanzania, and accounted for almost 40% of global diamond production by value. Rio-Tinto and BHP Biliton Inc. were the other major corporates engaged in diamond production.

India's diamonds date back to 8,000 B.C. and it continued to be the only known source of diamonds until the 18th century. Later, as other locations for diamonds were discovered in South Africa and Latin America, India lost its prominence as a diamond producer. However, India continued to remain a key player in the global diamond industry as the leading diamond processor in the world. The artisanship and low cost of Indian diamond processors gave India a competitive advantage in diamond cutting and polishing. India accounted for 55% of global polished diamond market in terms of value, 80% in terms of cartage, and 92% in terms of pieces **(Exhibit 2)**. Rough diamonds produced at the mines were distributed for further processing to cutting and polishing centres around the world **(Exhibit 3).**

Diamond distribution was dominated by a few major diamond-mining companies worldwide. Diamond Trading Corporation (DTC), the marketing arm of De Beers was the largest diamond distributor and accounted for approximately 50% of worldwide distribution of rough diamonds. DTC organised selling sessions for diamonds called 'sights' every year. These sights were by 'invitation only' to select diamond processors across the world. The list of sightholders comprised 92 participants, out of which 37 were Indian companies. India sourced approximately 23% of its diamond requirement from DTC directly, accounting for approximately 28% of DTC sales in 2004 **(Exhibit 4)**.

Cut and Polished Diamonds India, China, Israel, and Belgium were the leading countries engaged in diamond cutting and polishing globally. Indian exports in cut and polished diamonds grew at a CAGR of 15.6% till the turn of the century. The major export destinations for cut and polished diamonds were USA, Hong Kong, Belgium, and UAE **(Exhibit 5)**. A bulk of India's diamond processing sector was unorganised and employed about 2 million workers in approximately 1,00,000 diamond manufacturing units. However, the presence of Indian players was largely restricted to the lower-sized and lower-valued diamond market. European manufacturers dominated the higher value market.

The Indian jewellery industry appointed trained people called jewel technologists. All leading companies like Hammer Plus, Adora (M Suresh promoted brand), and Intergold hired jewel technologists to face global competition. Jewellery training institutes like Indian Institute of Jewellery (IIJ), SNDT Women's College and Gemmological Institute of India updated their curriculum to train engineers for the industry (Economic Times 2005-a).

Gem and Jewellery Industry

The crucial role of the gems and jewellery industry in the Indian economy was evident from the contribution the industry made in terms of exports from India. These exports stood at Rs.703.75 billion in fiscal 2005 accounting for about 19.7% of Indian exports and 18.8% CAGR **(Exhibits 6 & 7).**

Structure of gems and jewellery industry in India The gems and jewellery sector in India was classified into the following sub-sectors based on characteristics, manufacturing processes and position in the value chain:

1. Gemstones: consisting of diamonds and precious, semi-precious, and synthetic coloured stones
2. Jewellery: Consisting of gold jewellery, studded jewellery, and silver jewellery
3. Pearls

Of the above segments, gold and diamond jewellery were the significant constituents of the industry. However, while most of the gold jewellery manufactured in India was for domestic consumption, major portion of processed diamonds was exported.

Retailing of Diamond Jewellery USA was the largest consumer of retail diamond jewellery, accounting for approximately 48% of world diamond jewellery consumption. India was the largest supplier to the USA in the lower sized diamonds segment. India's market share in the US market was determined largely on US consumer preferences towards lower sized diamonds. India was also the top supplier to Japan, the second largest diamond consuming country. Meanwhile, India's domestic market and China were also rapidly developing as major markets for diamond consumption. Many diamond manufacturers in India were targeting the domestic market and setting up retail distribution channels.

Gold Jewellery In India, gold was the preferred form of jewellery and a popular investment tool occupying second position for investment of savings, after gold deposits. As India's demand for gold far outstripped its production, the shortfall was met through imports. In 2004, India accounted for a mere 0.4% of world gold production, and was the largest importer of gold in the world. A sizeable portion of gold jewellery manufactured every year in India came from recycled gold. Sale of gold jewellery was very sensitive to income levels and price levels. The major cost component in gold jewellery being the cost of raw material, margins for retailers was low. In addition, sale of gold jewellery was dependent on purchases based on faith in the retailer, and the market was extremely fragmented.

India's exports of gold jewellery were Rs 17.3 billion in the fiscal 2004-05. Gold exports from India increased at a CAGR of 34.4%. UAE and USA were the major export destinations and constituted approximately 85% of gold jewellery exports from India.

Branded Jewellery in India Branded jewellery was a relatively recent phenomenon in India, with most jewellery retailed in the unorganised sector. The majority of traditional jewellers catered to the local population and most purchases were made on trust and reputation of the local jeweller. *Tanishq* and *Gili* were among the earliest jewellery brands in India. The branding of jewellery in India followed the pattern in the international market where 90% of the jewellery was sold as a fashion accessory or as everyday wear, and not as an investment. Branded jewellery was therefore

positioned as a lifestyle and personality statement. There was also a shift in consumer preference towards diamond jewellery due to the extensive positioning of diamond jewellery as both affordable and contemporary.

Another key development in branded jewellery was the introduction of value-added services such as the certification of gold and diamonds, and lifetime return and buy-back schemes. These trade practices resulted in the perception of superior quality associated with branded jewellery. The new generation preferred to buy branded jewellery. The best-known brands as per the TNS survey (**Exhibit 8**) across three Metros indicated Tanishq, Nakshatra and Asmi among the top 10 brands (http://www.gjepc.org//gjepc.aspx?indpage= news_FT_women_buying & section_id = 5 accessed on 09.02.06).

Retailing Formats for Branded Jewellery in India There were broadly three retail formats followed by branded jewellers in India:

1. Exclusive outlets at malls and other shopping centres in major cities showcasing various models of the brand;
2. Kiosks/displays in departmental stores and malls; and
3. Display of branded jewellery in shops of local jewellers.

GOVERNMENT INITIATIVES AND REGULATIONS FOR THE GEMS AND JEWELLERY INDUSTRY IN INDIA

The Government of India took several initiatives to stimulate the growth of the gems and jewellery industry given the industry's critical importance in Indian exports. These included duty free imports of rough diamonds and waiver of customs duty on coloured, rough gemstones and semi-processed, half-cut, and broken diamonds. The EXIM policy for 2002-07 focused on exports of gems and jewellery through market access initiative schemes, duty free imports, and adjustments in value addition norms. There was a reduction of import tariff on cut and polished diamonds and gemstones from 15% to 5%, which enabled Indian jewellers to import expensive, large-size diamonds and export them after value addition through the manufacture of studded jewellery.

Under the Industrial Policy and FEMA, foreign direct investment up to 100% was permitted in the gems and jewellery industry. FIIs including institutions such as pension funds, investment trusts, asset management companies, nominee companies, and incorporated, institutional portfolio managers could invest in the securities traded on the primary and secondary markets in India. FIIs were required to obtain an initial registration from the SEBI and a general permission from RBI to engage in transactions regulated under FEMA and comply with the provisions of the SEBI (FII) Regulations, 1995. The initial registration and the RBI's general permission, together enabled the registered FII to buy (subject to the ownership restrictions discussed below) and sell freely securities issued by Indian companies, to realise capital gains on investments made through the initial amount invested in India, to subscribe or renounce rights issues for shares, to appoint a domestic custodian for custody of investments held, and to repatriate the capital, capital gains, dividends, income received by way of interest, and any compensation received towards sale or renunciation of rights issues of shares.

Under the Foreign Trade Policy 2004-2009, cutting and polishing of gems and jewellery was treated as manufacturing for the purposes of exemption under section 10A of the *Income Tax Act*. Import of gold of 18 carat and above was allowed under the replenishment scheme; duty free import of commercial samples were permitted up to Rs.100,000; and duty free re-import entitlement for rejected jewellery was fixed at 2% of the FOB value of export. Export Oriented Units (EOUs) were exempted from Service Tax in proportion to the exported goods and services. Income tax benefits on plant and machinery were extended to Domestic Tariff Area (DTA) units, which converted to EOUs. Import of capital goods was on self-certification basis for

EOUs. Free Trade and Warehousing Zones were introduced to create trade related infrastructure to facilitate the import and export of goods and services to carry out trade transactions in free currency. Units in the FTZs qualified for all other benefits applicable to SEZ units.

Special Economic Zone

Duty free import/domestic procurement was permitted for all goods required for the development, operation, and maintenance of SEZ. Income tax was exempted under section 10 of the Income Tax Act to SEZ units and SEZ developers. External Commercial Borrowing by SEZ units up to U.S.$ 500 million in a year without maturity restriction, through recognised banking channels, and carry forward of losses and income tax exemptions to the extent of 50% of ploughed back profits to SEZ units was permitted. Certain exemptions were also permitted in central sales tax, service tax, and income tax. Suppliers to SEZ were entitled to physical export benefits such as drawback, advance licence, Duty Free Replenishment Certificate and Duty Entitlement Passbook.

Gem and Jewellery Export Promotion Council

The Government of India designated the Gem and Jewellery Export Promotion Council (GJEPC) as the importing and exporting authority in India in keeping with its international obligations under section IV (b) of the Kimberley Process Certification Scheme (KPCS). The Kimberley Process was a joint government, international diamond merchants, and civil society initiative to stem the flow of 'conflict' diamonds - rough diamonds used by rebel movements to finance wars against legitimate governments. The Kimberley Process comprised participating governments that represented 98% of the world trade in rough diamonds. The Government of India implemented the KPCS in India from January 1, 2003. The Gold Jewellery Export Promotion Council (GJEPC) targeted exports worth $20 billion by 2007 (Financial Express, 2005).

DEMAND CONDITIONS

Diamonds and fine jewellery formed part of the discretionary purchases for consumers, and demand depended on various factors such as economic growth, employment levels, income levels, tax rates, and credit availability, all of which affected consumer spending and disposable income. In the event that prevailing consumer tastes for diamonds and jewellery declined, or if a widespread demand for alternatives to diamond products was created, demand and price levels for jewellery would decline and business would be adversely affected. In addition, jewellery offerings had to reflect the tastes and preferences of a wide range of consumers whose preferences changed regularly. If the styles offered became less popular with consumers, and firms were unable to adjust output in a timely manner, sales would decline.

The business was dependent on the continued establishment and promotion of the various brands. Promoting and positioning brands was directly related to the success of marketing and merchandising efforts and ability to provide a consistent, high-quality customer experience. The failure of brand promotion activities could adversely affect ability to attract new customers and maintain customer relationships, thus adversely affecting business. The industry was seasonal in nature with higher sales during Diwali and the Christmas holiday season. In anticipation of increased sales activity during the second half of the year, firms accumulated higher inventory of 12 to 15 months of production and employed additional staff in customer-support operations.

SUPPLY CONDITIONS

Fluctuations in the prices of precious metals, and precious and semi-precious stones in general affected the jewellery industry. Since a small number of diamond mining firms controlled a majority of the world's rough

diamond supply, any decision made by such firms to restrict the supply of rough diamonds could adversely affect operations. The availability and prices of gold, diamonds and other precious metals and precious and semi-precious stones could be influenced by cartels, political instability in exporting countries, and inflation. Prices were subject to wide fluctuations in response to changes in supply and demand for gold and diamonds, market uncertainty, and a variety of additional factors. High rough prices and the inconsistency of supply for non-sightholders were a major problem (http://www.gjepc.org/solitaire/magazines/Apr06_May06/Apr06_May06.aspx?inclpage=CoverStory&section_id=9 accessed on 01.08.06). Sustained interruption in the supply of rough diamonds, an over-abundance of supply, or a substantial change in relationship with the DTC and other diamond-mining and wholesale-trading firms, including the loss of sightholder status, could adversely affect performance. A failure to secure diamonds at reasonable commercial prices and in sufficient quantities would lower revenues and adversely impact results of operations. In addition, increases in the price of diamonds could adversely affect consumer demand, which could cause a decline in sales. Almost all rough diamond purchases and exports were denominated in U.S. dollars hence changes in currency exchange rates influenced cost of inputs as well as output.

COMPETITION

Current and potential competitors included independent jewellery stores, retail jewellery store chains, online retailers, department stores, chain stores and mass retailers, and discounters, and wholesale diamond traders that could forward-integrate into retail markets. Due to continued focus on branding, and retail sales under DTC's Supplier of Choice (SOC) program and the higher margins associated with branded jewellery sales as compared to the sale of processed diamonds, other DTC sightholders could also enter the business of retailing of branded jewellery. In 2002, when the DTC implemented SOC, they set rough prices at extremely competitive levels while they pushed all the sightholders downstream. Sightholders went ahead and made huge investments downstream - and long-term commitments to go along, from which they could not back out. However, DTC backed out of its end of the deal and hiked up prices (http://www.gjepc.org/solitaire/magazines/Apr06_May06/Apr06_May06. aspx? inclpage=CoverStory&section_id=9 accessed on 01.08.06). Added to this, any deregulation in restrictions on foreign ownership in the retail sector by the Government of India could bring new competition to the Indian market.

Competition was based primarily on the quality, design, availability, and pricing of products. To remain competitive, firms had to reduce procurement, production, and distribution costs, and improve operating efficiencies. New players could enter the industry, though there were some entry barriers like substantial working capital to purchase rough diamonds and hold polished inventory, the long-term relationships required to have access to adequate supplies of rough diamonds, the limited number of persons available with the skills necessary to consistently cut significant amounts of high quality diamonds, the difficulty in obtaining access to upscale channels of distribution, the importance of public recognition of an established brand name, a reputation for diamond-cutting excellence, and the procurement of computer systems to report on and monitor the manufacturing and distribution network. Current and potential competitors included independent jewellery stores, retail jewellery store chains, online retailers that sold jewellery, department stores, chain stores and mass retailers, and discounters and wholesale diamond traders that could enter the retail markets in the future.

The primary competitors were the top 3-5 jewellers at the premium end of the jewellery market, in major cities. Most of these jewellers had been in existence for several decades, were family run, and had advantage of local knowledge and a loyal base of customers. Some of the regional players included Mehrasons Jewellers (Delhi), Tribhuvandas Bhimji Zaveri (Mumbai), B.C. Sen and P.C. Chandra (Kolkata), G.R. Thanga Maligai (Chennai), and C. Krishnaiah Chetty (Bangalore).

Tanishq set up a manufacturing facility in 1994 at Hosur, having a refining plant with Swiss technology, the alloying equipment, assay testing facilities, and Yasui waxing and casting machines from Japan. A typical

jewellery industry consisted of an owner, intermediaries, and a *karigar* (worker with jewellery experience). In order to eliminate intermediaries and provide direct employment to *karigars*, parks were set up at Hosur in 2001. The *karigar* parks helped reduce the cost of manufacturing, as they were akin to ancillary units. Tanishq provided raw materials and designs to the *karigars* and trained the owner and workforce of such parks to follow the systems and procedures laid down by them to ensure quality products to customers. As the *karigar* park was located at Hosur, they had the benefit of quick delivery, reduced inventory holding, quicker communication, flexibility to respond during exigency, elimination of logistics cost, and quicker lead-time.

The first Tanishq jewellery store opened in Chennai in 1996 and gradually spread to 79 stores across 59 towns in India. The stores were either Company managed (Bangalore, Hosur, Chennai, Calcutta, Mumbai, and New Delhi), management agent owned, or franchised. Company-managed showrooms served as flagship retailing stores designed to provide the best that the Tanishq stores had to offer to customers. They also influenced the operations of other franchisees and brought about uniformity across the retail chain. The jewellery products were broadly categorised into studded jewellery, 22 Karat jewellery, and coins. The jewellery utilised materials such as platinum, gold, silver, and other precious metals and stones, with considerable emphasis on marketing the diamond collection. Each Tanishq diamond was cut according to rigidly enforced measurement and precision standards. The colour of each diamond was determined, and graded according to grading standards of the Gemmological Institute of America (GIA) scale from "D" (colourless) to "Z" (intense yellow). The diamonds were also graded as per the GIA scale of VVSI (very very small inclusions) to S12 (small inclusions) to offer various standards of clarity. New collections based on various looks and themes were constantly innovated and introduced. The jewellery collections included Aria, Ethnic Gold, Lightweight Diamonds, and Paheli. Apart from gold and diamonds, a collection in sterling silver was also offered. Tanishq jewellery was exported to Europe, US, Middle East, Singapore, and Australia.

A retail operation comprised customers, salespeople, and processes. The customer related programmes included VOICE-T (Voice of Invaluable Customer Entering Tanishq), a customer satisfaction measurement programme used to collect feedback from customers visiting the stores; Store Scorecard, which assessed the health of a store by monitoring store productivity, customer satisfaction, employee satisfaction and audit compliance, and Complaint Management System. Sales staff offered the Tanishq experience to customers through product knowledge or expertise, delivering the prescribed standards of customer service and meeting customer expectations. Sales staff was trained through a training programme—TAJ—Tanishq Accomplished Jewellers. All operational aspects of a store were provided to each store through Store Operations Manuals, the BOAT (Boutique Operations Advisory Tool) and the New Process Manual.

Laxmi Dia Jewel Pvt. Limited, Surat, was the country's second largest exporter of polished diamonds. It was looking at the diamond jewellery markets in the US, Antwerp, China, Hong Kong and Bangkok. The company planned to sell its branded jewellery, Cygnus, by setting up 13 outlets in various cities. In 2003-2004, the company opened its first outlet in Mumbai followed by three outlets at Chandigarh, Noida, and Gurgaon. The first outlet in Gujarat was opened on 24 May 2004 at Ahmedabad. They also planned to sell Cygnus brand jewellery through 350 multi-brand lifestyle stores in the country. Laxmi Dia had offices at Antwerp, New York, Los Angeles, Bangkok and Hong Kong and planned an office and manufacturing facility for jewellery in China to supply to the US, Europe and East Asia (Business Standard, 2004-b).

Rajesh Exports Ltd (REL), headquartered at Bangalore, was the world's largest gold jewellery manufacturer and the country's largest exporter of gold jewellery. The company had offices in USA, Europe, Middle East, and South East Asia. The company's manufacturing facility had an installed capacity of processing 250tpa of gold jewellery, which translated in market value, was estimated at Rs.60,000 crore of which only 25% was utilised. It pioneered the concept of fusion jewellery i.e. a combination of man and machine made jewellery. The company was negotiating with mining companies to form joint ventures on one hand and on the other, it had firmed up plans to enter the high-margin jewellery-retailing segment. It also planned to open 100 retail

outlets at an investment of Rs. 450 crore. FIIs visiting their manufacturing setup analysed the business model, delivery mechanisms, and administrative capacities and shown interest in investing in the company (http://www.indiainfoline.com/view/100505.html dt. 09.02.06).

The Swarnmandir Jewel Designer based at Tumkur in Karnataka was known for its exclusive designer series of 916 handcrafted gold jewellery collections by skilled goldsmiths and set with Signity Star Cubic Zirconia. The range of jewellery included engagement and wedding rings, bangles, pendants, necklace sets, torque and choker with matching ear studs, and bracelets. The company's collection comprised designs that were both traditional and contemporary. In order to keep up with changing times, Swarnmandir also forayed into teenage collections and international design collections (Fortune India, 2003).

Platinum Guild International (PGI) came to India in 2000 when the Indian retail space was being transformed by new-age consumers and a surging economy, and won a huge following in the country. The popularity of platinum was attributed to its lustre and tensile strength. PGI introduced the platinum jewellery brand, 'Dew Drops' in India. The icon-jewel integrated values, symbols, and emotions perceived by consumers across the world. The Dew Drops Platinum collection included earrings, finger rings, pendants, and bangles in unique designs. A second edition was on the cards going by the response to Dew Drops, which fascinated people from celebrities to young and stylish, making platinum the choice metal among the 25-35 age group (The Retail Jeweller, 2005).

Zirconium Jewellery was gaining popularity among consumers. Collage Consulting got the brand project for cubic zirconium (CZ) jewellery brand Ishtaa. The brand project included positioning, retail identity, and packaging and handling the mass media business for Ishtaa. Collage was the newly formed branding, designing, and creative services division of advertising agency R.K. Swamy BBDO. Ishtaa was a joint venture of Emerald Jewel Industry Pvt. Ltd. of Coimbatore and Clarity Gold Pvt. Ltd. of Mumbai (Agency FAQS, 2005).

GITANJALI GEMS

Established in 1966, by Mehul Choksi, the Gitanjali group was one of the earliest diamond houses in India. By 1967, it was accorded a Sight by the Diamond Trading Company Ltd. London, making it one of the first Sightholders in India. Having received over 50 National and Council awards from the Ministry of Commerce for outstanding exports, it became one of the largest diamond exporting companies of India. It captured the entire value chain from sourcing of roughs to cutting and polishing them at five locations in India. It also manufactured gold and diamond jewellery, which was marketed as branded jewellery. In the 1970s and 80s they established business and marketing activities in USA, Japan, France, Italy and Hong Kong apart from Indian facilities at Borivali, Goregaon, and Surat. Due to changing international business patterns during 1990s, the company positioned itself to manufacture and promote diamonds as well as studded jewellery right down to retail level rather than restricting to worldwide wholesalers.

Gitanjali Gems was an integrated diamond and jewellery manufacturing company and one of the largest manufacturers and retailers of diamonds and jewellery in India. The firm was accorded a "sightholder" status with DTC in 1968 and was one of the first DTC sightholders in India. Their business was initially limited to the manufacture and export of cut and polished diamonds to various international markets. Leveraging on their sightholder status, in 1990 they commenced production of diamond studded and other jewellery at a facility at the SEZ at Andheri, Mumbai. In 1994, the firm commenced retail sales of *Gili;* one of the first branded jewellery lines introduced in India and awarded a "Superbrand" status by Times of India in 2004. From time to time attempts were also made to develop and market synthetic stones and gems to compete in the market for diamonds and diamond jewellery. In fiscals 2003, 2004, and 2005, total income from sales of diamonds and jewellery products was Rs.1172.39 million, Rs.1306.54 million, and Rs.1354.17 million, respectively, with net profit of Rs.18.42 million, Rs.11.46 million, and Rs.8.72 million, respectively.

Infrastructure

The company manufactured the most precise and ideal cut diamonds in the world. The precise positioning of facets resulted in dazzling diamonds that were sought by the global customers. The company trademarked 25 of these cuts. It had specialised factories in different parts of the world. The major units were Diminco Pacific Manufacturing Co. Ltd. at Qingdao in China, Gemsiam Manufacturing Co. Ltd. at Thailand, Hai Duong Diamond Factory at Vietnam, and GEC at Surat and Mumbai in India. The company had two modern diamond manufacturing facilities located at Borivali in Mumbai and at the SEZ in Surat in Gujarat (Business Standard, 2006-b). The diamond cutting and polishing facility at Borivali was spread over an area of 40,000 square feet with modern diamond processing equipment, employing more than 1,200 skilled employees and was one of the largest diamond manufacturing facilities in India. The facility at Surat was an export-oriented facility. A sophisticated 80,000 sq. ft. jewellery designing and manufacturing facility for diamond-studded jewellery existed at the Santacruz Electronic Export Processing Zone ("SEEPZ") at Andheri, Mumbai employing more than 800 employees. This 100% export oriented facility also produced gold and platinum diamond-studded jewellery. Two modern jewellery-manufacturing facilities also existed at MIDC at Andheri, Mumbai that primarily produced branded jewellery lines for retail operations in India. Additional diamond and jewellery manufacturing facilities were planned at Mumbai and at the proposed Gems and Jewellery Special Economic Zone ("GJSEZ") in Hyderabad. Sophisticated manufacturing facilities, strong design capabilities and focus on stringent quality control enabled them to produce quality certified diamonds and jewellery. Their design, quality, and large customer base outside India, which include jewellery manufacturers, large department store chains, retail stores and wholesalers, enabled them to develop strong credentials in international markets and positioned them to capitalise on the growing demand for diamonds and jewellery in the Indian and international markets.

Human Resources

As of September 30, 2005, the firm had 2,300 employees including contract employees, of which about 1,800 employees were employed at manufacturing facilities and more than 250 employees were employed in retail operations. The Company had 410 full-time employees, of which approximately 117 employees were employed at corporate offices in Mumbai. The company had a strong belief that motivated and empowered employees were the key to competitive advantage. Their senior management, with significant industry experience was instrumental in the consistent growth in revenues and operations. In addition, the Board included a strong combination of management as well as independent members that brought significant business experience to the Company. The CMD was involved in the diamond and jewellery industry for more than 25 years. All subsidiaries, joint ventures, and associate companies operated as professionally managed operationally independent units under the supervision of managers who had significant experience in the industry **(Exhibit 12).**

Gitanjali Gems provided regular staff training programmes, leadership programmes and performance enhancement programmes for employees. They engaged outside consultants to assist in training employees and to enhance their performance. Gitanjali also planned to set up a training centre for employees (Economic Times, 2004). In addition to a base salary and a performance linked variable pay, benefits to employees included medical expenses, housing or rent assistance, annual leave and travel allowance, provident fund, healthcare, schooling, pension, and group gratuity schemes. Employees and contract employees were also covered under insurance schemes.

Technology

Gitanjali Gems achieved an international first by perfecting the heart cut for diamonds and making them available in affordable jewellery at prices between Rs 1,000 and Rs.6,000. Gitanjali Laser House (GLH) developed the heart cut for small diamonds. Even diamonds as small as two and three points could have the heart cut. It took two years and 250 carats valued at Rs 2 crore for GLH to perfect the technology (Business India, 1997).

Procurement

Operations and revenues were dependent upon the availability of rough diamonds, the world's known sources of which were highly concentrated. Angola, Australia, Botswana, Brazil, Canada, Ghana, Guinea, Ivory Coast, Namibia, Republic of the Congo, Russia, Sierra Leone, and South Africa accounted for a significant portion of the world's rough diamond production. Rough diamonds were procured at competitive prices from DTC, the rough diamond-marketing arm of De Beers S.A., with whom Gitanjali enjoyed sightholder status, either directly or through the promoter group companies for more than three decades. The remaining rough diamond requirements were procured from secondary source suppliers in the international market.

Sales by DTC were directed to a select group of clients or "sightholders" in London and South Africa. In order to maintain their purchasing relationship, DTC's clients were expected to purchase substantially all of the diamonds offered to them by DTC. Companies that were not sightholders had to either purchase their requirements from sightholders or seek access to that portion of the world supply not marketed by DTC. The latter periodically invited its clients to submit their requirements regarding the amount and type of stones they wished to purchase. Gitanjali's employees attended offerings of rough diamonds held by DTC periodically during the year in London. At sights, they purchased at DTC's stated price, an assortment of rough diamonds known as a "series", the composition of which attempted to take into account their qualitative and quantitative requirements based on requests submitted to DTC.

In 2000, DTC announced significant changes in its approach to rough diamond marketing. DTC stated that it would stop open market purchases, alter its market control and pricing policies, and focus on selling its own mining productions through its "Supplier of Choice" marketing programmes. These policy changes were intended to drive consumer demand for diamond jewellery by fostering the development of efficient distribution networks that stimulated demand. It supported the emergence of internationally recognised brands to meet consumer needs, supplying clients with a consistent supply of rough diamonds, encouraging, and supporting additional investment in marketing and advertising programmes with the goal of developing an industry led by advertising and marketing support. As a sightholder under DTC's Supplier of Choice program, Gitanjali had an assured and steady source of quality rough diamonds at competitive prices, advertising and marketing support from DTC to develop the brands under which they sold their product, and access to DTC's consumer research knowledge base.

Through its control of a majority of the value of the current world rough diamond output, DTC could exert significant control over the pricing of rough and polished diamonds by adjusting the quantity and pricing of rough diamonds it supplied to the marketplace. Rough diamond prices established by them were characterised, historically, by steady increases over the long term; however, prices in the secondary market experienced a greater degree of volatility. Traditionally, Gitanjali Gems was able to pass along such price increases to customers. From time to time, however, they absorbed these price increases in the short term to maintain an orderly pricing relationship with customers. This caused temporary adverse effects on earnings. Increases in the price of rough diamonds generally resulted in a corresponding increase in the price of polished diamonds. However, during periods of economic uncertainty, there was a significant time lag before they were able to increase polished diamond prices. They broadened the sales base and implemented strict inventory, pricing,

and purchasing controls aimed at decreasing the impact of fluctuations in the price of rough and polished diamonds. These included sophisticated rough diamond evaluation programmes and inventory utilisation programmes.

In fiscal 2005, rough diamonds sourced from DTC constituted approximately 25% of the total rough diamond procurement cost. The remaining rough diamond requirements were procured from secondary source suppliers in the international market to ensure that there was no shortfall in the supply of rough diamonds for operations. They had good relations with suppliers, including DTC, which was expected to ensure access to primary sources of diamonds.

Manufacturing

Diamond Manufacturing The diamond cutting and polishing process was labour-intensive and required specialised knowledge and skills. Rough diamonds were sorted or graded based on colour, shape, clarity, cut, and weight. In order to ensure optimum recovery of polished stones from the rough diamonds, the cutting process was carefully planned. The following diagram outlines the cutting and polishing process:

Marking Marking, the first step in the diamond cutting and polishing process, was executed following a careful examination of each rough diamond to determine the optimal cut designed to yield the greatest value of the polished diamond. The shape of the rough diamond and the number and location of inclusions, or blemishes, were first considered. Since the crystalline structure of diamond caused it to have a grain, called cleavage, it was critical to plan for the facets of the diamond to be made in the correct direction. After considering these factors, the manner in which the rough diamond was to be cut was determined and the rough diamond was then marked for cleaving or sawing.

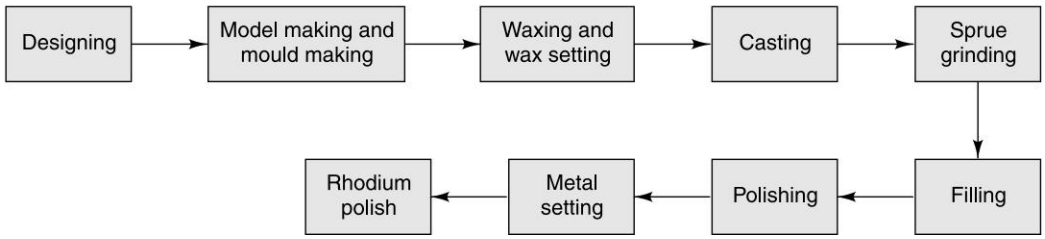
Cleaving Following the marking of the rough diamond, it was either cleaved or sawed. The cleaving process was critical to the manufacturing of polished diamonds, as a mistake in the cleaving process could shatter the diamond. Cleaving involved cutting the diamond into two pieces to bring out the best angles and establish the final shape and cut. Cleaving was performed by striking the rough diamond with a sharp blow from a blade or hammer. However, certain rough diamonds had too many stress points that could fragment if cleaved. Such rough stones were instead sawed, a process which was extremely meticulous and time consuming.

Sawing Sawing was the process of cutting crystal shaped diamonds into two pieces on rotating copper blades. The saw used in diamond processing was a paper-thin disk of phosphor bronze that rotated on a horizontal spindle at about 4,000 rotations per minute. The diamond was clamped so it rested against the blade and was sawed for several hours, depending on the size of the diamond. Since diamond was the hardest substance on earth, only another diamond could cut it. Therefore, diamond dust was used on the saw, as well as the actual diamond dust generated by the crystal being cut.

Cutting The next step in cutting a round stone was called girdling, or rounding. The diamond was placed in a lathe and a second diamond was held against it using a long handle, which slowly rounded it into a cone shape. The next step was for the stone to go to the blocker, who specialised in placing the first 18 main facets on a brilliant-cut diamond. It then went to the brillianteer, who placed and polished the remaining 40 facets (if the stone was being cut in the standard 58-facet brilliant cut). Using Belgian technology and skilled workforce, a variety of unique diamond cuts in calliberated diamond shapes are created to look different yet refract light optimally. Twenty-six of these cuts are patented—lilac, wild orchid, tulip, maggnatic, glory, jupiter, sun, satumers, mars, turnhill, moon, queen, sultan, prince, pine feezia, dew, czar, iny, butterfly, azene, flame, foretta, victoria, star and Mahalaya.

Polishing The last step in the diamond finishing process was polishing. The diamond was clamped onto a revolving cast-iron lap (a horizontal, circular disk) that was charged with diamond dust. The fine diamond dust acted as an abrasive to polish away small imperfections and make the surface of the stone perfectly smooth. The final stages of the diamond manufacturing process consisted of checking for damage, cleaning by boiling in various acids, and the final assortment for marketing to the customer.

Jewellery Manufacturing Jewellery designing and manufacturing was done at Santacruz where gold and platinum diamond studded jewellery was also produced. Jewellery manufacturing process involved the following steps:



Designing In-house designers developed and created new designs for jewellery products in consultation with merchandisers based in the United States, Hong Kong, and other international markets to cater to the latest international trends and meet specific customer requirements.

Model making and mould making On receipt of the approval of customers and the finalisation of the design, these designs were sent to the model-making department where the model for the jewellery was fabricated in silver and sent for the customer's approval. A rubber mould was then developed from the model approved by the customer.

Waxing and wax setting Wax was injected into the rubber mould to produce wax jewellery pieces. These pieces were provided finishing touches, precious stones were then studded onto them, and the wax tree produced was forwarded to the casting department.

Casting Investment was done in this department for the wax tree in the casting flask. The flask after drying was placed in the burnout furnace to melt and/or vaporise the wax to create a cavity in the investment flask. Thereafter, the cavity was filled with the relevant metal in which the jewellery was required to be manufactured.

Sprue grinding The metal jewellery pieces were separated from the tree. Any sprue remaining after such separation was ground at this stage.

Filling The excess metal in the grooves and channels in the jewellery pieces were removed. Thereafter, the jewellery pieces were cleaned for casting dust and the removal of any scratches.

Polishing The jewellery was then polished to develop the final surface finish. Under the Foreign Trade Policy 2004-2009, cutting and polishing of gems and jewellery was treated as manufacturing for the purposes of exemption under section 10A of the Income Tax Act.

Metal setting The relevant diamond and other precious stones were then studded on to the jewellery at this stage.

Rhodium Polish Following the studding and polishing, the jewellery was provided with rhodium treatment where gold plating was provided for the relevant part of the jewellery. The jewellery pieces then went through final quality checks and forwarded to the packing division.

Expatriates from Belgium played a major role in turning the Indian diamond processing industry into a $7 billion industry. Belgians came in large numbers to help set up factories, introduce technologies, and train workers in the diamond centres of India. Gitanjali Gems employed several Belgian expatriates to leverage their skills in operating the business (Economic Times, 2003). Gitanjali launched a range of diamonds under the brand name-Gitanjali Belgian Cut Diamonds. International Gemmological Institute of Antwerp certified the diamonds internationally, ensuring the authenticity of the diamonds. It also offered a reliable and accurate statement of identity and grade based on an internationally accepted grading system (The Hindu, 2000).

Marketing

Gitanjali did not have any long-term contracts with customers, but the top 10 customers accounted for 42% of the sale (Annual Report, 2005). Gitanjali Gems offered customers a comprehensive product range of diamond and other jewellery products aimed at various jewellery categories, different customer and price segments, various festive and social occasions as well as jewellery products for regular use including, custom made jewellery. Branded jewellery lines enjoyed significant brand equity in their respective market segments developed through aggressive advertising and marketing campaigns that gave them an advantage over competitors. The sub-brands of D'Damas were particularly notable for the wedding and general collections. The wedding collection included Diamond Mangalsutra, Jhalak collection, Vivaah Collection and Triana Collection. The General collection included Anika invisible, Taarika 7-diamond, Raena-party wear, Fior and Fleurprincess collection, Damas Solitaire, Original, Victorian and Eternal collections. The company was in the process of registering 24 trademarks in India in connection with branded jewellery lines. These trademarks included Christy, Gitanjali, Tarika, Triana, Vivaah, Amika, Bindi, Senses, Jhalak, Raena, D'Damas, Barzheim, Ticino, Ista, Tichino, T Tichino, Passion Stone, Giantti, Glitterati, Mangalsutra, Mangalsutram, Diamond Mangalsutra and Diamond Mangalsutram (Business Standard, 2005-b).

In addition, branded diamond and jewellery products were certified for cartage, authenticity, and quality and carried a suggested maximum retail price that enabled them to develop customer loyalty. Development of new products and designs was a key element of the business strategy. Innovative designs and product lines enabled them to develop the brand and increase retail sales. Designs were upgraded regularly to service the changing preferences of consumers.

Gili brand of jewellery introduced in 1994 was among the first branded jewellery introduced in India (Dalal Street Investment Journal, 2003). Over the years, the company strengthened the brand portfolio with the launch of new brands and sub-brands aimed at different customer profiles, various market and price segments, and for various uses and occasions and enjoyed significant brand equity and market share in their respective market segments.

In view of the significant potential for branded jewellery in India and their success in developing branded jewellery lines, in 2000, DTC permitted them and three other sightholders in India to market and sell jewellery products under the *Nakshatra* brand. The four sightholders formed a joint venture company, Brightest Circle Jewellery Private Limited. In November 2005, *Nakshatra* was licenced to Brightest Circle Jewellery Private Limited by the virtue of which Brightest Circle got the sole right and interest to market the brand. Superbrands India Private Limited, an independent arbiter in branding, selected the first jewellery brand Gili as a "Superbrand" in 2004. In 2004, the company began selling branded gold jewellery to different consumer segments (in association with the World Gold Council) under the brand names that include *Collection g, Gold* Expressions and *Vivaha Gold.* The brands enjoyed significant brand equity in their respective market segments

developed through aggressive advertising and marketing campaigns, which gave the company a competitive advantage over competitors. According to the July 2005 edition of Solitaire International, a publication of the Gem and Jewellery Export Promotion Council of India, four of the brands under which they sold their branded jewellery, *Nakshatra (premium)*, *Asmi (premium)*, *Gili* and *D'Damas*, featured among the ten best known jewellery brands in India (Financial Express, 2003).

The cut and polished diamonds and other jewellery products were exported to various international markets in Europe including Antwerp and Italy, United States, Middle East as well as to several diamond and jewellery markets in Asia including Japan, China, Hong Kong, and Thailand. Branded diamond and other jewellery products were also sold in India through a nationwide sales and distribution network that as of September 30, 2005 consisted of 26 exclusive distributors across India, approximately 620 outlets, including outlets in host stores, 5 stand alone stores and 17 stores set up through franchisee arrangements spread across 30 cities and towns in India. The large customer base was spread across India and international markets and included various jewellery manufacturers, large department store chains, retail stores, and wholesalers.

In 2001, Gitanjali launched the buy-back scheme for diamonds. Under the buy-back scheme, Gitanjali offered 5% below purchase M.R.P. if the diamond was sold within a year of purchase, 5% above purchase M.R.P. for diamonds sold between the second and third year, 10% above purchase M.R.P. between the fourth and fifth year, and 15% above purchase M.R.P. from the sixth year onwards. The diamonds were individually certified and numbered for easy identification and future sale (Business Line, Mar 20, 2001).

Distribution

The success in growth of retail operations, whether directly or through the operations of subsidiaries, joint ventures and associate companies, was dependent upon the opening of new stores and capitalising on existing marketing and distribution network, increased sales volume and profitability from existing and new stores, franchises and other distribution and selling arrangements. The ability to operate existing and new stores profitably was subject to various contingencies, including ability to secure suitable locations for outlets on a timely basis and on satisfactory terms, ability to hire, train, and retain qualified personnel and the successful integration of new outlets with existing marketing and distribution network.

Gitanjali Gems had an independent sales and distribution network for diamonds and jewellery products. A substantial majority of cut and polished diamonds were exported to diamond wholesalers and large jewellery manufacturers in international markets. Promoter group companies outside India played a major role in developing strong relationships with customers in these markets. A significant part of jewellery export sales were through wholesalers in international markets that acted as procurement agents for jewellery retailers in those markets. The company also leveraged long-term relationships with jewellery retailers in international markets to sell directly to such retailers rather than through the wholesalers.

In India, the company had strong sales and distribution channels including sales affected through *exclusive distributors*, *direct sales to large department stores* and reputed jewellery stores and *direct sales to end customers* through retail operations. In order to increase visibility of branded jewellery lines, they operated through extensive distributor networks to enable them to display their products at retailers in several cities and towns across India. They also sold through large department stores and reputable jewellery retailers in major cities and towns and directly to end-customers through retail operations. Retail operations included several exclusive retail stores in major metropolitan areas that were owned by them (*D'Damas* brand) as well as shop-in-shop outlets in various host stores such as large department store chains and shopping malls. Twelve retail outlets for various brands were established as franchises. These were located in high customer-concentration areas. Retail operations network was supported by an inventory management system that enabled them to move inventory to and from, and channel sales through, various outlets depending on the relevant festive and other

occasions and the demographic nature of the customers for specific outlets. Operations through host stores had the benefit of lower capital investment in fixed assets typical of stand-alone stores.

Payment terms for distributors typically involved payment of 15% of the aggregate purchase price by the distributor on the placement of an order, an additional 35% of the payment on the delivery of products to the distributor, and the remaining 50% of the payment within 60 days of such delivery. The commission to distributors varied from 10-20%.

The company also sold jewellery products to large department stores and reputed jewellery retailers in major cities and towns including Lifestyle, Piramyd, Oyzterbay, Inorbit, Shoppers Stop, and Akbarlly's. Payment terms were similar to that of distributors. The company provided continued brand promotional support to distributors and to retail chains through sales promotion campaigns. They also provided facilities for the replacement of unsold stock and regular upgrading of jewellery product lines and circulated design catalogues that were updated every quarter from which distributors and retailers could select latest jewellery designs.

The sales and distribution channels in India were common to all branded jewellery lines other than the jewellery products sold under the *Gili* brand name. The *Gili* brand was sold through an independent distribution network through regional offices across India, which supplied products directly to small retailers within the geographic region under such regional office. They also operated through retail outlets in host stores such as major department store chains.

In addition, they entered into arrangements with Shoppers Stop, a large department store chain spread across various metropolitan areas in India, to operate "Facet Shops" within Shoppers Stop stores to provide custom-made jewellery for customers. A new brand, The Facet shop was introduced in the price range of Rs 1500–150,000 Oxclusively for Shoppers' Stop aimed at the planned purchase segment of the middle income society for occasions such as marriages, anniversaries and birthdays. It could be sold off the shelf or manufactured for specific requirements (http://www.gitanjaligroup.com/newhome/site.htm accessed on 18.07.07).

Customer Relationship Management

The diamond processing business was dependent on developing and maintaining continuing relationships with customers. The business was dependent on certain market segments, including wholesalers, distributors and retail jewellers. Customers purchased diamonds and diamond jewellery under specific purchase-orders raised from time to time and the company did not have any long-term contracts with customers; nor were customers subject to any contractual provisions or other restrictions that precluded them from purchasing products from competitors.

The firm identified specific customer requirements and delivered on such requirements efficiently within the shortest possible time-frame. Continuing relationships with customers enabled them to identify the requirements of customers and supply diamonds of specific sizes, shapes, cuts, and quality to customers in accordance with their specifications. CRM also enabled them to reduce payment risks. International customers visited diamond-manufacturing facilities in India and placed orders for diamonds of certain specifications. Participation in trade shows in international markets enabled existing and potential customers to examine manufacturing capabilities and the processed diamonds product range. Participation in such trade shows and fairs was also used as a forum to develop new relationships with customers and better understand their requirements as well as the latest trends in the diamond processing markets.

Acquisitions & Alliances

The company had strategic alliances with the World Gold Council for promoting gold sale in India. The WGC brand "Collection g" was housed in many of Gitanjali's outlets. It also retailed Gold Expression, a brand

jointly owned by WGC and D'damas and co-promoted fashion events, design contests and TV contests like Khul Ja Sim Sim where prizes were co-sponsored by WGC and D'damas. WGC certified the Vivaha collection of Gitanjali's gold jewellery.

Gitanjali was a Diamond Trading Company sightholder since 1967. Diamond Trading Company was the world's greatest source for rough diamonds. DTC sourced diamonds from the De Beers group of mines and from a few mines in Russia. It sorted, valued, and supplied rough diamonds to the rest of the world. This accounted for two-thirds of the world's annual supply of rough diamonds. De Beers had laid down six criteria for the selection of sightholders, including financial strength, strong market position, efficient and experienced distribution, marketing abilities, high quality manufacturing facilities, and reputable business. Gitanjali Gems as diamond manufacturers could demonstrate substantial downstream involvement in jewellery retailing and drive vertical integration in the industry (http://www.gitanjaligroup.com/home/site.htm accessed on 27.02.06).

In 2001, the firm entered into a 50% joint venture in the form of D'Damas Jewellery Private Limited with Damas Jewellery LLC, a jewellery company based in the U.A.E., to manufacture and market jewellery products in India under the brand *D'Damas* and its various sub-brands. D'Damas Jewellery (India) Private Limited was initially a joint venture between Gemplus and Damas Jewellery LLC and became a joint venture of the company with effect from April 1, 2005. D'Damas Jewellery (India) was engaged in the manufacture and sale of branded diamond and other jewellery under its flagship brand *D'Damas* and its sub-brands and had a manufacturing facility at Andheri in Mumbai.

The Company acquired a 99.04% equity interest in Fantasy Diamond Cuts Private Limited from Mehul C. Choksi and other shareholders of Fantasy Diamond Cuts Private Limited on October 5, 2005. The company proposed to expand retail operations for diamond and jewellery products in smaller cities and towns in India primarily through Fantasy Diamond Cuts Private Limited. Hyderabad Gems SEZ Limited was incorporated on December 2, 2004 and Gitanjali Gems acquired a 100% equity interest in Hyderabad Gems SEZ Limited on October 04, 2005. Hyderabad Gems SEZ Limited was incorporated for the establishment and development of a SEZ at Hyderabad because of an agreement with the government of Andhra Pradesh.

Gitanjali Gems had two associate companies, Brightest Circle Jewellery Private Limited and Gili India Limited. The Company had a 33.34% equity interest in Brightest Circle Jewellery Private Limited, which was a joint venture between the Company and two other DTC sightholders in India, and was engaged in the manufacture, marketing, and sales of diamond-studded jewellery under the brand name *Nakshatra*. The Company held a 40% equity stake in Gili India Limited and their Promoter Mr. Mehul C. Choksi, directly and indirectly held an additional 20% equity interest. Gili India Limited was engaged in the manufacture and sale of diamond and other jewellery under the brand *Gili*, which was one of the first branded jewellery lines introduced in India.

On 30th September 2005, three of their group companies, Gemplus, Prism, and Giantti were amalgamated into the Company (Financial Express, 2006-b). While Gemplus was primarily engaged in the business of exporting jewellery products, Prism (including its subsidiary CRIA Jewellery Private Limited) was engaged in the business of manufacturing and retailing diamond and other jewellery products. Giantti operated exclusive jewellery boutiques for jewellery lines. CRIA Jewellery Private Limited became a subsidiary of the Company and D'Damas Jewellery (India) Private Limited became a joint venture company of the Company. The Company had five subsidiaries, Mehul Impex Limited, Gitanjali Exports Corporation Limited, CRIA Jewellery Private Limited, Hyderabad Gems SEZ Limited and Fantasy Diamond Cuts Private Limited. The Company held a 100% and 99.80% equity interest in Mehul Impex Limited and CRIA Jewellery Private Limited, respectively. Gitanjali Exports Corporation Limited became a 51% subsidiary of the Company with effect from September 20, 2005. Mehul Impex Limited and Gitanjali Exports Corporation Limited were engaged in the business of manufacture and sale of cut and polished diamonds while CRIA Jewellery Private Limited was primarily engaged in the marketing and sale of diamond studded and other jewellery. For structure of the company, please refer to **Exhibit 9.**

The Future

Gitanjali Gems was poised to become a leading integrated diamond and jewellery manufacturing and retailing company. For achieving this position, they set forth several initiatives:

Increase Market Share in the Diamonds and Jewellery Businesses in India The company earned 70% increase in market share in the diamonds and jewellery businesses in India by taking advantage of greater consumer spending and disposable income. The company planned to capitalise on the gradual shift of consumer preferences in India from traditional unbranded jewellery to branded jewellery.

Maintain Focus on International Markets The company earned 70% of their revenues from sales of products in international markets. Exports were an important source of growth hence the company planned to focus on wider customer base and reduce dependence on domestic customers by leveraging their quality products and long-standing relationships and credentials with international customers to further develop international markets.

Develop Branded Jewellery Lines The company planned to introduce reputed global brands in the Indian market and product offerings to cater to various customer and price segments in the diamonds and jewellery markets. The intent was to capitalise on experience in developing the branded jewellery market in India and the goodwill associated with the brands that were sold under brands such as Nakshatra, Gili, Asmi, and D'Damas. This was achieved by targeted marketing initiatives, innovative promotional campaigns, and international and Indian public relations management and through increased emphasis on key merchandise items and on holiday and event-driven promotions through participation in host store marketing programmes.

The company launched *Mission Mars* to create a range of customised branded jewellery that could provide better value proposition to the customers. The emphasis was on originality and exquisite finish of the product. It would be tailor made by putting together state-of-the-art design ranging from classic to modern in 18-carat gold set with fine diamonds with the help of a team of product development, brand consultant, advertising agency, packaging developers and worldwide network (http://www.gitanjaligroup.com/home/site.htm viewed on 27.02.06).

Expand Retail Operations Gitanjali Gems planned to add about 6,00,000 sq. ft. of retail space and increase retail outlets in India from 620 in early 2006 to 1,300 by 2008 (Financial Express, 2006-a). The company planned to introduce several large exclusive retail stores in the larger cities and offer a comprehensive product range of jewellery products to target various categories of customer and price segments as well as to provide custom-made jewellery to showcase the entire range of product offerings under various brands and sub-brands. They also planned smaller independent exclusive stores in larger cities and towns to benefit from an increased store density through a lower capital outlay (Economic Times, 2006-a). These smaller outlets would enable them to offer jewellery aimed at the customer demography of the specific outlet and enable frequent renewal of inventory. They were also planning to set up smaller outlets including brand zones and brand kiosks at host stores such as kiosks, shopping malls and larger department stores to showcase the range of branded jewellery and to add additional outlets in new locations opened by such host stores (Business Line, 2006-c). Appointment of additional distributors apart from existing network of independent jewellers in various cities was also planned. Gitanjali Gems also planned to set up 12 Franchised Shops and increase the Brand Stores (Business Standard, 2006-a).

Expand Product Offerings and Maintain High-Quality Customer Service Gitanjali Gems planned to expand the product offerings and maintain high-quality customer service to cater to different customer and price segments and aimed at various uses and occasions such as work-wear jewellery, regular use, casual, wedding, jewellery for the newborn, as well as gifting jewellery aimed at specific holiday seasons. They planned to address specific customer requirements to meet highest international standards by working closely with suppliers, distributors and customers and participating in jewellery fairs, trade shows and other industry forums to enable them to introduce new designs.

Increase Production Capacities and Revenues and Harness Inherent Synergies of Integrated Operations Capacity expansion was planned through setting up additional manufacturing facilities at Mumbai and Hyderabad with proposed capital investments of approximately Rs 999.70 million (*The Asian Age*, 2006; *Economic Times*, 2006-b; *Business Line*, 2006-b).

Pursue Strategic Acquisitions and Alliances Pursue strategic acquisitions and alliances with partners whose resources, capabilities, and strategies would complement and enhance business operations, in order to enhance capabilities and address specific industry opportunities and to further enhance industry and technical expertise, expand operations geographically, benefit from other well-established brands in the diamond and jewellery businesses and enable them to control operating costs. They also intended to explore opportunities to develop strategic alliances with local partners in international markets to benefit from their established marketing and distribution networks.

While the company had defined its future strategy, Mehul Choksi was reflecting on the flip side of growth. So far, Gitanjali had been able to live with its partnerships and relationships that ensured uninterrupted supply of diamonds. However, if for some reason, the supply of roughs got restricted, the entire plan would fall apart. He was wondering how to ensure sustainable supply in the long run.

Exhibit 1—World Mine Production of Rough Diamonds

Million Carats

	Country	2000	2001	2002	2003
1.	Australia	26.70	26.20	33.64	33.10
2.	Botswana	24.65	26.40	28.40	30.40
3.	USSR	23.20	23.20	23.00	24.00
4.	South Africa	10.78	11.17	10.88	12.67
5.	Namibia	1.60	1.49	1.35	1.65
6.	Ghana	0.88	1.17	0.96	1.00
7.	Tanzania	0.32	0.25	0.21	0.23
8.	Angola	6.00	5.17	5.02	5.30
9.	Congo	17.50	18.24	18.24	20.00
10.	Others	6.37	7.32	8.80	8.85

Source: http://www.gjepc.org/gjepc/gjepc.aspx?inclpage=Uinfo_St_Statistics&section_id=6#/ accessed on 09.02.06

Exhibit 2—Import of Rough Diamonds into India

US$ Million

	Country	2001-02	2002-03	2003-04	2004-05
1.	Belgium	2438.86	3533.54	3924.97	4321.28
2.	U.K.	1042.92	1473.12	1699.46	1736.99
3.	Israel	240.90	386.56	483.33	584.02
4.	U.A.E.	171.69	307.57	369.17	214.96
5.	Hong Kong	388.96	531.34	397.65	385.21
6.	U.S.A.	8.28	12.15	24.71	36.71
7.	Switzerland	4.52	15.03	150.58	72.75
8.	Others	51.50	11.68	91.17	243.37

Source: http://www.gjepc.org/gjepc/gjepc.aspx?inclpage=Uinfo_St_Statistics&section_id=6#/ accessed on 09.02.06

Exhibit 3—Production Chain of Diamond Industry

Exhibit 4—India's Share in Diamonds Distributed by DTC

US$ Million

Year	DTC's Sales	India's Offtake	Percentage Share (%)
1990	4,167.00	633.00	15.31
1991	3,927.00	678.00	17.27
1992	3,417.00	566.00	16.56
1993	4,366.00	706.00	16.17
1994	4,250.00	690.00	16.24
1995	4,531.00	747.00	16.49
1996	4,834.00	677.00	14
1997	4,640.00	618.00	13.32
1998	3,345.00	483.00	14.44
1999	5,240.00	777.00	14.83
2000	5,670.00	995.00	17.55
2001	4,454.00	989.00	22.2
2002	5,154.00	1,127.10	21.87
2003	5,518.00	1,469.00	26.62
2004	5,695.00	1,607.57	28.23

Source: http://www.gjepc.org/gjepc/gjepc.aspx?inclpage=Uinfo_St_Statistics&section_id=6#/ accessed on 09.02.06

Exhibit 5 – Country wise Exports of Cut and Polished Diamonds from India

(Rs in Crores)

Sr.	Country	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
1	U.S.A.	1497.0	1931.4	3031.7	3586.2	3907.4	4518.6	4807.6	6050.8	7972.6	10546.5	9702.3	9365.3	10907.2	11715.4	1161
2	Hongkong	657.6	997.3	1527.1	2805.5	3190.9	3856.8	3543.9	4056.9	5114.7	7790.0	7570.3	7594.5	9233.0	11162..2	1361
3	Belgium	939.8	1198.4	1357.5	1812.0	1985.6	2434.9	2508.2	2881.0	3651.0	3955.0	4123.0	3999.8	4489.4	4758.6	564
4	U.A.E.	na	na	na	na	27.3	46.5	118.9	193.0	263.1	583.2	1180.5	1635.0	2046.1	3640.2	825
5	Israel	91.0	156.1	210.9	304.4	324.4	494.8	508.7	764.1	1016.0	1588.9	1213.9	1253.0	2114.7	2643.5	314
6	Japan	951.7	1174.4	1271.4	1676.3	1770.2	2357.7	1690.2	1155.6	1450.2	1955.7	1700.2	1560.4	1706.4	1840.9	210
7	Thailand	175.8	201.8	233.7	371.0	496.0	728.5	573.3	324.4	401.7	698.7	815.2	1021.0	1003.1	917.8	117
8	U.K.	44.3	49.0	52.0	61.3	74.7	84.4	104.1	80.7	146.5	153.8	179.5	156.0	459.1	344.4	27
9	Singapore	57.1	84.5	145.0	231.1	205.7	274.1	349.0	231.5	269.8	424.2	462.2	457.4	651.8	788.1	258
10	Switzerland	118.6	135.4	116.8	120.4	175.5	206.9	257.1	268.9	408.5	474.1	501.6	566.3	638.9	1090.2	72
11	Germany	62.7	73.1	90.7	104.4	97.3	121.7	107.1	120.9	158.9	185.6	163.2	137.5	137.8	157.6	19
12	Australia	na	na	na	na	52.6	56.3	59.4	58.2	84.9	107.0	102.8	120.9	166.1	225.8	25
13	Others	143.3	161.4	279.3	337.4	265.9	319.7	289.1	393.3	136.3	243.9	327.3	479.5	744.6	266.0	49
	Total	**4738.7**	**6162.6**	**8316.2**	**11409.9**	**12573.4**	**15501.0**	**14916.5**	**16579.5**	**21074.1**	**28706.5**	**28041.8**	**28346.5**	**34297.9**	**39550.6**	**5007**

Source: http://www.gjepc. org/gjepc/gjepc. aspx?inclpage=Uinfo_St_Statistics&section_id=6#/ accessed on 09.02.06

US$ Millions

Sr.	Country	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05
1	U.S.A.	834.3	783.5	1048.3	1146.9	1249.6	1363.0	1364.0	1641.3	1900.2	2442.4	2144.3	1972.7	2258.8	2553.9	2584
2	Hongkong	366.5	404.5	524.1	897.3	1020.4	1161.5	1006.5	1100.0	1219.7	1803.4	1670.0	1600.1	1915.7	2436.5	3041
3	Belgium	523.8	486.1	468.7	579.5	626.4	730.5	712.2	776.5	872.6	916.0	908.2	842.4	930.8	1038.2	126
4	U.A.E.	na	na	na	na	8.7	14.0	33.7	52.0	62.6	135.1	258.6	344.3	424.7	795.8	184:
5	Israel	50.7	63.3	72.6	97.3	103.7	147.3	144.5	206.7	242.3	367.9	268.3	263.9	438.5	576.0	701
6	Japan	530.4	476.4	439.9	536.1	566.1	707.9	480.7	314.8	345.8	453.3	375.1	329.2	353.5	401.6	46!
7	Thailand	98.0	81.9	80.4	118.7	158.6	219.4	163.1	88.1	95.8	161.7	179.4	215.1	207.5	200.4	26:
8	U.K.	24.7	19.9	18.0	19.6	23.9	26.5	29.6	22.0	34.8	35.6	39.5	32.9	95.7	75.2	61
9	Singapore	31.8	34.3	50.4	73.9	65.8	82.2	98.9	64.0	64.2	98.3	101.9	96.3	135.1	171.7	58
10	Switzerland	66.1	54.9	40.6	38.5	56.1	61.9	72.9	72.5	97.5	109.9	110.7	119.5	132.7	236.3	162
11	Germany	34.9	29.7	31.4	33.4	31.1	36.6	30.3	32.8	37.8	43.0	36.1	29.0	28.6	34.4	44
12	Australia	na	na	na	na	16.8	18.0	16.9	15.8	20.2	24.8	22.6	25.5	34.4	49.3	5'
13	Others	79.9	65.5	93.2	107.9	93.7	93.2	81.9	106.2	32.6	56.5	72.1	101.0	154.7	58.2	10'
	Total	**2641.0**	**2499.9**	**2867.6**	**3649.0**	**4020.9**	**4661.9**	**4235.1**	**4492.7**	**5026.1**	**6647.8**	**6186.7**	**5971.9**	**7110.6**	**8627.5**	**1118**

Source: http://www.gjepc. org/gjepc/gjepc. aspx?inclpage=Uinfo_St_Statistics&section_id=6#/ accessed on 09.02.06

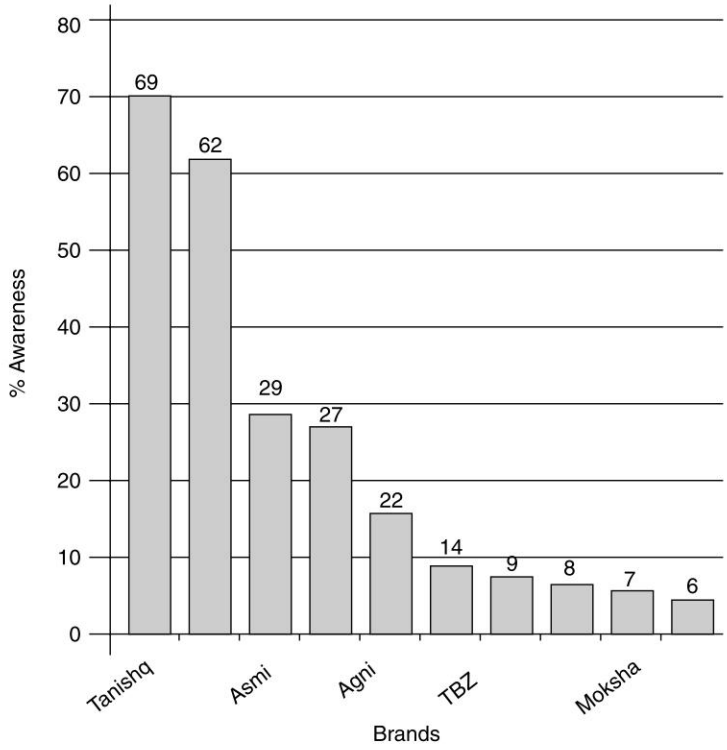
Exhibit 6—Diamond Export–Import Trade of India

Year	Import			Export			Added Value		% of
	Cts. in Lac	Rs In Crore	US $ Million	Cts. In Lac	Rs In Crore	Us $ Million	Rs In Crore	US $ Million	Added Value wrt. Import
1990-91	371.3	3544.0	1975.0	83.4	4739.0	2641.0	1195.0	666.0	33.7
1991-92	545.9	4678.0	1882.0	87.2	6163.0	2500.0	1485.0	618.0	31.7
1992-93	722.9	6768.0	2186.0	110.3	8316.0	2868.0	1548.0	682.0	22.9
1993-94	696.1	8081.0	2562.0	139.9	11410.0	3649.0	3329.0	1087.0	41.2
1994-95	729.1	8810.0	2792.0	158.1	12573.0	4021.0	3763.0	1229.0	42.7
1995-96	899.0	10993.0	3274.0	192.1	15501.0	4662.0	4508.0	1388.0	41.0
1996-97	1029.0	12038.0	3382.0	188.8	14916.0	4235.0	2878.0	853.0	23.9
1997-98	1066.1	11254.4	3036.2	205.6	16579.5	4492.7	5325.0	1456.5	47.3
1998-99	1527.0	14127.9	3343.2	268.0	21074.1	5026.1	6946.2	1682.9	49.2
1999-00	1337.0	20924.8	4812.3	331.2	28706.5	6647.8	7781.7	1835.5	37.2
2000-01	1003.8	19833.0	4349.8	299.1	28041.8	6186.7	8208.8	1836.9	41.4
2001-02	1292.2	20098.8	4205.5	328.9	28346.5	5971.9	8247.7	1766.4	41.0
2002-03	2082.4	30504.2	6271.0	372.3	34297.9	7110.6	3793.7	839.6	12.4
2003-04	1991.4	33064.0	7141.0	376.8	39550.6	8627.5	6486.5	1486.4	19.6
2004-05	1762.4	34242.0	7595.3	479.4	50073.6	11181.5	15831.7	3586.2	46.2

Exhibit 7—Export from SEEPZ

Year	Diamonds		Gold		Silver		Platinum		Total	
	Rs in Crore	US $ Million	Rs in Crore	US $ Million	Rs in Crore	US $ Million	Rs in Crore	US $ Million	Rs in Crore	US $ Million
1990-91	49.8	27.8	80.0	44.6	-	-	-	-	129.8	72.3
1991-92	49.1	19.9	163.9	64.8	0.0	0.0	-	-	213.0	84.8
1992-93	145.4	46.6	293.0	94.6	-	-	0.1	0.0	438.4	141.3
1993-94	141.7	45.3	384.0	122.8	0.0	-	0.1	0.1	525.8	168.2
1994-95	156.1	49.9	575.6	184.1	0.1	0.0	0.7	0.2	732.5	234.2
1995-96	176.1	52.0	760.3	227.7	-	-	22.8	6.6	959.3	286.4
1996-97	103.0	29.1	1049.7	297.9	0.2	0.1	6.4	1.9	1159.3	328.9
1997-98	171.5	46.0	1,251.8	339.1	26.8	7.1	6.1	1.6	1,456.1	393.8
1998-99	332.2	78.5	1,704.7	406.2	11.3	7.1	32.6	7.7	2,080.9	499.5
1999-00	125.5	29.2	2,268.8	525.3	-	-	31.6	7.3	2,425.8	561.8
2000-01	258.4	56.8	2,302.8	507.5	2.4	0.5	37.4	8.1	2,600.9	572.9
2001-02	198.6	41.7	2,394.1	504.3	2.4	0.5	34.0	7.2	2,629.0	553.6
2002-03	467.3	97.0	3,436.0	712.0	0.2	0.0	-	-	3,903.5	809.0
2003-04	748.8	163.1	4,273.9	932.9	-	-	-	-	5,022.8	1,096.0
2004-05	439.3	97.9	4,599.2	1022.9	54.2	12.0	-	-	5,092.7	1,132.8

Exhibit 8—Leading Jewellery Brands in India



Source: http://www.gjepc.org/gjepc/gjepc.aspx?inclpage=news_FT_women_buying&section_id = 5 accessed on 09.02.06

Exhibit 9—Gitanjali Gems–Divisions and Structure

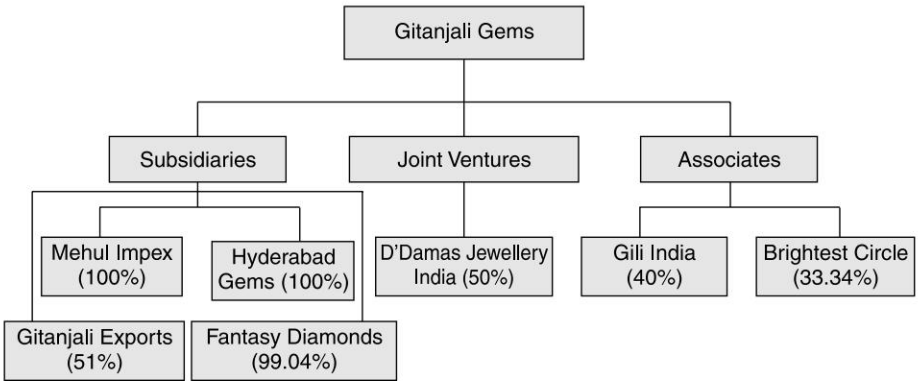


Exhibit 10—Gitanjali Gems – Segment wise Revenue and Capital Employed

A. Primary Segment

	Yr ended 31st March 2006
1. Segment Revenue	
(a) Diamond	128,985.11
(b) Jewellery	35,489.85
Total	164,474.97
Less: Inter-segment Sale	2,350.77
Net Sale	**162,124.20**
2. Segment Result	
Profit (Loss) before tax & interest	
(a) Diamond	4,589.20
(b) Jewellery	3,717.01
Total	8,306.21
Less Interest	2,874.45
Total Profit before tax	**6,431.78**
3. Capital employed	
(a) Diamond	27,060.50
(b) Jewellery	16,547.46
Unallocated net assets	27,910.61
Total Capital Employed	**71,618.67**

Rs In Lac

Exhibit 11—Gitanjali Gems – Financial Results

Particulars	Nine months ended 31.12.2005	Quarter ended 31.03.2006	Year ended 31.03.2005 (Audited)	Year ended 31.03.2006 (Audited)
1. Net sales	114,382.49	47,741.71	135,209.63	162,124.20
2. Other Income	60.84	52.15	200.65	112.99
3. Total Expenditure				
(a) (Increase)/Decrease in stock in trade	(3,134.48)	(665.83)	1,406.77	(3,800.31)
(b) Consumption of Raw Materials/ Cost of Trading Goods	109,528.31	45,398.89	124,803.50	154,927.20
(c) Staff Cost	390.12	175.73	122.84	565.85
(d) Other Expenditure	1,143.09	910.80	6,310.57	2,053.89
4. Interest	2,077.57	796.8	1,322.27	2,874.45
5. Depreciation & Amortisation	153.99	30.36	42.47	184.35
6. Profit(+)/Loss(–) before Tax (1+2–3–4–5)	**4,284.73**	**1,147.03**	**1,401.86**	**5,431.76**
7. Provision for Tax				
–Income Tax	641.27	34.18	532.00	675.45
–Deferred Tax	(34.57)	1.07	(5.78)	(33.50)
–Fringe Benefit Tax	2.89	26.69	–	9.58
8. **Net Profit(+)/Loss(–) after Tax (6–7)**	**3,675.14**	**1.105.09**	**875.64**	**4,780.23**
9. Paid up Equity Share Capital	4,199.85	5,899.85	3,001.00	5,899.85
Face Value of Equity Shares	Rs 10-	Rs 10/-	Rs 10/-	Rs 10/-

(*Contd*)

(*Contd*)

Particulars	Nine months ended 31.12.2005	Quarter ended 31.03.2006	Year ended 31.03.2005 (Audited)	Year ended 31.03.2006 (Audited)
10. Reserve excluding revaluation reserves	–	–	21,651.84	65,618.72
11. Basic & Diluted EPS for the period, for the year to date and for the previous year (Not annualised)	9.08	2.63	2.92	11.36
12. Aggregate of Non-Promoter shareholding				
(a) No. of Shares	2,000,000	19,000,000		19,000,000
(b) Percentage of shares	4.76%	32.20%		32.20%

Rs in Lac

Exhibit 12—Organisation Structure of Gitanjali Gems

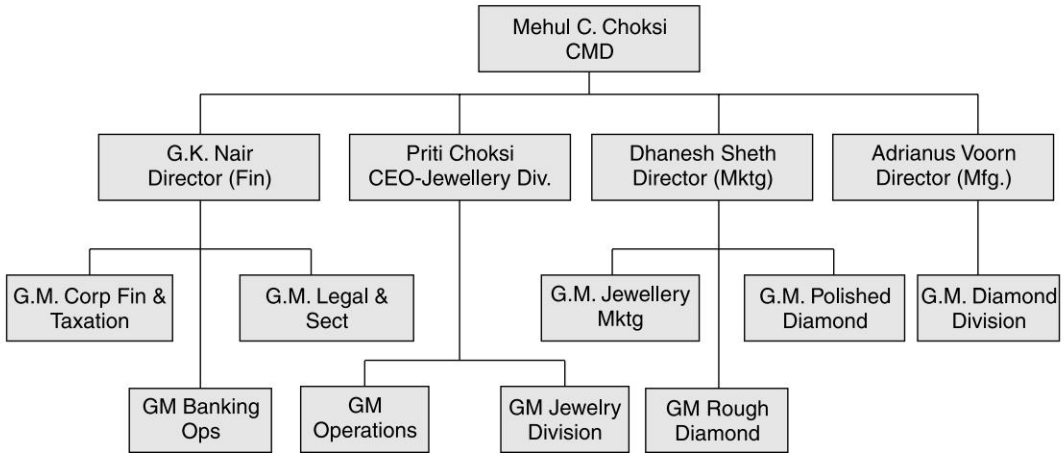


Exhibit 13—Organisation Mission, Vision & Values

Mission

We are a global family with a rich heritage, committed to our consumers to provide them the best. We understand the emotional needs attached to diamonds and jewellery and celebrate the glory of diamonds, gold, and jewellery with our consumers.

Vision

To become the world's leading company in diamond manufacturing and retailing of branded jewellery
To have a strong, globally diversified infrastructure for manufacturing and marketing diamonds
To integrate its activities by efficiently linking its diamonds from rough to retail
To create incremental demand for diamonds through marketing and promotion strategies
Create enterprise and brand value to increase the net worth of the group
To protect worker interest. To remain loyal customer to DTC

Values

Our business is driven by our focus on the market, identifying the consumer need, gathering resources to fulfil it and an inner urge to excel.

We are a multi-faceted team and give due respect to every member. The welfare and interest of our people is our prime concern.

Our integrity is never compromised and we make positive contributions to the society.

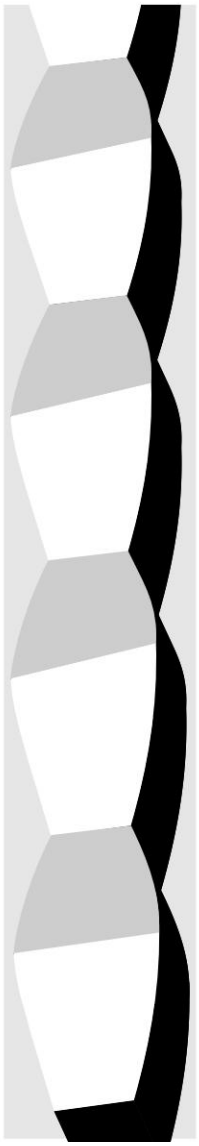
We persistently want to improve in all the ways we can. We believe in being the best.

Exhibit 14—Profile of Mehul C. Choksi

Mr. Mehul C. Choksi, aged 46 years, was the Company's Chairman and Managing Director and was associated with the diamond industry for 28 years. The group commenced operations through formation of a partnership firm known as Gitanjali Exports Corporation in 1966 by Mr. Choksi's father Late Chinubhai Choksi. Mehul Choksi joined the group in the year 1981. In 1986, he established Gitanjali Gems Ltd, the flagship company of the group. He was instrumental in launching successful brands like GILI, D'Damas, and Giantti and played an important role in positioning the brands Nakshatra and Asmi in India. He had wide experience in the diamond industry, and was in charge of buying rough diamonds, sales of polished goods to customers and pioneered the use of corporate practices in the Indian jewellery industry. Mr. Choksi was on the committee of the Export Promotion Council from time to time and was responsible for expansion and diversification plans of the group.

REFERENCES

Agency FAQs. Nov 21, 2005; Collage Consulting Bags Ishtaa Jewellery Account.
Annual Reports of Gitanjali Gems Ltd.
Annual Reports of Titan Industries Ltd.
Business India, Feb 09, 1997; pg 105; Ace Of Hearts
Business Line, Dec 23, 2005; pg 8; Gitanjali Gems To Invest Rs 300 Cr For Expansion
Business Line, Feb 17, 2006-b; pg 19, Gitanjali Gems IPO Opens
Business Line, Feb 19, 2006-c; pg 8, Gitanjali Gems: At The Cutting Edge
Business Line, Jan 6, 2006-a; pg 15; Gitanjali Gems Fixes IPO Price Band At Rs.210-250
Business Line, Mar 20, 2001; pg 6; Gitanjali Offers Diamond Buyback Scheme
Business Standard, Apr 15, 2005-b; pg 16; Rocks For All - Gitanjali Gems
Business Standard, Feb 13, 2006-b; All that Glitters
Business Standard, Feb 28, 2005-a; Gitanjali Gems; Ranks 20th in the Listing of Top Indian Unlisted Companies in Terms of Total Income in 2002-2003
Business Standard, Jan 31, 2004-a; Gitanjali Gems - Ranks 11th in the Bs 500 Listing of the Top Unlisted Companies in India in Terms of sales in 2001-2002
Business Standard, Jan 5, 2006-a; pg 6; Gitanjali Gems Proposes Rs 300-Crore Initial Float
Business Standard. May 25, 2004-b; Pg 12; Laxmi Plans Diamond Stores Overseas.
Dalal Street Investment Journal. Nov 2, 2003; Pg 80; Man with the Golden Touch
Economic Times, Apr 7, 2005-a; Pg 15 Jewellery Industry Hooks On to Trained Staff
Economic Times, Dec 29, 2005-b; pg 4; Gitanjali Gems Plans IPO, To Invest Rs300 Cr
Economic Times, Feb 10, 2006-a; pg 5; Gitanjali Gems Fixes IPO Band at Rs170-195
Economic Times, Feb 20, 2006-b; Gems are Forever
Economic Times, Nov 2, 2004; pg 8; Gitanjali Plans To Set Up Jewellery SEZ In Hyderabad
Economic Times, Nov 28, 2003; pg 1; Belgians Cut their Diamonds Here
Financial Express, Feb 19, 2006-b; pg 20, Gitanjali Gems: Shining On Branded Jewellery
Financial Express, Sep 8, 2003; pg 8; Rise of Diamond Jewellery Brands Nudges Unbranded Gold
Financial Express, Aug 1, 2005; Pg 9; Gems and Jewellery: The Jewel In the Export Crown.
Financial Express. Feb 17, 2006-a; Pg 14; Gitanjali Gems to Expand its Retail Business
Fortune India. Jul 31, 2003; Pg 43; Swarnmandir: A Jewel Designer Par Excellence.
http://www.gitanjaligroup.com/home/site.htm Accessed on 27.02.06
http://www.gitanjaligroup.com/newhome/site.htm Accessed on 18.07.07
http://www.gjepc.org/gjepc/gjepc.aspx?inclpage=news_FT_women_buying&section_id=5 Accessed on 09.02.06
http://www.gjepc.org/gjepc/gjepc.aspx?inclpage=Uinfo_St_Statistics&section_id=6#/ Accessed on 09.02.06
http://www.indiainfoline.com/view/100505.html Accessed on 09.02.06
The Asian Age. Feb 17, 2006; Pg 7, Gitanjali To Set Up Rs 50 Cr SEZ
The Hindu, Feb 16, 2006; pg 20; Gitanjali Gems IPO Opens Today
The Hindu, Nov 19, 2000; pg 13; Branded Diamonds From Gitanjali
The Retail Jeweller. Aug 31, 2005; Pg 22; Years Of Platinum in India.



The McGraw-Hill Companies

Case 3

Delhi Land and Finance—Strategy or Serendipity?

I have always been a champion of FDI in the construction industry. Opening up the sector to foreign players will raise the bar for the industry in India. Of course, our leadership is threatened. But we're preparing for it. We are expanding our organisation substantially. We have sold off all unrelated businesses and are concentrating on real estate commercial, residential and retail. We are looking at property development in other states as well. This is our acid test: will we remain No.1?

Kushal Pal Singh
CEO - DLF Universal

DLF was a real estate developer in India primarily into the development of residential, commercial and retail properties. It spanned all aspects of real estate development, from the identification and acquisition of land, to the planning, execution and marketing of its projects, through to the maintenance and management of completed developments. Since the founding in 1946, the business focused on real estate development in the National Capital Region,

including Delhi and Gurgaon. The firm developed commercial projects with a lettable area of 4.69 million square feet and retail projects with a saleable area of 2.26 million square feet. Land reserves under development aggregated 1,372 acres representing approximately 102 million square feet of developed area or area available for development and they had made partial payments to acquire a further 2,893 acres in various regions across India.

INCEPTION

DLF was incorporated in pre-independent India on September 18, 1946. (http://www.dlf-group.com/know_about_DLF.aspx accessed on 29.12.06). Singh's father-in-law Chaudhary Raghvendra Singh, who figured that partition would lead to mass migration and the new migrants would need homes, started DLF. He built Delhi's landmark residential colonies like Greater Kailash, South Extension, and Hauz Khas. Chaudhary Raghvendra Singh developed about 21 colonies in Delhi between 1947 and 1961 by persuading farmers to sell their holdings on credit as he had limited financial resources (Business India, 2006). Then all development in the capital city was taken over by the Delhi Development Authority, which forced DLF to diversify into batteries and cables (Business Standard, 2006-a). The family ventured into making electrical motors in a joint venture with Universal Electric, USA. Alongside, they started making car batteries. By then, Kushal Pal was fully involved and learning the nuances of managing a business. However, neither of these ventures was successful and both were eventually sold off. Wondering how to recoup, KP hit upon the 30 acres of land that his father-in-law had acquired in Gurgaon. Since this area was part of Haryana state, the development restrictions of Delhi did not apply. Although Gurgaon was a rural, deserted area, K.P. Singh was not discouraged. He quietly started acquiring parcels of land from farmers, using his father-in-law's strategy of buy now, pay later. Winning over their trust by delivering interest cheques on the first of every month and providing money on call for emergencies, Singh was able to make headway. It was a complex, painstaking exercise, as landholdings were small and ownership divided between several family members (*Business India*, 2006).

WINDFALL(S)

Kushal Pal Singh inherited the business, as Chaudhary Raghvendra Singh did not have any sons (Business India, 2006). On May 12, 1981, on a hot afternoon at Gurgaon, then a wilderness, with just two *keekar* trees for shade and a deep well to quench his thirst, Kushal Pal Singh had been sitting all by himself on a cot next to the well nurturing hopes of getting back into township development, when a jeep stopped as its engine had got overheated and the driver was looking for some water to cool it. In the jeep was Rajiv Gandhi (later on became India's Prime Minister), who had just entered politics and had big dreams to fast-track India to the 21st century. The two men got chatting under the trees and a couple of hours later, Gandhi was convinced that the laws constraining the sector needed to be liberalised. It was a turning point for not just DLF but also for urban development in the country (Business Standard, 2006-a).

Rajiv Gandhi took up the cause when he entered government. That enabled K.P. Singh to secure licences and permissions to reclassify his agricultural holdings as non-agricultural and develop them. When Bansi Lal became chief minister, the licences were cancelled, forcing K.P.Singh to sit it out for two years, until they were reinstated. Singh's philosophy was to lobby for changing the law rather than breaking it (Business India, 2006). Witnessing the success of Kushal Pal Singh at DLF, his father-in-law often expanded DLF to ***D****amn* ***L****ucky* ***F****ellow* (Business Standard, 2006-a).

Singh bought 1500 acres of land during the time that prices tumbled. Although there was much talk of building satellite towns 60 km away from the national capital region in Aligarh and Panipat, Singh was convinced that ring towns just on the outskirts would work better. He bet on Gurgaon, convinced that south

was the way to go. Right from the Mughal times, Delhi had expanded towards the south: from Chandni Chowk to Daryaganj, Connaught Place, Lutyen's Delhi, Greater Kailash and so on. Therefore, Gurgaon appeared to be the next logical extension. At the time, Faridabad and Ghaziabad were also emerging, but neither had Gurgaon's appeal. Being closer to farmhouses of the rich and famous, Gurgaon had a greater social cachet. However, to make people feel it was not a distant suburb of the city, DLF cleverly called its first project Qutab Enclave after the historical monument in south Delhi. Still, there were few takers for Gurgaon in the 1980s (Business Standard, 2006-a).

Then he built DLF City, Asia's largest 3000-acre township in Gurgaon, south of Delhi just across the Haryana border. The transformation of barren expanses of farmland into a busy, self-contained suburb that became India's call centre capital was a major achievement. Multinational companies that found South Mumbai or South Delhi too expensive located their head offices at Gurgaon.

Cushman & Wakefield and Jones Lang LaSalle, leading international property consultants, were retained to perform a land valuation in respect of properties representing an aggregate of approximately 228 million square feet in 64 locations across India. The consultants valued these properties between Rs 965 billion and Rs 1,066 billion and, after deducting the notional developer profit of 20%, the land value was between Rs 772 billion and Rs 853 billion (Construction World, 2006).

BUSINESS LINES

Residential Development

In the residential business line, they built and sold a wide range of properties including houses, duplexes, and apartments of varying sizes, with a focus on the higher end of the market. The residential real estate projects were focused on the creation of new suburbs through large-scale developments, as well as developments of luxury and super-luxury residential accommodation on a smaller scale. The first residential colony, Krishna Nagar, was completed soon after independence in 1949. Since then, they developed over 8,800 acres of colonies and townships, and developed or launched over 20 million square feet of residential space. They implemented innovative approaches to the development and marketing of residential projects and were one of the early developers to focus on theme-based projects, such as The Magnolias development in DLF City, which included a golf course. The leisure facilities associated with luxury and super-luxury residential accommodation were not only a powerful marketing tool, but also an additional source of revenue. Another innovation, in some super-luxury developments, was that customers could customise the layout of their new homes.

Commercial Development

In the commercial business line, they built, leased, and sold commercial office space, with a focus on properties attractive to large multinational tenants. The projects focused on developing an extensive portfolio of commercial properties built to international standards. The first significant commercial development was DLF Centre, an office building located in central Delhi, which opened in 1992. DLF Centre provided leased commercial space to a number of multinational corporations and served as corporate headquarters of DLF. The majority of other commercial properties were in DLF City, Gurgaon. Many of these commercial properties were part of Cybercity, which was a major commercial area being developed in DLF City. As of April 30, 2006, DLF had leased out 4.89 million square feet of commercial real estate, representing an occupancy rate of over 98% and lands had been acquired for approximately 40.9 million lettable square feet of commercial development. In addition, they were in the process of acquiring land for the development of approximately

15.9 million lettable square feet of commercial space. They continuously endeavoured to strengthen and expand relationships with commercial clients. Their relationship with a Fortune 500 IT Company (name withheld for anonymity) started in 2000 with a leased area of 48,000 square feet. With the expansion of the client's business in India, its leased area grew ten times to 483,000 square feet in DLF City. When the client sought to expand to Chandigarh and Kolkata, it chose DLF for its commercial space and committed to lease up to 230,000 square feet in Kolkata and 60,000 square feet in Chandigarh.

Retail Development

The retail business line, which was established in 1940s, focused on developing, managing and leasing or selling shopping malls, including cinema complexes. DLF originally established the business in the development of local markets and community shopping centres; however, given the improving Indian economy and increasing spending power and consumption, they actively pursued modern retailing developments by building some of India's earliest malls and, since 2001, developing air-conditioned mega malls and other retail spaces. By 2006, they became one of India's leading developers of retail space in terms of the development of malls, shopping centres, and markets.

DLF had six retail real-estate development formats catering to the entire spectrum of the retail market to serve the needs of customers with different buying patterns and purchasing power. These formats were stand-alone stores, shopping centres, prime downtown shopping districts, neighbourhood malls, destination malls, and super-luxury malls. The malls had a superior tenant profile and were characterised by aesthetic design, high quality infrastructure as well as leisure and entertainment options such as cinema complexes, food courts, and restaurants. The locations of malls, as well as the mix of retail outlets within them, were planned based on the profile of the relevant catchment areas as well as understanding of consumer preferences, with the aim of attracting shoppers and ensuring an attractive mix of international brands, national retailers and leading local retailers. In the mall expansion strategy, DLF catered to the expansion strategies of tenants providing them with retail space in a variety of preferred locations and encouraging them to take space in a new developments. They had a memorandum of understanding with Trent, the retail business of the Tata Group, to collaborate with them across their intended retail formats in all future malls, occupying a minimum of 150,000 square feet in each mall. DLF had cinema complex business under the brand name DT Cinemas, and derived revenues from ticket receipts, advertisements, and concessions. They also had a memorandum of understanding with Metro Cash & Carry to identify suitable retail spaces in various locations across the country that would be suitable for joint development. The retail business model included both the sale and the ownership and leasing of retail developments. DLF sold almost all of the units in retail developments, generally before completion of construction, with payments of the purchase price being made in instalments after payment of an initial deposit.

With the growth of the Indian economy and the resulting increase in corporate and consumer incomes, as well as foreign investment, there were significant opportunities for growth in all three primary businesses. The firm also planned to diversify into other real-estate related businesses such as development of SEZs, infrastructure construction through joint venture with Laing O'Rourke plc, and the development of hotels.

PROJECT IMPLEMENTATION PROCESS

DLF had a systematic process for land identification and acquisition, project execution and the sales and marketing of completed developments.

Land Identification and Acquisition

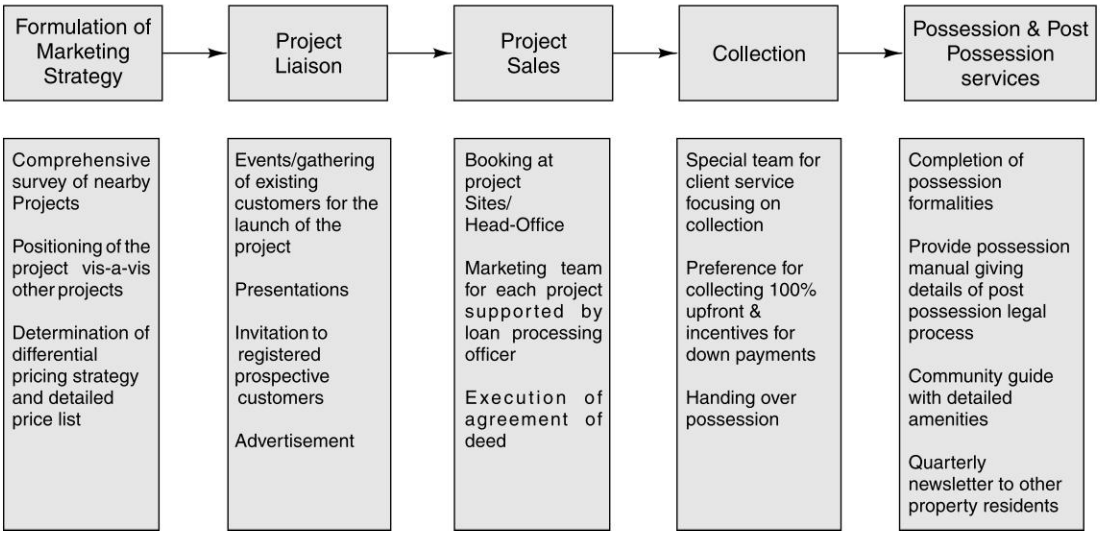
The land acquisition team monitored real estate markets and emerging trends by assessing selected markets to identify cities and localities with development potential. Property consultants, large local land, and property dealers also provided information regarding future development areas and availability. The initial assessment and selection of the land involved a detailed assessment of the plot with a focus on the land's development potential and location. After a preliminary land title evaluation and review by local lawyers, a preliminary agreement was entered into with the landowners for the purchase of the land. Following title clearance, either the land was acquired or a joint development agreement was entered into with the owners.

Project Execution

The project execution process commenced with obtaining requisite regulatory approvals, including environmental approvals, and the development of a project concept based on the area's marketability, target customers, and potential return. After a detailed review of the site parameters, the architectural brief was finalised based on the project concept in consultation with selected architects and consultants. The development process, construction quality, actual and estimated project costs, and construction schedules were closely monitored with an endeavour to maintain high health and safety standards in all real estate developments.

Sales and Marketing

Three separate sales and marketing departments were maintained, one for each of the residential, commercial, and retail business lines. The sales and marketing function is illustrated in the chart below.



The company encouraged participation of former buyers or tenants in the new product launches and sale was concluded both directly to customers and through brokers. Various marketing approaches were employed depending on whether the project was residential, commercial, or retail. These included launch events, corporate presentations, web marketing, direct and indirect marketing, as well as newspaper and outdoor advertising. In

the commercial and retail business lines, marketing was through property consultants and relationships with existing tenants. Different marketing approaches were used to target commercial and retail tenants. Approximately 120 brokerage firms marketed the properties. Most of the sale bookings were at project sites, although sales were also made at the corporate offices. Sales teams had positive and negative compensation incentives tied to their sales performance. A client servicing team served the customer from the booking process, through to the transfer of property to the new owner. Relationships with various banks and housing finance companies facilitated convenient access to finance to customers, and share partial advertising costs.

STRATEGY

DLF had a mission to build a world-class real estate development company with the highest standards of professionalism, ethics, and customer service and thereby contribute to and benefit from the growth of the Indian economy. The seven key elements of business strategy included:

Increasing Land Reserves in Strategic Locations

Building land reserves was critical to growth strategy. DLF identified lands in and around 62 cities, which were suitable for projects and started acquiring them. By April 30, 2006, they had made partial payments to acquire 2,893 acres of land across the country.

Expand Core Business Lines Nationally

DLF focused on the development of super-luxury and luxury residential projects in key locations in India to take advantage of increasing urbanisation by investing in the development of townships on the peripheries of cities around the country. DLF also planned to develop extensive commercial properties in selected cities, built to international standards in order to attract key multinational tenants, and strengthen their position as a leading developer of commercial real estate. To take advantage of the growth of the Indian economy, and changing consumer preferences towards malls that would provide modern retail space, customer service facilities and entertainment centres, along with high standard safety and security features. An important element of the growth strategy was to anticipate the expansion plans of commercial and retail clients, thereby catering to their growing real estate requirements and geographic expansion. DLF evaluated projects throughout India, involving the development of residential, commercial and retail, and developed approximately 96 million square feet, 16 million square feet and 6 million square feet, respectively, totalling over 118 million square feet area.

Diversify into SEZ Development

SEZs were a new business concept in India, and provided attractive fiscal incentives for both developers and tenants. SEZs were a key element of the infrastructure development plans of the central and state governments in India, which were increasingly authorising the development of SEZs in various locations across the country. DLF identified several potential locations for SEZ development and commenced the process of obtaining the necessary approvals. The SEZ projects focused on exporters, IT, and biotechnology companies and aimed to provide the highly specialised facilities they required. Each SEZ would be developed as an integrated township and include residential, commercial and retail space as well as schools, hospitals and hotels.

Undertake Infrastructure Development

DLF entered into a joint venture with Laing O'Rourke plc, a leading UK-based construction company with a strong track record of major construction projects globally to gain from Laing O'Rourke's construction expertise

and experience in the development projects and participate in the construction of infrastructure projects including roads, bridges, tunnels, pipelines, harbours, runways and power projects (Business Line, 2006). The joint venture would create the opportunity to exploit new sources of revenue and new opportunities in the core business areas.

Diversify into Hotel Development

DLF planned to develop 100 hotels in the four star, five star and deluxe segments and other tourism and leisure related assets, such as serviced apartments, clubs and golf courses. The hotel business would complement the existing business and create opportunities to situate hotels in or close to other developments such as commercial centres, IT Parks and shopping malls. DLF planned a $2-2.5-billion investment in the hospitality sector. It acquired 24 sites in India and was negotiating for 15-20 more sites (Business Standard, 2006-c).

Move to a Sales Revenue Based Business Model

DLF adopted a new business model, based on the development and sale of commercial and retail properties, whereas previously they developed and leased such properties. As a result of the change in their business model, revenues would primarily be derived from sales of properties. This would enable more expeditious realisation of the value of developments.

Enhance Execution Capabilities

To improve the construction quality of real estate developments and the time taken to bring them to market, a substantial part of the construction activity related to projects would be outsourced to the DLF Laing O'Rourke joint venture. The joint venture would give access to the latest advances in construction techniques that would shorten the time taken to complete projects within existing business lines as well as proposed ventures. The advanced architectural techniques and construction materials would help in creating innovative, environmentally friendly, and profitable developments.

INDUSTRY AND COMPETITIVE SCENARIO

The real estate development industry in India, while fragmented, was highly competitive. The Indian real estate sector was divided into the organised and unorganised segments, with the unorganised segment accounting for over 70% of the housing units constructed. The organised segment comprised private real estate developers and government or government affiliated entities. The major players in the organised sector were Hudco, state housing bodies and private real estate developers like DLF, Unitech Limited, Ansal Properties and Infrastructure Limited, the Hiranandani group, the Raheja group and Gesco. The industry was highly fragmented with most of the real estate developers having a city-specific or region-specific presence. The unorganised sector comprised small builders and contractors, who primarily constructed houses on a contract basis with individuals.

Real estate developers in the organised sector were actively considering townships, multiplexes and shopping malls to drive their business prospects. Regional real estate players characterised the industry, as there were no strong national players in the sector. Apart from developing residential/commercial complexes, some established developers had diversified into hotels. In Mumbai, the Hiranandani group forayed into hotel through its hotels 'Rodas'; while the Rahejas established hotels in association with Marriott. Most established players in the industry funded their projects through the promoters' contribution and intra-group loans. The developer's ability to sell a large portion of its project in advance enabled the projects to be largely self-financed, even at an early stage. The developer's reputation/land title also played an important role in influencing

the selling price of the projects. The margins on a residential property varied depending upon the location of the project, the amenities provided and the developer's reputation/title. While amenities had an impact on the construction costs, the location of the project affected land costs and selling prices.

Firms also faced competition from large domestic as well as international property development and construction companies due to, among other things, the relaxation of the FDI policy for the real estate sector, rising government expenditures on infrastructure and various policy initiatives for the development of SEZs. Some competitors were better known in the markets, enjoyed better relationships with landowners and international joint venture partners, gained early access to information regarding attractive parcels of land and were better placed to acquire such land. Competition in DLF's new businesses came from established construction firms, hotel companies, and various other business groups.

Developments in the real estate sector were driven by:

- Demand for more housing units in cities and towns because of growing urbanisation of Indian population, burgeoning middle class, increased disposable income, easy availability of housing finance at cheaper rate, and tax incentives. The census of 2001 indicated an urbanisation rate of 27.78%, which was expected to go up to 41% in the next 20 years (based on a population of 1,350 million). This growing trend of urbanisation coupled with factors like faster growth in incomes in the middle and higher income categories, decline in EMIs due to the fall in housing finance rates and availability of tax incentives on housing loans were pushing up the requirement for housing units in cities and towns. Earlier the cost of the houses used to be in multiple of nearly twenty times the annual income of the buyers, whereas by the year 2005, the multiple was less than 4.5 times, due to rise in income levels. With less tax and more income there was more money left with people to spend. The interest rate, which earlier used to be between 16-18%, halved and fuelled demand for housing units. Another major contributing factor to boost the growth of residential housing property were income tax incentives on housing loans—interest up to Rs 1,50,000 deductible and a rebate of Rs 20,000 per annum on principal repayment.
- Demand for office premises by the fast-growing IT industry especially the BPO sector. India was the preferred destination for setting up back office operations. Consequently, the growth in the sector would translate into substantially higher demand for commercial space, adding to the overall investment in real estate activities. As per industry estimates, India's IT/ITES exports increased at a CAGR of 37% to touch $12.5 billion and was expected to further increase at a CAGR of 32% to touch $51 billion by 2008-09. This growth in IT/ITES is likely to translate into real estate investments of Rs 25 billion by 2007-08.
- Demand for shopping malls by the growing retail segment. The boom witnessed in the service sector not only pushed up the disposable income of the urban populace, but also made people more brand conscious. This increase in disposable income coupled with more brand consciousness resulted in higher sale of branded goods. The retail industry was expected to grow at a CAGR of a little over 6% over the next 5 years. Moreover, the proportion of organised retail-sales to total-sales was also expected to increase to over 5%. The rising income level and changing outlook towards branded goods translated into higher demand for shopping mall space, fuelling strong growth in mall development activities. As per industry estimates, mall development activity across India to the tune of Rs 55 billion was expected to take place by 2010. While mall development activity was initially restricted to a few cities like Mumbai and Gurgaon, it would also extend to other cities like Surat, Pune and Ahmedabad.
- Demand for multiplexes by evolving entertainment sector. Growth of multiplexes was driven by favourable government policies. The Union Budget 2004-05 provided for a tax deduction of 50% on the profits earned by the multiplexes constructed between April 2001 and March 2005 in non-metro towns. This initiative resulted in most major players announcing multiplex projects in smaller towns.

Non-ticket revenues like food and beverages and the leasing of excess space to retailers provided additional revenues to theatre developers.

- Demand for hotels/resorts by growing tourism industry. With the increase of disposable income in the hands of upwardly mobile Indian middle-class, the propensity of spending a larger portion of their income on tours and travels was going up. This factor, coupled with the changing lifestyle of Indian population, created demand for quality hotels/resorts across the country. In addition, India was emerging as a major destination for global tourism, which in turn pushed up the demand for hotels/resorts across India.

THE ROAD AHEAD

DLF was in the process of adopting a new business model for commercial and retail properties. They intended to develop and sell, whereas previously they developed and leased such properties (Business Standard, 2006-b). However, they would retain ownership of retail developments and even if they sold the units in a mall, they would retain the management of the mall charging a management fee from the tenants, as well as the ownership of key common areas, in order to control the quality of the retail space and maintain an appropriate mix of tenants. The size of malls would also increase due to consumer demand for greater retail diversity, and size would be an important determinant of the success of a mall. Thus, DLF planned city centre malls ranging in size from 200,000 square feet to 1 million square feet, and out-of-town destination malls at approximately 2 million square feet. In line with the changed business model, DLF planned their growth for each of the three segments (Economic Times, 2006-c).

Planned Residential Real Estate Projects

DLF planned to build residential real estate business across India. They acquired 23 acres of land for a super-luxury residential development in Chanakyapuri in New Delhi and simultaneously were in the process of acquiring land for township development in and around Amritsar, Bangalore, Chennai, Chandigarh, Goa, Gurgaon, Ludhiana, Indore, Jaipur, Mumbai, Pune and Shimla (Deccan Herald, 2006). They have also won a bid, together with a joint venture partner (name withheld for anonymity), to acquire 35.8 acres of land in New Delhi, out of which 17 acres of the land would be used for residential development of 3,500 units of affordable housing and 18.8 acres of the land for super-luxury residential development of 750 to 1,000 apartments. This development would be a 'public-private partnership' between the joint venture and the DDA, which would require inclusion of a certain proportion of low-income housing in the development. Since such arrangements will effectively use the private sector to finance public-sector housing requirements, DLF expected similar arrangements in other municipalities across India, where local authorities had insufficient funds to build low income housing themselves.

Planned Commercial Real Estate Projects

IT and ITES were driving demand for commercial real estate. DLF planned to develop extensive commercial properties in select cities, built to international standards in order to attract key multinational tenants and further strengthen their position as a leading developer of commercial real estate. A key element of the growth strategy was to anticipate the expansion plans of clients and thereby cater to their growing real estate requirements. DLF was acquiring land for the development of approximately 15.9 million square feet of commercial space, in various locations across India. In Bangalore, DLF was constructing the 1.5-million square feet DLF Technopolis expected to be commissioned in 2007. In Hyderabad, the company was developing an integrated facility on 26 acres of land with three million square feet of office space for information technology

(IT) companies, service apartments, and a shopping mall. In Chennai, a facility having an area of six million square feet on 41 acres of land for an IT park was being developed, the first phase of which was to be completed by Mar 2007 (The Asian Age, 2006). The IT park, called DLF IT Park@Chennai comprising 11 blocks, would be located in the 43-acre Shivaji Garden at Manapakkam, near the Chennai airport. Manpower consultant Jones Lang LaSalle entered into a strategic partnership with DLF to market the space in DLF IT Park@Chennai (Economic Times, 2006-b).

Planned Retail Real Estate Projects

A significant proportion of DLF's planned malls would be situated in prime city centres, although a number of destination malls were also planned on the outskirts of India's major cities, with about 20 malls in North India (Express Hospitality, 2006). DLF projected domestic demand for retail space at 1,300-1,450 million square feet by 2015 and proposed to invest Rs30,000 crore on developing 100 million square feet of retail space on 34 shopping mall projects (Financial Express, 2006). The largest of these planned projects was the Mall of India, to be located in Gurgaon as India's largest mall with area of 32 acres (Times of India, 2005). The mall would be designed by The Jerde Partnership Inc., an international architect, and constructed by DLF Laing O'Rourke.

NEW BUSINESSES

Special Economic Zones

DLF perceived a window of opportunity when the Government of India took measures to encourage foreign investment in and exports from the country. These included the introduction in 2005 of a Special Economic Zone regime under which specified land was deemed "foreign territory" for the purposes of Indian customs controls, duties, and tariffs. SEZs provided an internationally competitive and relatively unregulated environment for export-oriented activities. DLF planned to develop integrated or 'multi-product' SEZs, each with a minimum area of 2,500 acres, including sector-specific SEZs, each comprising 1 million square feet of processing space. The SEZ would be developed as an integrated township, including residential accommodation, commercial and retail facilities, as well as schools, hospitals, hotels and other support infrastructure, and captive power-generation facilities. The proposed 1100-acre SEZ in Amritsar would be an integrated SEZ, covering textiles, garments and engineering goods and services such as food processing. The integrated SEZ at Gurgaon would be developed over four phases of approximately 5,000 acres each. The SEZ would include residential zones, industrial and commercial zones. The institutional zone at the Park would have campus sites for world-class educational, healthcare and research institutes at a total investment of Rs.1,24,000 crore in fixed assets of industrial, commercial and residential stock (Project Monitor, 2006).

DLF was the first to take permissions from the Board of Approvals, GoI for the proposed multi-product SEZs in Ambala, Gurgaon, and Ludhiana and IT-specific SEZs in Chennai and Gurgaon and was in the process of procuring the land with the help of concerned state governments (*Economic Times*, 2006-a).

Hotels

There was a substantial increase in demand for high-quality accommodation across the Indian hotel sector due to increased business tourism, a decline in airfares, and greater investment in infrastructure. DLF was also looking at developing hotels in the four-star, five-star and deluxe segments and other tourism and leisure related assets, such as serviced apartments, clubs and golf courses using their existing real estate capabilities

as well as joint venture to build these assets. They identified 21 sites for the hotels and commenced acquiring lands in some of these locations. DLF was constructing a 16-storey Hilton Hotel off EM Bypass in Kolkata for Rs154 crore. DLF outbid ITC and the Raheja group to acquire a 5.54-acre Calcutta Metropolitan Corporation plot on which it was planning to develop a five-star deluxe hotel in partnership with Hilton International. The Kolkata property was one of the 100 hotels that DLF was planning to develop in the country in partnership with Hilton (The Telegraph, 2006).

On April 20th, 2006 at The Chambers, the exclusive club at the Taj Man Singh Hotel, K.P.Singh reminisced the day twenty five years earlier on the hot afternoon at Gurgaon under two *keekar* trees:

"We are not aware of any developer in the world who has undertaken work of this magnitude," said Singh, sipping *nimbu pani* from a tall glass.

Singh was convinced of the *Damn Lucky Fellow* connotation of his father-in-law, considering the growth path of DLF, but his son, Rajiv had to ensure that the DLF created by his father would continue to sustain leadership position in the market even with the advent of global players and their partnerships. Would the advantage built over the years sustain and for how long?

Exhibit 1—DLF Vision, Mission & Values

DLF Vision

To contribute significantly to building the new India and become world's most valuable real estate company.

DLF Mission

To build world class real-estate businesses across six business lines with the highest standards of professionalism, ethics, quality, and customer service.

DLF Values

-Sustained efforts to enhance customer value and quality
-Ethical and professional service
-Compliance and respect for all community, environmental and legal requirements

Exhibit 2—Approximate Saleable/Lettable Area of DLF Projects

Area (Million sq.ft.)	Completed Developments	Projects under Development	Planned Projects
Residential	21.6	44.4	95.6
Commercial	4.7	40.9	15.9
Retail	2.3	16.3	6.2
Total	28.6	101.6	117.7

Exhibit 3—Residential Development in DLF City

Project	Area (Million sq.ft.)	No. of units	Started	Completed	Sale Value (Rs Million)	Av. Value (Rs./sq.ft.)
Trinity Towers	0.6	234	2002	2006	832	1,472
DLF Exclusive Floors	0.8	516	2001	2004	1,039	1,350
Belvedere Park	0.5	318	2000	2003	1,080	2,006
Belvedere Towers	0.5	222	2000	2003	895	1,742

(*Contd.*)

(*Contd.*)

Carlton Estate	0.7	485	1999	2003	929	1,334
Princeton Estate	1.1	918	1999	2003	1,456	1,382
Wellington Estate	0.9	555	1999	2003	1,082	1,238
Oakwood Estate	0.5	322	1999	2002	710	1,354
DLF Regent House	0.1	34	1999	2002	74	1,380
Ridgewood Estates	1.4	924	1999	2001	1,712	1,237
Richmond Park	0.6	280	1997	2001	945	1,672
Windsor Court	0.4	132	1995	2000	737	1,934
Hamilton Court	0.7	266	1995	2000	909	1,260
Regency Park	1.2	824	1995	2000	1,302	1,065
Beverly Park – II	0.6	182	1996	1998	660	1,181
Beverly Park I	0.5	158	1993	1998	473	977
Silver Oaks	1.4	749	1991	1997	701	700
Executive Home	0.2	109	1992	1996	170	746
New Town House	0.5	333	1990	1994	322	629
Town House	0.6	540	1990	1994	412	639

Trinity Towers

Trinity Towers, located 19 kilometres from Delhi international airport, and 5 kilometres from Cybercity consisted of three buildings of 20 floors each in a total area of 3.7 acres with apartments ranging in size from 2,340 square feet to 3,018 square feet. The amenities included power back up, clubhouse and swimming pool.

DLF Exclusive Floors

DLF Exclusive Floors located 19 kilometres off Delhi international airport and 7 kilometres from Cybercity comprised 172 plots, with three 1,500 square foot units per plot. DLF Exclusive Floors was a low-rise luxury residential development with one unit per floor.

Belvedere Park

Belvedere Park located 12 kilometres off Delhi international airport and close to Cybercity was developed over 13 acres with apartments ranging in size from 1,408 square feet to 3,015 square feet. The amenities included power back up, clubhouse, gymnasium and swimming pool.

Exhibit 4—Commercial Real Estate Development

Project	Area (Million sq.ft.)	Started	Completed
Infinity Towers	1.3	2004	2006
DLF Cyber Green	0.9	2004	2005
Kolkata Tower	1.0	2004	2005

(*Contd.*)

(*Contd.*)

Chandigarh Infosys Park	0.7	2004	2005
Ericsson	0.2	2003	2004
Amex Tower	0.1	2002	2004
DLF Centre	0.3	1989	1992

Infinity Towers

Infinity Towers in Gurgaon, designed by Hafeez Contractor, one of India's leading architects, consisted of three interconnected multi-storied towers, and was designed to provide tenants with the option of scaling up or down using floor plates ranging from 38,000 to 52,000 square feet in size. 140,000 square feet of contiguous space could be provided on each individual floor. The buildings were designed to Seismic Zone V specifications, which was one level above the nationally prescribed level. Infinity Towers was located close to DLF Cyber Green.

DLF Cyber Green

DLF Cyber Green at Gurgaon consisted of five multi-storied towers, offering high-speed elevators, service lifts, a multi-level car park and power back-up facilities. DLF Cyber Green also incorporated floor plates of 19,000 to 22,000 square feet with wide column spans and high floor-to-floor clearances and provided facilities such as a food court with a seating capacity of 450, a health club and ATMs. The tenants of DLF Cyber Green included Canon, Nokia, IBM-Daksh, ABN-Amro, Sapient and Microsoft. DLF Cyber Green was located just off National Highway 8 and was well connected to Delhi's international airport as well as south, central and west Delhi.

Exhibit 5—Retail Real Estate Development

Project	Area (Million sq.ft.)	Started	Completed	Sale Price (Rs Million)	Sale Price (Rs./sq.ft.)
DLF Mega Mall	0.3	2002	2004	1,119	4,520
DLF City Centre	0.3	2001	2003	1,028	4,003
Galleria	0.3	1996	2000	1,421	4,676
Super Mart-I	0.2	1996	2000	221	1,256
Super Mart-II	0.03	1996	2000	39	1,393
Central Arcade	0.1	1991	1993	80	1,415
Park-N-Shop	0.01	1992	1993	14	2,460

DLF City Centre

DLF City Centre was situated in Gurgaon along the Mehrauli-Gurgaon Road. The 2.8-acre development was anchored by the Lifestyle Department Store and housed a cinema complex and a number of restaurants. Other tenants included Benetton, Barista and Reebok. The mall provided parking for up to 700 vehicles.

DLF Mega Mall

DLF Mega Mall was located in Phase I of DLF City in Gurgaon. The development housed a cinema complex and a range of dining options. Other tenants in this development included Reebok and Sensa. The mall provided parking for up to 800 vehicles.

Exhibit 6—Residential Development in Progress

Project	Area (Million sq.ft.)	No. of units	Started	Expected Completed	Sale Value (Rs Million)	Av. Value (Rs./sq.ft.)
The Magnolias	1.8	290	2005	2009	N.A.	N.A.
Royalton Towers	0.2	76	2004	2007	712	3,264
The Icon	0.9	364	2004	2007	3,025	3,151
The Pinnacle	1.1	280	2004	2007	3,921	3,583
The Aralias	1.6	252	2003	2007	3,718	2,373
The Summit	0.7	228	2003	2008	2,963	4,285
Westend Heights	1.0	368	2002	2007	2,072	2,100

The Aralias

The Aralias project is developed over 9.8 acres with apartments ranging in size from 5,822 square feet to 10,803 square feet. It is a luxury residential development where owners can plan and design the layout of their apartments.

The Magnolias

The Magnolias project is one of the first assignments for DLF Laing O'Rourke, expected to be completed in 2008. The project consists of residential units in four buildings of 17 floors each. The total area of the development was 22.77 acres with apartments ranging in size from 5,825 square feet to 9,800 square feet. The Magnolias is a super-luxury residential development and has its own nine-hole golf course.

Westend Heights

Westend Heights is developed over 45 acres with apartments ranging in size from 2,610 square feet to 2,804 square feet.

All three projects are situated adjacent to the 18 hole DLF Golf and Country Club and have high-quality amenities such as central air conditioning, power back up, car calling (valet) and car washing facilities and day-care as well as playschool facilities. The development also provided clubhouse facilities including a multipurpose room, swimming pool and changing rooms, squash and tennis courts, a gymnasium, a convenience shop, and centralised services. This development was near the Mehrauli–Gurgaon Road and National Highway 8, 19 kilometres from Delhi's international airport and 5 kilometres from Cybercity.

Exhibit 7—Commercial Development in Progress

Project	Area (Million sq.ft.)	Actual / Scheduled Started	Scheduled Completion
Gurgaon Projects	**5.9**		
A-II (Phase-V)		2006	2007
Silokhera		2007	2010
Phase-V		2007	2009
Cybercity Projects	**15.50**		
Buildings 8&9		2006	2007
Two Buildings		2007	2008
Cyber Terrace		2007	2008
W Block		2007	2008
New Buildings		2007	2011
Delhi Projects	**3.20**		
Jasola		2006	2008
SIEL		2007	2009
Mumbai Projects	**0.44**		
Niharika		2006	2008
Other Projects	**15.84**		
DLF IT Park I, Kolkata		2005	2007
Pune		2006	2011
Hyderabad		2006	2009
Chennai		2006	2010
Bangalore		2007	2008
NOIDA		2007	2008

DLF IT Park I, Kolkata

This project is adjacent to a new six-lane highway leading to the airport, and is expected to have a total lettable area of 1.17 million square feet of commercial space, incorporating high quality technological features.

Jasola

Jasola in the NCR, located adjacent to the main Mathura Road leading to Kalindi Kunj and NOIDA, is expected to have a total lettable area of approximately 0.7 million square feet of commercial space and incorporated retail facilities, a fitness centre, a food court, restaurants, power backup to offices, central air-conditioning and fibre-optic connectivity.

Exhibit 8—Retail Development in Progress

Project	Area (Million sq. ft.)	Actual / Scheduled Started	Scheduled Completion
Courtyard	0.46	2006	2007
Promenade	0.45	2006	2007
Emporio	0.32	2006	2007
Times Square	1.71	2006	2008
Mall of India	3.60	2007	2009

DLF Place

DLF Place is envisioned as being one of the country's foremost retail landmarks comprising two separate malls linked by a landscaped open-air entertainment and leisure area. It is located near Vasant Vihar in New Delhi, which has an affluent catchment area. The first of these malls is Emporio super-luxury mall, with four levels and space for a large number of leading international and national luxury retailers. The second mall Promenade, has a mix of retail offerings appealing to middle to upper middle income segments. Promenade has restaurants, a food court and a cinema complex.

Courtyard

The Courtyard Mall located at Saket in South Delhi targeted an affluent catchment area. The project is part of an integrated development with commercial space as well as a hotel. The project comprises a department store, a variety of restaurants and a cinema complex with parking for up to 990 vehicles.

Exhibit 9—Subsidiaries of DLF

DLF Services Limited provided maintenance and management services for power distribution, back-up power generation, central air-conditioning, water supply, drainage pumping, janitorial services, security services, parking management, pest control, fire detection, and solid waste disposal and management. Most of these operations were outsourced to qualified and experienced vendors with DLF Services taking responsibility for developing standard operating procedures, maintenance schedules, and addressing complaints. DLF Services was ISO 9001:2000 certified which appealed to multinational clients, who expected superior quality standards.

DLF Power was founded in 1988. Its early operations included the setting up of captive power plants. Upon the opening up of electricity generation to private operators by the GoI, DLF Power commenced supplying electricity to Coal India Limited and the Assam State Electricity Board in the mid-1990s. DLF Power had five power plants in Eastern India with an aggregate capacity of 55 MW. DLF Power's capabilities were a valuable asset in developing captive power resources for planned projects and would be a competitive advantage in the development of large SEZ, township and infrastructure projects.

Exhibit 10—DLF's joint venture with Laing O'Rourke

DLF entered into a joint venture with a leading UK-based construction company, Laing O'Rourke plc, which was the principal contractor for a number of major construction projects globally, including the construction of Terminal 5 at London's Heathrow airport and a terminal at the Dubai international airport. Laing O'Rourke had operations in the UK and Ireland, the Middle East, Asia, Europe, the Far East and Australia and employed more than 23,000 people. Through the joint venture company, DLF wanted to draw from their construction expertise and experience. The joint venture would facilitate participation in the construction of infrastructure projects, including roads, bridges, tunnels, pipelines, harbours, runways and power projects and create opportunities to exploit new sources of revenue.

Exhibit 11—Income of Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	247.8	78.75		267.55	594.1
1998	261.74	136.35		227.42	625.51
1999	214.48	155.57		184.79	554.84
2000	247.23	114.46		214.11	575.8
2001	256.8	135.55		176.54	568.89
2002	247.06	412.16		212.9	872.12
2003	263.01	333.92	68.8	235.63	901.36
2004	286.88	537.73	112.2	373.96	1,310.77
2005	358.26	497.7	305.01	509.33	1,670.3

(Rs in Crore)

Exhibit 12—Operating Profit of Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	27.22	–15.83		26.16	37.55
1998	20.35	17.61		19.77	57.73
1999	6.88	39.46		17.84	64.18
2000	7.66	–4.91		16.75	19.5
2001	–6.19	–43.54		10.99	–38.74
2002	–2.92	–22.81		–5.15	–30.88
2003	9	18.43	12.12	10.19	49.74
2004	2.72	23.01	19.58	16.45	61.76
2005	19.31	77.5	71.98	42.33	211.12

(Rs in Crore)

Exhibit 13—Profit After Tax of Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	20.01	11.19		18.82	50.02
1998	9.23	19.74		13.37	42.34
1999	10.77	25.56		12.61	48.94
2000	12.11	54.89		11.85	78.85
2001	9.19	25.09		10.53	44.81
2002	8.42	37.18		6.97	52.57
2003	14.74	36.53	11.32	10.64	73.23
2004	10.02	47.77	18.41	14.07	90.27
2005	20.83	80.38	65.89	28.87	195.97

(Rs in Crore)

Exhibit 14—Land & Building Worth for Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	38.96	6.79		4.68	50.43
1998	38.95	7.72		4.49	51.16
1999	29.98	9.32		7.2	46.5
2000	29.41	11.14		6.77	47.32
2001	26.21	10.67		7.1	43.98
2002	27.66	29.11		7.1	63.87
2003	29.08	28.63	0.41	6.94	65.06
2004	29.08	98.9	0.47	6.94	135.39
2005	30.68	138.85	8.2	10.53	188.26

(Rs in Crore)

Exhibit 15—Advertising Expense of Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	4.72	1.05		0.34	6.11
1998	3.65	0.94		0.5	5.09
1999	2.75	3.17		0.2	6.12
2000	2.09	2.84		0.33	5.26
2001	0.87	3.08		0.09	4.04

(*Contd.*)

(*Contd.*)

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
2002	1.57	3.22		0.11	4.9
2003	0.97	4.5	0.23	0.14	5.84
2004	1.07	3.13	0.86	0.34	5.4
2005	1.03	3.43	1.05	3.52	9.03

(Rs in Crore)

Exhibit 16—Marketing Expense of Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	8.77	2.75		0	11.52
1998	9.6	1.15		0	10.75
1999	6.44	2.02		0	8.46
2000	3.58	7.32		0	10.9
2001	0.96	6.61		0	7.57
2002	1.94	6		0	7.94
2003	3.45	8.95	0.1	0	12.5
2004	3.38	18.13	0.45	0	21.96
2005	2.03	22.42	1.26	0	25.71

(Rs in Crore)

Exhibit 17—Raw Material Expense of Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	28.03	0		19.56	47.59
1998	26.82	0.04		34.84	61.7
1999	21.11	0		19.94	41.05
2000	20.97	22.28		29.09	72.34
2001	22.08	11.59		34.43	68.1
2002	27.27	2.08		0	29.35
2003	23.47	14.68	0	0	38.15
2004	22.93	9.84	0	0	32.77
2005	48.76	0	0	57.24	106

(Rs in Crore)

Exhibit 18—Salary and Wage Expense of Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	13.53	3.41		12.47	29.41
1998	15.86	12.47		11.47	39.8
1999	16.43	15.62		10.95	43
2000	15.08	14		11.13	40.21
2001	14.65	15.6		10.98	41.23
2002	18.6	15.04		9.7	43.34
2003	19.27	18.35	1.26	8.71	47.59
2004	20.36	24.21	2.78	10.38	57.73
2005	23.09	36.15	4.31	17.03	80.58

(Rs in Crore)

Exhibit 19—Capital Employed by Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	283.85	172.12		177.67	633.64
1998	326.3	261.34		216.09	803.73
1999	334.64	396.4		233.46	964.5
2000	344.38	403.82		271.98	1,020.18
2001	359.74	277.68		280.67	918.09
2002	381.1	421.77		268.98	1,071.85
2003	396.45	344.39	21.2	270.57	1,032.61
2004	385.72	917.81	86.77	282.35	1,672.65
2005	306.33	1306.42	219.28	469.15	2,301.18

(Rs in Crore)

Exhibit 20—Net Worth of Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	123.37	37.49		97.63	258.49
1998	129.06	66.16		105.63	300.85
1999	137.9	89.98		112.82	340.7
2000	148.67	210.2		120.15	479.02

(*Contd.*)

(*Contd.*)

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
2001	148.12	234.33		127.92	510.37
2002	147.97	266.21		130.53	544.71
2003	161.35	300.09	20.72	138.35	620.51
2004	170.18	368.21	38.3	150.69	727.38
2005	176.55	494.68	102.31	173.91	947.45

(Rs in Crore)

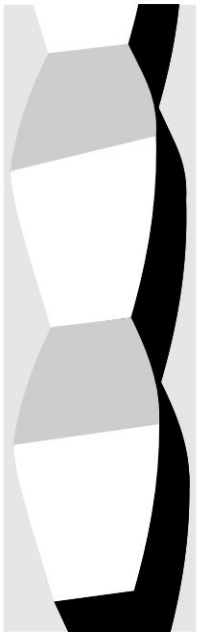
Exhibit 21—Borrowings of Major Real Estate Developers in India

Year	Ansal Group	DLF Group	Parsvnath Developers Ltd.	Unitech Ltd.	Total
1997	170.86	179.01		82.97	432.84
1998	209.81	268.94		132.26	611.01
1999	208.4	428.58		144.95	781.93
2000	215.4	307.38		152.63	675.41
2001	245.78	99.8		153.28	498.86
2002	288.69	187.37		141.04	617.1
2003	294.31	57.67	5.34	132.71	490.03
2004	281.19	590.11	60.94	132.69	1,064.93
2005	216.94	847.13	136.4	295.24	1,495.71

(Rs in Crore)

REFERENCES

Annual Reports of DLF Universal Ltd.
Business India (2006), Lords of the Land, May 21, pp.42-49
Business Line (2006), DLF Partner Laing O'Rourke Buys Aussie Co., Jul 5, pp.2
Business Standard (2006-a), The Story ind DLF's Success, April 20
Business Standard (2006-b), DLF Opts for New Business Model, May 15, pp.9
Business Standard (2006-c), DLF'S $2.5-Billion Hotel Industry, Jun 23, pp.10
Construction World (2006), India's Most Admired Companies 2006: DLF Universal, Aug 31, pp.56
Deccan Herald (2006), DLF Plans Foray into SEZ, Hotels, Infrastructure, Jun 6, pp.15
Economic Times (2006-a), DLF Plans to Set Up SEZs Across India, Apr 8, pp.7
Economic Times (2006-b), DLF Set to Enter Chennai with Information Technology Park Plan, May 16, pp.5
Economic Times Mumbai Ed. (2006-c), DLF to Focus On Infrastructure, Hotels & SEZs, Jun 8, pp.4
Express Hospitality (2006), Here come the Malls, Jun 15, pp.10
Financial Express (2006), DLF to Invest Rs. 30,000 Crore, Jul 3, pp.8
http://www.dlf-group.com/group_vision_mission.aspx accessed on 29.12.06
Insight Database
Project Monitor (2006), DLF to Set up SEZ in Gurgaon, Dec 4, pp.4
Prowess Database
The Asian Age (2006), DLF Eyes Southern Expansion, Jun 5, pp.6
The Telegraph Kolkata Ed. (2006), 16-Storey Hilton Hotel On Bypass, Jul 23, pp.7
Times of India, New Delhi Ed. (2005), World's Biggest Mall Planned in Gurgaon, Jun 22, pp.1



The McGraw-Hill Companies

Case 4

Gati Limited— At the Threshold of a Big Leap

"Tomorrow beckons us with limitless opportunities, in both the domestic and international sectors. Driven by an insatiable urge to excel, we stand at the threshold of a big leap forward, ready to greet tomorrow with a spring in our step. Gati seeks to...
Be the leader in Asia-Pacific, and a globally preferred provider of India-centric supply chain services and solutions. Delight customers with quality service by setting new trends through innovation and technology. Be the most preferred organisation for all its stakeholders. Be a responsible corporate citizen with unwavering commitment to environmental protection and conservation."

K.L.Chugh, Chairman

Gati Limited was a leader in the Express Cargo movement and a pioneer in Distribution and Supply Chain Management solutions in India. Gati Limited was incorporated on April 25th, 1995 with its registered office at Secunderabad. It provided services ranging from traditional point-to-point transportation, to complex end-to-end integrated logistics and supply chain management solutions. Gati offered a spectrum of services that were cost-efficient and flexible (Financial Express, 2006).

The company operated in three different business segments namely, logistics, shipping, and fuel stations. GATI's products were different kinds of services offered to customers depending upon the time sensitivity of their cargo/ packet as shown in **Exhibit 1**.

Logistics

The logistics division of the company was primarily engaged in providing integrated logistics solutions through state-of-the-art infrastructure, IT-led initiatives, modern equipment, and efficient and mechanised system of working. The division offered multi-modal transport services (Industry, 2003) through a vast network of own offices and franchisees in India, own and outsourced fleet of trucks, and through an alliance with Indian Airlines. Express *Distribution and Supply Chain* was the core business segment of Gati, offering a wide gamut of value-added services like warehousing, trucking, express, and time-bound cargo. The *international business* wing provided courier/freight services to over 200 countries, offering customers the convenience of sending their consignments on 'consolidated weight' basis. The *trucking solutions* wing offered customised container services, with online cargo tracking and one-time locks for extra security. With a turnover of Rs 259.14 crore, this segment had a growth rate of 22.47%.

Shipping

The shipping division "GATI Coast-to-Coast" engaged in coastal shipping as well as covered Yangon (Myanmar) and Andaman & Nicobar Islands. This segment was growing by 11%.

Fuel Stations

The Company also operated five fuel stations situated at Bangalore, Belgaum, Indore, Shadnagar (near Hyderabad), and Chhatra (Karnataka). In the *Fuel Stations* segment, Gati traded in petroleum and lubricants, supplying to several pumps in Karnataka, Andhra Pradesh, and Madhya Pradesh on behalf of oil majors. Rising fuel prices affected growth (4%) and profitability of this segment.

Gati's total turnover consisted of 70% from logistics division, 7% from shipping division, and 23% from petrol stations division. Out of 70% of logistics division, 98% was from cargo and rest 2% from courier business. The company faced competition from small-time regional players on account of lower pricing policy implemented by them, but they were unable to match the standards of Gati in services. The competition was limited only to the regional level since Gati had a network covering 580 districts and 3827 locations delivering anything anywhere, and was expanding towards covering all districts in India.

INFRASTRUCTURE

The infrastructure consisted of a vast network of offices and franchisees in India, own and outsourced fleet of vehicles, and own ships. It had 5 Zonal Offices, 61 Express Centres, 109 Depots, 160 Franchisees, 54 Customer Convenience Centres, 20 Surface Transit Centres, 19 Air Transit Centres, 5 Rail Transit Centres, 3827 extra service stations, and 27 modern warehouses (total area 6,00,000 sq.ft.) spread across 580 out of 590 districts in the country. It provided multi-modal transportation – road, rail, sea and air. Its infrastructure facilities consisted of Rail Transit Centres, Surface Transit Centres and Air Transit Centres across the country. It had a strategic alliance with Indian Airlines for joint promotion of small cargo.

Gati was spread across 427 locations in India, and had overseas offices in Sri Lanka, Nepal, Hong Kong, Singapore and China (Business Line, 2005-d). The Company was in the process of opening branches/liaison offices in Thailand, Malaysia, U.A.E., and Taiwan (Business Line, 2005-c). The booking and delivering was

transacted through the branches. The Zonal Offices controlled the administrative activities, and hubs operated routes through which the cargo was moved from one place to another.

Handling more than 24000 dockets daily, its 2000-strong surface vehicles fleet covered over 3.20 lac kms. every day. The company owned a fleet strength of over 1350 aerodynamic LCVs for in-city pick-up and delivery. The company had 30 containerised HCVs, refrigerated vehicles, and tractor-tow-heads which provided the cutting edge to their business. The existing facilities could be enhanced depending on the demand, by setting up extension counters, and taking additional trucks on hire.

The Company aimed to be a one-stop service provider in logistics solutions, focusing on warehousing and infrastructure, Express Distribution Centres, a Central Distribution Centre, information technology, and human resources. The year 2004-05 saw the emergence of India as the world's tenth largest economy. With a GDP of US$ 692 billion, India entered the elite group of the world's fastest developing nations. By leveraging its countrywide network of branches, 'Express Distribution Centres' (EDCs), and 'Centralised Distribution Centres' (CDCs), Gati was at the right place to take advantage of a dynamic market that was actively outsourcing its express distribution and supply chain requirements.

The shipping division "GATI Coast-to-Coast" operated through two ships i.e. GATI-1 & GATI- Suvidha with the DWT of 4811 & 6084, respectively. GATI operated on Port Blair and Chennai sector and diversified to Yangon port. It also operated five fuel stations situated at Bangalore, Belgaum, Indore, Shadnagar (near Hyderabad), & Chhatra (Karnataka).

TECHNOLOGY

In 2002, Gati Web site was inaugurated, which was aimed at rendering better services to customers. Customers could track multiple docket numbers and download information, lodge complaints online and track its status, check prices and transit time for shipment of any of Gati's services, with the option to compare different services on both fronts. This implementation helped Gati work pro-actively and provide high level of customer satisfaction through reverse flow of information through the website, e-mail, SMS, and toll free number (Business Standard, 2002). Consignment delivery information was sent to customers via e-mail. Gati.Net, a corporate intranet application, was also introduced to enable employees to share information and communicate over an interactive online platform (Business India, 2002). In 2004, Gati implemented a state-of-the art web based ERP called gati@web, comprising GEMS (Gati Enterprise Management System)-a custom-developed application, Oracle CRM, and Oracle Financial. This was a completely centralised and on-line application (Express Computers, 2004). In order to connect to this application, more than 120 locations were networked through lease lines and VSAT. The company enhanced its *Gati Enterprise Management System* (GEMS) software by adding new modules for freight forwarding and ZIPP Courier Service and customised the applications to meet international operational requirements. The website was revamped by providing several user-friendly features such as provision of complete solutions on the web to the customers, through an online 'chat' facility with the company's Customer Service personnel. Communication amongst Gati'ites was upgraded from 'messaging' to 'instant messaging' (online chats). By implementing Lotus Notes suite of products, the company moved to 'collaborative working' through instant messaging, sharing, presentations online, whiteboard, and conferences on the web. To supplement the company's central server at its Head Office, Gati was setting up an alternate *disaster recovery site.* It was planning a portal for Gati'ites as well as business intelligence and data warehousing solutions to give a 'dashboard' facility on key performance indicators for the senior management.

HUMAN RESOURCES

Gati employed a workforce of 2364 supported by 512 trainees from Gati Learning School. Gati brought forth a higher level of critical appreciation of its Performance Management System (PMS) and linked it to the

Business Performance. It leveraged Performance Linked Award (PLA) as an impetus to gauge and reward performance. The revisit of the Promotion Policy opened a transparent career development map for all Gati'ites, especially those on the 'Fast Track'.

The revised promotion policy - branded 'Talent for Tomorrow' - was based on a careful diagnosis of the company's operational dynamics, and enabled high-performers to get on a 'fast track' growth route and reach their deserving responsibility levels, through special Assessment Centres. Aspirants for quick growth were given an opportunity to opt for a lateral shift - functional or geographical - and have their latent talent/ potential rewarded. They were informed of their strengths and weaknesses at Development Centres, and advised on suitable means to develop themselves. The company attached great importance to equip every Gati'ite and Business Partner with the right functional competencies in his/her job. A dynamic training process was in place, which developed and helped individuals in their career growth. Functional skills were honed mostly through internal training, imparted by senior personnel through structured modules. This helped in constantly streamlining the business processes of the company. Equal importance was accorded to training the Business Partners (Gati Associates, handlers, drivers and franchisees) as well. External assistance was taken for training drivers (TELCO, Ashok Leyland, Eicher) and handlers (Godrej, Jost). For training its personnel in management/soft skills, Gati co-opted consultants and resource persons from reputed institutions such as IIMs, NIIT, FICCI, CM, AIMA, ICFAI, ASCI, XLRI, NITIE, etc. The training programmes were coordinated at the P.D. Agarwal Development Centres (PDADCs) at Chennai, Pune, New Delhi, Kolkata and Indore, and their satellite centres at Bangalore, Kochi, Mumbai, Ahmedabad, Chandigarh, Allahabad, Lucknow, Jamshedpur, Guwahati, Bhubaneshwar, and Nagpur (Annual Report, 2005). The company was planning to provide benefit of life/ medical /accident cover to its Business Partners (who were not regular employees) as well. The Company launched e-HR to provide complete emoluments and related information of every Gati'ite.

OPERATIONS

Gati was an ISO 9001:2000 company, certified for design, marketing, and providing cargo management services and logistic solutions (Business Line, 2003). Gati established modern state-of-art warehouses at Gurgaon, Ludhiana, Jaipur, Indore, Kolkata, and Pondicherry, with multi-level stacking features for effective space utilisation. Equipped with stackers, forklifts, cage lifts, and CCTV, they offered several benefits and services like on-line inventory control and monitoring, flexible hiring options, and billing/data collection and were in the process of constructing more such warehouses in major cities in the country with Central focal point for distribution activities being Nagpur. In September 2004, Gati entered into a special tie-up with Indian Airlines and launched *Gati Gold and Gati Silver* services, for speedy air-delivery of time-sensitive consignments at several major airports in India. This was a door-to-door pick-up and delivery service for sensitive sub-load cargo. The product provided a wide reach through multi-modal connectivity. It offered value-added services such as flexible delivery options, door pick-up and delivery, online tracking, and toll-free call number. Besides this, it was more cost-effective in comparison to other services. The service was to be extended to other domestic airports as well as a few overseas destinations.

International business operations kept pace with the changing market trends. Gati International handled international business with a new focus, in association with local logistics agents. The Company had branches in Singapore and Nepal and liaison office in Sri Lanka, Hong Kong, and China and was in the process of opening branches/liaison offices in Thailand, Malaysia, U.A.E., and Taiwan. It planned to acquire a modernised, customised fleet of unique containers suited for Indian terrain to re-engineer and revamp its network to international standards. These containers were designed to increase the space utilisation as well as for storage of odd-sized materials with different dimensions. Gati was certified by IATA (International Air Transport Association) to promote, service, market, and handle international air cargo movement.

MARKETING

Gati's marketing strategy aimed at attracting new customers and retaining old ones. The clientele of Gati included Hitachi, Pantaloon, Ford, and Ranbaxy. A series of activities were involved to serve the customers and make them long-term clients. The dynamic market was constantly evolving, and customers' expectations were on the rise. Gati's priority was to work towards personalised and innovative services, thereby building an everlasting relationship with customers. The company took several internal and external initiatives in this regard, including changes in people and processes. Management believed that the foundation of any successful business was only as strong as the degree of customer satisfaction. Gati made it a primary responsibility to understand customers thoroughly, and delight them in the best manner possible. As Arthur Simon Bertie (Chief Business Chain Officer) observed,

"Business is about people. ***Stakeholders*** *are the financial mechanism that makes a company's business happen.*
Customers*, as users of a company's services, are its paymasters.*
Competitors *need to be respected, as they spur a company to excel and work on innovative and creative ideas.*
A company's ***vendors*** *are its supporters, and should therefore be made to belong to the organisation.*
The company's ***employees****, being service providers, make its customers happy by caring for them and responding to their various needs.*
As it is ***people*** *who drive all the operations of Gati, it is important for everyone to work with the motto 'people service people' in mind."*

The series of innovative initiatives pioneered by Gati established it as the leader in India in logistics solutions and services. The company's growth was propelled by an urge to delight its customers with quality and deliver value way beyond their expectations. Driven by the twin engines of innovation and continuous organisational renewal, Gati experimented with new ideas and relentlessly move up the logistics value chain. Gati transformed its existing warehouses into modern express distribution centres. The gati@web was launched for smoother functioning, and to ensure effective and quicker means of communication among all Gati offices, and real-time information for the benefit of its customers.

Gati revolutionised the cargo sector with its *on time intact, else money back* offer, aided by its fleet of custom-designed, product-specific containers, flexible pick-up/delivery options, and vehicle tracking system. Gati was the first Indian company to introduce a toll-free number *(1-600-425-4284),* along with a unique *Customer Complaint Monitoring System* that systematically captured, organised, and disseminated customer complaints. *Cash-on-Delivery was* another unique benchmark that transformed the manner in which business between a consignor and consignee was transacted. In another industry *first*, Gati tied up with Indian Airlines to assure itself of cargo space in *34 air sectors* of the airline. Computerising its operations far ahead of the competition, Gati was the first to offer a unique *Track-n-Trace* facility for customers to monitor their consignments (Voice & Data, 2003). Gati's first-of-its-kind *3PL Solutions* offered special third-party logistics features such as 24x365 operations, parts bank, shared facilities, shelf space, flexible delivery, inventory control, and MIS. *Coast-to-Coast* emerged as India's largest container operator in the Chennai-Port Blair sector, serving Bangladesh, Myanmar, Malaysia, Sri Lanka, and Dubai.

Gati's pioneering tie-ups with *Bhutan Post and Maldives Post* offered Gati's Indian customers access to several destinations in the two countries. The company also provided complete shipment solutions to all other *SAARC* countries. The *Alphonso Mango Scheme* was another popular 'customer delight' initiative from Gati, under which customers had the fruit delivered at their doorstep by placing orders telephonically or through the company's website. Gati was the first Indian logistics company to implement *e-CRM* by launching a *Customer Call Centre* and a *Complaint Management System* that reduced complaint resolution time through automatic call distribution and escalation.

Gati's *Enterprise Management System* connected 267 offices and enabled consignment to be tracked from anywhere in the country. *e-POD* was another 'first' that enabled consignors to view scanned images of their PODs on the website (Smart Inc., 2002). Gati was the unanimous choice for the *Best Domestic Logistics Company* award from Frost and Sullivan in 2004. Gati had the pioneering spirit and ability to be change-leaders by always seeking out new questions, finding new value-added solutions for them, and new ways to bring out the best.

In November 2004, Gati took a major step in tapping into India-centric business in the Asia-Pacific region by setting up a Regional Office at *Singapore,* in conjunction with several business houses and MNCs. In the same month, the company launched *Gati Saver* in the small package segment; non-commercial shipment weighing up to 4 kg could be sent through this service at just Rs 90. In February 2005, Gati Coast-to-Coast achieved a new milestone by launching a *direct service* between Chennai and Yangon (Myanmar). The benefit of this initiative was demonstrated when the company moved 55 containers from Yangon to Nagpur via Chennai in just 14 days, as against the normal transit time of 35-45 days (via Singapore, with trans-shipment at Mumbai). In March 2005, Gati Coast-to-Coast achieved another milestone by setting up a new office at Port Blair to boost its operations in the *Chennai-Port Blair sector.*

In June of the same year, Gati set up an office in Beijing as a gateway for its India-centric express distribution, warehousing and inventory management business in China. In its endeavour to spread further in the Asia-Pacific region, the company was planning to set up offices in Hong Kong, Thailand, Malaysia, and Indonesia as well.

During 2005, Gati redefined logistics by launching state-of-the-art *Express Distribution Centres* (EDCs) at Kolkata, Jaipur, Pondicherry, Gurgaon, Ludhiana, and Indore. Equipped with highly advanced web-enabled software, warehouse management system and material handling equipment, these 'mechantronic' warehouses enabled Gati to utilise its vertical space more effectively and provide world-class levels of operational efficiency.

Gati was the only express distribution and supply chain company in India that offered comprehensive multi-modal (land, sea, air and rail) transportation services to customers, as well as niche value additions such as *third-party logistics, trucking* and *warehousing* solutions.

Gati's Risk Management Group (RMG) assisted the company in its quest for excellence, corporate governance, and professionalism by proactively minimising losses and maximising opportunities through systematic identification, evaluation, monitoring, and communication of its potential business risks. Adopting an 'anticipate and prevent' approach, the RMG covered the areas of vigilance, internal audit, insurance/claim management, and legal compliance. Gati's 'Engineering Solutions' department was engaged in re-engineering the company's warehousing and operational networks, by working continuously on ergonomics, office automation, work/ process flow, and manpower rationalisation. Gati was in the process of implementing software to provide a 'single-invoice, multiple-dockets' tracking facility to its regular clients. Gati's relentless pioneering took it along paths that others could barely notice. Gati's quest for adding further value to its services kept pushing it beyond the possible.

Gati built the brand over a period of years, with active participation in the media, exhibitions, and other promotional activities on the warehousing front. To know its customers better and understand their expectations, Gati held several Customer Meets and Carnivals through the year, at Ahmedabad, Bangalore, Baroda, Berhampore, Bhopal, Bhubaneshwar, Chandigarh, Chennai, Hyderabad, Indore, Jaipur, Jamshedpur, Kanpur, Kochi, Kolkata, Ludhiana, Lucknow, Mumbai, Nagpur, New Delhi, Pondicherry, Pune, Shantipur, Surat, Vapi, Varanasi, and Warangal.

Gati took part in several industrial exhibitions/fairs. By offering updates on its wide range of integrated cargo management solutions, the company cemented its reputation as India's leader in logistics, as well as a comprehensive business partner to its customers. The company participated in All India Management Convention, New Delhi (September 2004), International Trade Fair for Transport and Logistics, New Delhi

(September 2004), Network India-TiE Asia Pacific Conference, Singapore (October 2004), Industrial Trade Fair 2004, Kolkata (December 2004), National Convention of Indian Institute of Materials Management, New Delhi (December 2004), StoneMart 2005: International Stone Industry Exhibition, Jaipur (January 2005), Mahatech Exhibition, Pune (January 2005), Exhibition jointly organised by CACCI and FICCI, New Delhi (February 2005), and Garment Fair, Indore (March 2005).

INDUSTRY SCENARIO

The development of Indian express industry dates back much earlier than the decade of eighties, which saw the real entry of professional players into this market. Since then the industry grew at a steady rate and provided services to the customers at large. "Express industry" comprised courier companies providing express and door-to-door pick up and delivery services for documents and non-documents shipments other than freight to various domestic and international destinations. Domestic services included express and door-to-door pick up and delivery services to the various destinations in India through air and surface mode. The international services included pick up and delivery of inbound and outbound shipments to India mainly through air. The consignments handled by express companies were broadly classified into two types viz. documents and non-documents. Any material comprising paper such as correspondence, bill/invoices, brochures, catalogues, manuals, annual reports, account details, books, files etc. were categorised as documents. The non-documents consignment included items with or without commercial value such as samples, CKD units, small machineries, electronic parts and goods, spare parts etc. Overall, *document* accounted for about 60% of the total organised sector revenue and *non-documents* constituted 40%. The Indian express cargo industry - organised and unorganised - had huge growth prospects for both local and international players alike. The increasing investment in infrastructure, booming manufacturing, and development of organised retail sectors were providing business potential for the express cargo companies.

Sector	Revenue (Rs In crore)	Market Share (%)
Organised	1628	65
Semi Organised & Unorganised	618	25
EMS Speed Post	247	10
Total	2493	100

The express industry witnessed progressive growth during the last decade of the twentieth century. The growth drivers were trade and services. Changing economic scenario led by removal of trade barriers and globalisation of markets led to increase in international trade. This saw entry of international majors equipped with technology driven value-added services. The express industry went through a growth and transition phase due to entry of these international majors, and challenges posed by web-based technology. The express industry in India comprised large players with deep pockets operating on speed and technology based infrastructure, integrating air and surface solution in domestic and international market. The express market was characterised by the existence of over 2000 express companies operating in India, with about 20 companies in the organised sector, 25 in semi-organised, and the rest in the unorganised sector. The market was estimated at Rs 2,493 crore. The domestic market constituted 59%, valued at Rs 1,468 crore, while the international market constituted of 41% of the total industry, valued at Rs 1,025 crore.

Organised Sector

The players in this sector were the express service providers having national and international reach, armed with fully equipped infrastructure and other value added services. They had their own collection and distribution

infrastructure. The major user sectors were Pharmaceuticals, IT, Readymade Garments, and FMCG products. Typically, MNCs catered to the international express business and domestic majors catered to the domestic market. Domestic companies acted as consolidator to the international service providers. Some of the domestic companies had tie-ups with the international service providers. The large service providers were technology driven companies with major emphasis on customer service and speed. Supply chain management and logistics were emerging areas of opportunity. With the development of Just in Time (JIT) and E-commerce there was sizeable business opportunity for web enabled services - convenience, reliability (time bound delivery, insurance facility), and speed (major operation through air, own fleet for surface delivery) were the growth drivers. Tracking services were offered by most of the organised sector players. Under these services, the customer was able to trace the movement of consignment through Internet from his/her own office premises. The leading service providers offered 10, 15, and 25 Kg boxes. These boxes relieved the customer of packaging difficulties and ensured the safe delivery of consignments.

The organised sector, which was mostly the package segment of the Cargo Management business, posted high growth. On the other hand, the unorganised/semi-organised segment of the industry faced pressure on margins because of the unfavourable pricing environment. The unorganised sector was mostly into the documents business, where the margins were much lower than the package segment. Barriers to entry in the documents business were also very low. Growth of the Cargo Management industry was not only linked to the economic situation prevailing in the country but also to the export scenario. The industry was not regulated which meant licences were not needed to set up a Cargo Management company. The entry barriers, especially in the package segment of the business were high because the Cargo Management companies had to build a strong distribution network. They also required the latest technology and well-trained staff. A strong brand image acted as a major barrier. Economies of scale played a very important role, given that operating leverage of the industry was very high.

Leveraging on their strong distribution network, the Cargo Management companies were well placed to take advantage of the billion-dollar e-commerce business. These companies were providing customers with value added services to differentiate their products from their peers. Logistics management also emerged as a new growth opportunity for the Cargo Management companies. Manufacturing companies were outsourcing their logistics requirements to third party logistics providers. Cargo Management companies worldwide, with their warehousing facilities and in-house technology, were in a better position to offer such value added services (Business Line, 2005-a).

Other Major Players

There were companies like Blue Dart, DHL, etc. with 70-80% of their turnover from the courier business, and 20-30% from the cargo business.

Blue Dart Blue Dart was South Asia's leading integrated **air-express** carrier having a domestic network covering 14,000 locations and services in more than 220 countries through alliance with DHL, the global express distribution service. DHL, 100% owned by Deutsche Post World Net, was the global market leader in international express, overland transport, and airfreight. It was also the world's *numero-uno* in ocean freight and contract logistics. DHL offered customised solutions including express document shipping and supply chain management. DHL's combination of global reach and local knowledge was a key competitive edge. Blue Dart had warehouses at 14 locations as well as bonded warehouses at the six major metros- Bangalore, Chennai, Delhi, Mumbai, Kolkata, and Hyderabad. The competitive advantage was that it had an air service, the only one of its kind in the country, which was focused on carriage of packages as its prime business, rather than as a by-product of a passenger airline. A dedicated aviation system to support Blue Dart's services was self-sustaining, with its own bonded warehouses, ground handling and maintenance capability.

DTDC Couriers & Cargo Ltd. Incorporated in July 1990 and headquartered in Bangalore, **DTDC Courier & Cargo Ltd.** (DTDC) was one of the leading Air Express & Cargo companies in India. It had expanded its delivery network to create the nation's Largest Domestic Delivery Network and had four Zonal Offices at Delhi, Kolkata, Chennai, and Mumbai. It had presence in over 80 locations across the country with strategically positioned regional & branch offices. DTDC was the pioneer of franchisee system in the courier industry in India with over 3,700 franchisees, delivering 3,21,000 consignments across the nation every day. With its widespread success in the domestic domain, DTDC extended its service network around the world too. DTDC Worldwide Express Ltd., a unit of DTDC Group, catered to the overseas market and provided services to over 240 worldwide destinations using international associates at prime gateways like USA, UK, Singapore, U.A.E., Nepal, Bhutan, Bangladesh, Sri Lanka, and Hong Kong. As part of its business innovations, DTDC was venturing into the digital domain of internet shopping, the DTDC SHOPPING NET**.** With this concept anyone located in any part of the country, could visit the DTDC site and log on to the shopping link to choose from a wide choice of gift articles to be hand-delivered in India.

CONCOR Container Corporation of India Ltd. was incorporated in March 1988 taking over the existing network of 7 ICDs from the Indian Railways. The company was set up with the objective of developing multi-modal logistics support for India's International and Domestic containerised cargo and trade, by providing customers direct interaction and door-to-door services that formed the backbone of road transport, while capitalising on the robust and more economical option of rail movement on the Indian Railways network. CONCOR operated container terminals across the country to cater to the needs of the trade, in the EX-IM and domestic business. It had the undisputed position as sole-provider of rail hauls for containers. Its strong ties with Indian railways guaranteed right of way. It also had the advantage of a dedicated network of terminals across the country to capture traffic at the production/consumption centres.

Semi-Organised Sector

The semi-organised sector comprised players operating within a limited geographical area. The operations could be between geographical regions (North-South; East-West), between states or between specific sectors (Ahmedabad–Mumbai, Delhi–Jaipur, etc.) i.e. domestic niche markets. Such companies generally had their own network of branches and franchisees in the regions in which they operated. There were few local companies who booked consignments bound for any domestic locations. However, such companies did not have their own distribution network, and relied on the network of other similar companies in various locations or acted as wholesalers to organised sector companies. The semi-organised sectors matched the reach of organised sector service providers. Most of the semi-organised sector players operated in the domestic market. However, some of the semi-organised sector players also accepted international consignments and used the services of other major international service providers. The consignments were also shipped through co-loaders. The semi-organised sector also generated its revenues through wholesale business (acceptance of a sizable lot of consignments) from small local service providers. There were some express companies which operated between niche market sectors like major wholesale markets in India for specific items. Such niche sectors operated between Mumbai, Ahmedabad, Baroda and Surat (all textile markets), Delhi (automobile parts), and Calcutta and Chennai (leather markets). In Mumbai, such courier companies (40 of them) formed an association called Bombay Courier Association. Some local express/courier companies operated independently, without any distribution network of their own. Such companies booked the consignments for any destinations. The consignments were then handed over to organised sector or semi-organised service providers. The *document* business dominated the total shipments handled. The semi-organised and unorganised players operated on

price advantages. According to industry sources, unorganised and semi-organised players were mainly characterised by high-volume business, and developed over the years from traditional "ANGADIAS" or personal mail delivery business.

Unorganised Sector

Unorganised sector of the express industry comprised companies, which had restricted operations within the boundaries of a particular city (intra-city couriers). Such companies were mostly found in metropolitan cities and semi-metropolitan cities. Typically, such companies had one or more branches in a city, based on the spread of the city and volume of the business from different locations within a city. Intra-city couriers dedicated personnel for collection and distribution of consignments. The delivery schedules were based on the urgency of the consignments. Almost the entire market for intra-city business was accounted for by documents. Intracity couriers carried out distribution of promotional materials, magazines, and newspapers. Large number of small-service providers marked this market. The major centres for intracity business were Mumbai, Delhi, Calcutta, Bangalore, Chennai, Indore, and Jaipur.

The unorganised sector thrived on price and was unable to keep pace with the market in terms of reliability and timeliness. The express service providers operated on economies of scale where large companies catered to the higher business volume. A scenario wherein unorganised sector would not exist at national level due to its inability to keep pace with the technology and customer demand was anticipated.

EMS Speed Post

EMS was the express arm of Post and Telegraph department in India, which operated in association with other member countries of Universal Postal Union. Both, Speed Post Domestic Services and Speed Post International Services, were offered under the brand *Speed Post*. *Speed Post* Domestic carried about 634 lac articles every year and generated revenue of Rs 2.43 crore, while the Speed Post International carried 5.76 lac articles (http://www.indiastat.com/india/ShowDataSec.asp?secid=12597&ptid=218 accessed on 30.07.06). Electronic Track and Trace System were implemented for Speed Post and Express Parcel Post wherein a customer could find out the status of his consignment online through Internet. It started operations in national Speed Post Centres, which were not directly linked with the web-server but were proposed to be linked in the Tenth Five Year Plan.

Products and Services of the Express Industry

Products In addition to the distribution of the consignments, express service providers offered customer-specific products. Various products and services offered by the express industry were:

Express (Document and Non-document) This was the basic product of all express service providers. The time bound delivery of consignments was ensured under this product. The delivery time depended upon the distance between the pick-up and delivery locations, and type (document, non-document) and size of consignments. The general delivery time offered by the express service providers were 12-noon delivery, 24 Hour delivery, 48 Hour delivery and 72 Hour delivery.

Door to Door (by Air and Surface) Under this product, the express companies offered an option to select mode of transport. If the customer did not specify the mode of transport, the consignments were transported by air. Heavy consignments and/or for pick-up and destinations on the trunk route surface transport were used.

Door to Airport and Airport to Door Under these products, the express companies took the total responsibility of preparation of legal documentation and procedures.

Services The basic service of express service providers was time-bound delivery. In view of the fierce competition, the service providers offered value-added services like pick-up, proof of delivery, collection of cheque, payment after delivery, bill the consignee, monthly payments, tracking service, and web enabled services.

Logistics Market

Logistics solutions emerged as a new growth opportunity and express companies with their inherent expertise and distribution management skills, coupled with technology leanings and infrastructure installation, were in the best position to offer such service to the customers. International freight traffic was increasing rapidly as multinational companies were setting up new manufacturing operations. The 3rd party logistics activities and solutions covered were order compilation and dispatch planning, physical transportation, in-transit monitoring, confirmation of deliveries, payment to transporters, and providing MIS to the client. They also helped clients achieve efficient inventory turnover and working capital management.

Organised sector players, integrating air and surface transportation, largely dominated express logistics market in India. However, in international markets, reduction and elimination of trade and tariff barriers, quicker customs clearance, the development of airport infrastructures that were equipped to handle large quantities of freight, larger aircraft with longer ranges, and the eagerness of a growing number of countries to participate more fully in the global economy combined to transform the economics in favour of non-courier express services. Large loads could be transported by air over vast distances at a reasonable cost in just two-three days.

In order to reduce cost and stick to the core competence many companies started out-sourcing the entire logistics and supply chain management services. The major factors leading to the growth of third-party logistics concept included reducing overall costs, need for expert logistics service providers, reduction in labour component of the manufacturing cost, lack of necessary skill sets to drive the changes particularly in logistics arena to face the competition, and value added services provided by the third-party logistics service providers. The fourth-party logistics service was still in the nascent stage and the concept had not taken its root in India. Fourth-party logistics service was knowledge oriented and required to integrate the best possible and cost effective logistics solution to the customer. With the integration of global market and a new trade regime, the concept offered new vistas of opportunities in the logistics arena.

Emerging Challenges

In the express industry, space was a perishable item. The entire business was carried out around space. The limitation with regard to availability of space was the foremost challenge faced by the industry. The express industry was not a standalone industry and the business was a direct function of overall trade environment. The industry thrived on economies of scale and time bound service, hence cultural and infrastructure changes were required among the regulatory authorities to deliver on its promises to the customers. Direct competition from unorganised sector players, and freight forwarders operating on lower profit margin, was another challenge faced by the industry. Strategic sales arrangements between companies were the need of the hour. The postal department operated in the bulk mail sector wherein speed was not a criterion. Postal department was not perceived as a major business threat to the express industry as it operated in a very different business environment, where focus was mostly on valued documents and commercial parcels.

The growth in express industry was dependent on the extent of business activity. Historically, this growth was dependent on the increase in domestic and international trade. However with the growth of service sector, IT industry, and the banking and financial sector, new value-added services emerged and spurred the growth of express industry as a whole. Though the organised sector players experienced a healthy growth of over 20%, the industry as a whole grew at a CAGR of around 11%. The international business was subject to bilateral trade. Improvement of India's trade relation with several countries under the aegis of the WTO agreement was expected to boost demand. Assuming an overall growth in economy of about 6.5%, growth in domestic business was expected to grow at a rate of about 20% and reach Rs 6,203 crore by the year 2007-08. This domestic growth was primarily fuelled by the banking and service sector, IT enabled services and the booming BPO industry. Liberalisation of the Indian economy and integration of international trade attributed to the sustained growth in Express industry. Growing customer requirements and scaling up of operations led to heavy investment by the express industry in infrastructure, hub set-up, and new technology.

Gati—At the Threshold of a Big Leap

Gati's vision of becoming the leader in Asia-Pacific and a globally preferred provider of India-centric supply chain services and solutions was the guiding force behind the company's future strategies. The strategy was to position the company to focus on information technology, process improvement, cost management, and establishment of state-of-the-art warehouses, providing better quality service to its customers.

Supply Chain Management (SCM), e-commerce, and third-party logistics (3PL) were rapidly emerging as new business areas with great potential. In order to stay focussed on their core competencies and reduce operational costs, manufacturing companies were outsourcing their logistics requirements to 3PL providers. Benchmarking against global standards, Gati aimed at achieving Six Sigma standards. It proactively re-engineered its warehousing/distribution infrastructure, and made its operations more mechanised and process-oriented, thereby reducing operational costs. Initiatives included mechatronic warehouses, palletised cargo movement, and multi-axle vehicles.

Mechatronic Warehouses The express business hinged around effective utilisation of space. Gati introduced state-of-the-art warehouses with multi-level stacking features that utilised the available cubic space. Equipped with modern material handling equipment (stackers, forklifts, cage lifts and CCTV), these warehouses offered several value-added services like on-line inventory control and monitoring, flexible hiring options, and billing/collection assistance (Business Line, 2005-b). The company planned to set up eight warehouses by June 2006 at Gurgaon, Ludhiana, Jaipur, Ahmedabad, and Pune (Project Monitor, 2005).

Palletised Cargo Movement By efficient unitisation (strapping several packages together in single units), Gati enhanced the stacking efficiency and in-transit safety of its consignments.

Multi-Axle Vehicles To optimise vehicle usage on high-density routes, Gati introduced high-capacity multi-axle vehicles fitted with a special racking system that took in a much higher volume of pallets.

Mr. Chugh's assistant brought to his notice a news feature on the express industry. While going through the article, Mr. Chugh realised that express cargo companies across the globe were focused on increasing international presence and widening their range of services. They were not merely satisfied with being the number one service providers, but also wanted to be the number one in terms of quality and delivering customer experience to become the first choice of customers worldwide. Benchmarking exercises to identify criteria by which customer selected logistics providers, and comparing them with existing processes to identify service gaps, was the need of the hour. Mr. Chugh was wondering whether Gati was positioned to take the leap forward to capitalise on the limitless opportunities, or was some radical rethinking required.

Exhibit 1—Products and Services Provided by Gati

Category	Salient Feature
Express – the surface cargo movement service through road & rail	Suitable for bulk cargo movement. The service covered 580 districts out of 590 districts in India and provided value added services such as door pick-up and door delivery, documentation assistance, assured date of delivery etc. It was the preferred distribution solution provider for varied industries like pharma, clothing, white goods, high value cargo etc.
Priority – the cargo movement through air at a better speed	Tie-up with Indian Airlines for providing cargo movement through air for faster movement of time sensitive consignments. The company had assured space in 34 designated air movement sectors and provided multimodal connectivity to enable faster transit for non-airport locations
Zipp courier service with extra features	Pre-paid envelopes and boxes. It provided choice of price and transit time options
Warehousing for complete warehousing solution for all warehousing needs	Modern storage systems and material handling equipment, offering operational efficiency. Gati had 6,00,000 sq.ft. of warehousing space spread across the country. Value added services- online inventory control and monitoring, flexible hiring options, billing & collection assistance etc.
International–for sending consignments to international locations	Covered more than 200 countries. The services offered included international courier and freight (inbound & outbound by air/sea)
Saver – for sending small packages at lower cost	Gati saver was meant to send samples, mementoes, literature and other non-commercial shipments and small packages up to 4 kgs.
Trucking Solutions–offered trucks to suit client's individual needs	This service was ideal for bulk cargo movement with customised containers as per client's convenience. The service provided online cargo tracking and one time locks for extra security.
Value Added Services	COD- Service collects Cash on Delivery FOD- Freight collected at the time of delivery DOD- Collecting Draft from customer and delivering it to consignor Documentation assistance-Information on forms/permit/legal requirements Inbound Rate Agreement – Billing on Delivery Proof of Delivery – Acknowledgement of delivery Holiday & Sunday Pickup & delivery Octroi clearance facility – Getting clearance on behalf of customers Safety Measures – Special Suraksha bags for high value cargo
Worldwide Saver–International locations on consolidated weight	The service was economical since rates were charged according to actual consolidated weight as against per piece basis. The service also provided free return of undelivered mail to sender.
Coast to Coast Service – for cargo movement through sea	The company had a fleet of two vessels - Gati-I and Gati-Suvidha, with DWT of 4811 & 6084 respectively. It provided inter-island-mainland connectivity. The service covered South-East and Middle-East countries

Exhibit 2—Segment Wise Revenues

Division	2004-05		2003-04	
	Rs (Lac)	%	Rs (Lac)	%
Express Distribution & Supply Chain	25,914	71.73	21,160	68.44
Coast-to-Coast Shipping	2,713	7.51	2,444	7.90
Fuel stations	7,292	20.18	7,011	22.68
Other Income	208	0.58	304	0.98
Total	36,127	100.00	30,919	100.00

	Trading	Logistics	Shipping
Sales	70.11	211.6	24.44
PBIT	0.74	16.91	1.93
Assets	1.79	105.02	22.42
Liabilities	0.26	72.12	12.76
Capital Employed	1.53	32.9	9.66
As On 31.03.2004			*Rs in Crore*

Exhibit 3—Brief Profile of the Board of Directors

Mr. K. L. Chugh (Chairman). Mechanical Engineer from Delhi University, previously Chairman of ITC.

Mr. Mahendra Agarwal (Managing Director). MBA from USA and associated with Transport and Express Cargo Industry for about 30 years.

Mr. Manoj Todi (Director–Infrastructure). MBA from Pittsburg University USA. He had experience in managing and planning surface transportation business.

Dr. Ram S. Tarneja doctorate from Cornell University. He had been Director, Graduate Department of Business Administration and Associate Professor of Management, Duquesne University, Pittsburgh, Pennsylvania. He served as Director of Personnel, Sahujain Group Kolkatta for 10 years. During 1970-1993, he served with Bennet, Coleman & Co. Ltd. and retired as MD in 1991 but remained associated as a Board Member.

Mr. R. K. Pitamber served in British Army commissioned as 2nd Lieutenant in the year 1954-56. He joined in Mahindra & Mahindra Limited as Management Trainee in 1958 and served as MD during 1990-97. He was President of Bombay Chamber of Commerce & Industry. He received Arjuna Award in 1967.

Mr.T.S. Rao, Retired Police Commissioner. He was advisor to ITC Agro-Tech Ltd. for 2 years.

Mr.S. Bhattacharya, B.E., M.B.A. (IIM, Ahmedabad) was the CMD of ITW Signode India for 14 years. He worked with Jumbo Group, Dubai with responsibilities on Board of Shaw Wallace, Falcon Tyres Ltd (MD) and India Tyre & Rubber Ltd. He was associated with Gati Ltd. as a Whole-time Director until 14.07.2003 and thereafter as a Non-Executive Director.

Exhibit 4—Organisation Chart of Gati Ltd.

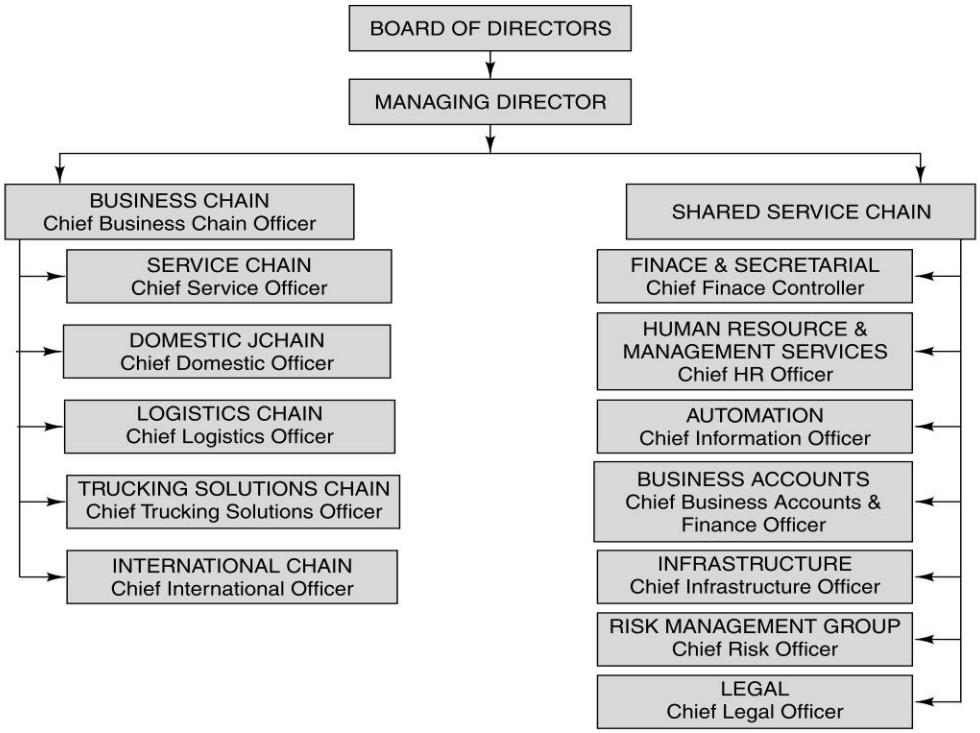


Exhibit 5—History of Growth

Year	
1996	Gati entered into strategic alliance with Indian Airlines, on Jan 1st, 1996. This association helped Gati take advantage of IA's air network, deliver the shipments on time and intact, and offer the customers a twin advantage of efficiency and cost-effectiveness.
1997	Gati introduced an innovative concept, 3rd Party Logistics solutions. The customers could outsource a readymade distribution channel. Keeping track of the changing needs of the customer and demands of the industry, Gati made the transition from 3PL to Complete Logistics and Supply Chain Management. Gati believed in tailor-made supply chain solutions that added value to customer's business and enhanced profitability.
1999	Gati developed the infrastructure to enter the International Cargo Segment.
1999	P D Agarwal Development Centre in Pune was set up exclusively for employees training & development with the objective to instil in the employees, in-depth knowledge of their work along with a sense of commitment and teamwork.
2003	Gati took up a pioneering initiative in further strengthening its internal communication process with the latest ORACLE based software, in 2003. *gati@web* was designed to simplify the internal processes and communication with a view to offer faster and better service to the customers.
2004	Gati introduced Mechanised Racking System in its automated warehouse (Express Distribution Centre) at Panvel, near Mumbai in July 2004.

Exhibit 6—Income Statement of Gati Ltd.

	2005	2004	2003	2002	2001	2000	1999	1998
Income	365.39	309.19	276.34	253.05	250.23	204.65	162.9	154.43
Net sales	359.19	306.15	275.14	252.55	249.52	204.17	162.45	153.9
Other income	2.08	3.04	1.2	0.5	0.71	0.48	0.45	0.53
Non-recurring income	4.12							
Expenditure	333.66	287.32	259.49	237.68	232.34	188.12	151.65	143.42
Consumption of raw materials	71.72	68.98	50.41	47.19	47.79	34.93		
Personnel cost	39.95	35	32.38	31.45	29.11	22.38		
Other expenses	221.99	183.34	176.7	159.04	155.44	130.81	151.65	
PBDIT	31.73	21.87	16.85	15.37	17.89	16.53	11.25	11.01
Interest	4.72	5.68	5.03	3.78	2.71	2.42	4.19	5.04
PBDT	27.01	16.19	11.82	11.59	15.18	14.11	7.06	5.97
Depreciation	7.3	7.81	5.37	4.75	4.09	3.36	2.91	3.37
PBT	19.71	8.38	6.45	6.84	11.09	10.75	4.15	2.6
Tax	5.22	2.83	2.35	2.54	3	1.7	0.4	0.05
Deferred tax	0.42	1.9	0.84	1.15				
PAT	14.49	5.55	4.1	4.3	8.09	9.05	3.75	2.55

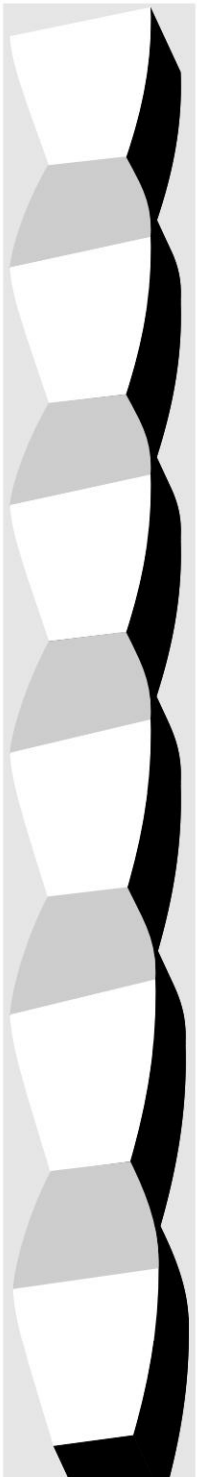
Rs in Crores

Exhibit 7—Vision & Core Values of Gati Ltd.

Vision
• Be the leader in Asia-Pacific and a globally preferred provider of India-centric supply chain services and solutions. • Delight the customers with quality services by setting new trends through innovation and technology. • Be the most preferred organisation for all its stakeholders. • Be a responsible corporate citizen with unwavering commitment to environmental protection and conservation.
Core Values
• To be ethical, integrated and transparent in our leadership. • To respect and treat with value the enquiries of others. • To be caring and abundant in giving support and services to others. • To balance the body and mind, and 'people serve people' in good spirit. • To approach life holistically and elegantly with sympathy. • In keeping with Indian culture and attitude, never say 'no' to a customer. • To be a responsible corporate citizen and remain committed to the cause of environmental protection and conservation.

REFERENCES

Business India, May 5, 1996-a, pg 103; Making a Packet
Business India, October 6, 1996-b, pg 93; Cargo Blues
Business India, March 8, 1998, pg 138; Dynamic Threesome:
Business India, Aug 5-18, 2002; pg 19, Gati Upgrades its Web Site
Business Line. Jul 7, 2002; pg 3, Gati Operates another Millennium Cargo Train
Business Line. May 16, 2003; pg 6, Gati Gets ISO Certification
Business Line. Jan 18, 2005-a; pg 7, Gati to Cash in on Incoming Global Biz
Business Line. Sep 30, 2005-b; pg 7, Gati To Invest Rs 50 Cr to Upgrade Warehouses
Business Line. Dec 4, 2005-c; pg 9, Gati: Take Delivery
Business Line. Dec 25, 2005-d; pg 3, Gati Opens Office In Hong Kong
Business Standard. Sep 19, 2002; pg 3, Gati Unveils it Initiatives
Economic Times. Nov 19, 2001; pg 10, Gati to Invest in Break-Bulk Feeder Vessels
Express Computers. Dec 13, 2004; pg 14, Gati Slashes Dial-Up Costs (through Citrix Metaframe Presentation Server)
Express Textiles. Dec 2, 2004; pg 25, Gati Spreads Wings to Singapore
Financial Express. Dec 27, 2004; pg 8, Gati Exploring Options to Raise Funds for Warehouses
Financial Express. Jan 31, 2006; FE-500 Industry-wise Performance - Couriers
Industry 2.0.0. Sep 30, 2003; pg 34, Gati Ltd.
Industry 2.0.0. Dec 31, 2004; pg 18, Gati Exploring Options to Raise Funds for Warehouses
Project Monitor. May 9, 2005; pg 12, Gati Capital Expenditure Plan to Set up Warehouses
Smart Inc. Nov, 2002; pg 30, Gati Ltd: Real-Time Tracker
Voice & Data. Mar, 2003; pg 60, Case Studies: Gati-Consignment Tracking
Annual Reports of Gati Ltd.
http://www.concorindia.com/company.asp Accessed on 27.06.06
http://www.concorindia.com/corebusiness.asp Accessed on 27.06.06
http://www.dtdc.biz/asp/0100text.asp?pageId=39&headId=71 Accessed on 27.06.06
http://www.gati.com/Vision.jsp Accessed on 27.06.06
http://www.gati.com/Milestones.jsp Accessed on 27.06.06
http://www.gati.com/About_Us.jsp Accessed on 27.06.06
http://www.gati.com/CSR_Initiatives.jsp Accessed on 27.06.06
http://www.eiciindia.org/ Accessed on 27.06.06
http://www.indiastat.com/india/ShowDataSec.asp?secid=208569&ptid=218 Accessed on 30.07.06



The McGraw-Hill Companies

Case 5

Tech Mahindra Limited

Tech Mahindra has emerged as one of the leading players in the Telecom Software space, due to a combination of technological capability, a committed workforce and strategic partnerships with industry leaders.

Anand Mahindra, Chairman

The organization has been on a continuous journey of transformation, addressing new players in the telecom ecosystem and expanding service lines.

Vineet Nayyar, Vice Chairman & MD

INTRODUCTION

Tech Mahindra, one of India's top software exporters providing services to the telecommunications industry, was planning to invest US$ 5 million for setting up a centre at Singapore. The business was expected to have a turnover of US$ 25 million within 18 months. Singapore was the centre of action with 95% of

all mobile handsets being manufactured in Asia. It was selected as a regional hub for the Asia expansion plan with the key intent of gaining a foothold into China, Hong Kong and Macau. The Singapore centre would focus on the international gaming business for developing mobile and interactive content. It would be an avenue to showcase the products and capabilities for new technologies such as Internet Protocol TV to clients in Asia. Singapore had potential to provide access to Mandarin and English-speaking work force that could be leveraged (http://www.techmahindra.com/PressReleases/ TCHMAHINDRA_ST1706060_Indian_IT_firm_to_build_regional_HQ_here.pdf accessed on 01.09.06).

TELECOMMUNICATIONS INDUSTRY

The telecommunications industry could be categorised into two segments - Telecommunications Service Providers (TSP) and Telecommunications Equipment Manufacturers (TEM).

Telecommunications Service Providers

Historically, the global telecommunications industry was based upon monopoly control at the national level. Telecommunications Service Providers (TSPs) were either state-owned and operated, or were government-regulated private entities. By the end of the 21st century, the state-owned TSPs were privatised and competition increased due to liberalisation. In addition to these changes that were largely in the area of fixed line services, the global rollout of mobile services transformed the industry. During 2000 to 2004, the wireless telecommunication service market grew at a CAGR of 23% and touched US$554.2 billion. During the same period, the global fixed line service grew at a CAGR of 2.7% to reach US$555.6 billion. Due to these changes, the priority of TSPs became the development of innovative value-added services to retain existing customers and attract new subscribers. These services required converged "next generation" networks to carry both voice and data. TSPs in both fixed and mobile markets had to invest in next generation technology to remain competitive. Fixed line TSPs were overhauling their networks to create convergent IP networks, which would enable them to provide services such as Voice over Internet Protocol (VoIP).

Mobile TSPs in advanced telecommunication markets were upgrading their networks to data intensive 3G wireless networks, to facilitate the provision of complex data services, such as online video, wireless instant messaging, and wireless conferencing services. These changes in the telecommunications service market led to the evolution from pure voice towards converged networks and a quadruple play of voice, video, data and content. The result was that TSPs revenue attributable to value-added services increased.

Telecommunications Equipment Manufacturers

TEMs provided the network equipment required by TSPs, including the switches used by fixed-line operators and the handsets used by the customers of mobile TSPs. During 2000 to 2002, TSPs reduced their spending on equipment as they had overbuilt the installed capacity in anticipation of growth in demand for telecommunication services, which did not materialise. After 2002, developments in the telecommunications services market fuelled growth in TEM market as it translated into increased demand for network equipment and the market grew at a CAGR of 1.7% to reach a size of US$ 299 billion. Europe contributed 31.6% of the TEM market size, followed by Asia Pacific, which contributed 26.6%. The growth was a result of higher demand for next generation infrastructure network. TEMs played a major role in the migration of TSPs to next generation networks. They designed mobile network infrastructures and soft switches used for VoIP technology, which helped TSPs reduce the costs associated with deploying next generation network applications. They also designed advanced mobile handsets, which served as platforms for advanced data and content services. The convergence and evolution of next generation networks created challenges for TEMs in the

form of maintaining and enhancing traditional equipment, while satisfying the demand for next generation equipment.

The migration to next generation networks represented an opportunity for IT services and software providers who focussed on the telecommunications industry. The main areas of TSP businesses in which IT services were required were operating support systems (OSS), and business support systems (BSS). OSS solutions covered the actual operation of the network, including switching, signalling and transmission and BSS covered non-network related functions such as billing and CRM. IT service providers were required to expand and upgrade their service to cater to the changing needs of TSPs to handle the complex business functions of converged networks and provide solutions across multiple network elements. The focus on next generation technology also led TSPs to rationalise and standardise their legacy networks in order to reduce the maintenance burden and free up capital expenditures for next generation networks that could be overlaid upon legacy networks. Outsourcing became the preferred route for the rationalisation process, as TSPs were challenged by the complexity of the legacy system and lacked the resources to manage them.

At the same time, competition in the telecommunications service industry was becoming a key driver of demand for IT services and software. As competition increased, fixed line revenues declined due to competition from mobile TSPs. In the mobile TSP space, competition driven by the increasing number of mobile TSPs and the emergence of mobile virtual network operators (MVNO), put pressure on revenues, though to a lesser extent than fixed line revenues. Pressure on margins caused TSPs to focus on reducing cost and IT became a critical element in determining cost efficiency of TSPs. Competition also caused decline in average revenue per user, which caused mobile TSPs to focus on providing customers with high-end value added data and content services which differentiated them from competitors and increased customer loyalty. TEMs expanded their margins by IT outsourcing and entering into strategic alliances to lower research and development costs through technology exchange and joint product development.

TECH MAHINDRA LIMITED

Tech Mahindra was incorporated on 24th October 1986 as a joint venture between Mahindra & Mahindra (57%) and British Telecom Limited (43%), Europe's second largest telecom service provider. Tech Mahindra Limited was the global leader in providing end-to-end IT services and solutions to the Telecommunications industry (Business Line, 2004). It was the eighth largest software exporter in India (http://www.techmahindra.com/content/about/comp_overview.shtml accessed on 01.09.2006). Tech Mahindra serviced premium telecom companies worldwide through a model that integrated delivery function and domain knowledge, for nearly two decades. They combined deep domain expertise in OSS and BSS, intellectual leadership, and a global workforce to provide services to leading players in the telecom ecosystem. The firm had an established presence in the European market and was growing rapidly in North America and Asia-Pacific with clients in over 40 countries including Singapore, Australia, Taiwan, Indonesia, and India. Starting with focus on TSPs, the firm expanded its coverage to TEMs and ISVs.

Services

Tech Mahindra provided a full range of basic IT services. These services involved the development or implementation of software systems and other types of IT solutions. Because of specialised telecommunications focus, the business was further classified into basic service lines and telecommunication focused services. The services provided by the firm could be categorised into three segments—IT Services, R&D Services and BPO.

IT Services

The IT services were categorised into the following service lines:

Application Development and Maintenance With design and development expertise in diverse platforms, usage of best-of-breed tools and techniques, combined with state-of-art software development facilities, Tech Mahindra delivered significant business benefits to its customers. Tech Mahindra offered scalable end-to-end application development and management solutions from requirement analysis to deployment and rollout. The mature yet flexible CMM Level 5 rated process framework instilled stringent quality measures in solutions, giving customers confidence in predictable, low-risk, and high-quality development and maintenance services. Mission critical systems of customers were handled with 0% downtime (http://www.techmahindra.com/content/services/IT_services/app_dev_mgmt.shtml accessed on 01.09.06).

Solution Integration Tech Mahindra's Solution Integration (**SI**) services enabled clients to identify, develop, and implement the most appropriate solutions to their change requirements. Growth in the SI services market was fuelled by the need for seamless business processes across a company's entire value chain of customers, partners, suppliers, and employees. Solution Integration was a critical area for companies due to various factors, such as multiple systems for various functions that required integration; systems & networks required integration post mergers & acquisitions; new product implementations required integration with the other existing systems; there was need to maximise existing investments while delivering new solutions and increased business value; and integrating with business partners, suppliers and customers to decrease inventory and reduce manual interactions.

Tech Mahindra offered a wide range of integration services to solve business and technical problems in a manner unique to each business. As a Solution Integrator, Tech Mahindra provided total project management, right from architecture design, integration, system and interface development to migration. They used reusable components that enabled faster project execution and improved product understanding which differentiated their SI services from competitors (http://www.techmahindra.com/content/services/IT_services/solution_integration.shtml accessed on 01.09.06).

Consulting Tech Mahindra offered a full range of consulting services for effective implementation of software solutions. Consultancy in strategy planning, assessment, procurement, re-engineering solutions, planning, audits, and best practices was provided. Tech Mahindra's consulting services emphasised their holistic approach to solving clients' business and IT problems, flexibility around the vendor/client relationship, their pricing and packaging, the ability to assist in corporate transformation and agility, as well as commitment to creativity and innovation. Strategic alliances gave a boost to market penetration, competitiveness in emerging markets, and competitive awareness of the latest technologies. The focus on alliances with multiple product companies helped in consulting customers on product evaluation too (http://www.techmahindra.com/content/services/IT_services/consulting.shtml accessed on 01.09.06).

Managed Services Tech Mahindra provided on-going operational services to manage an enabling infrastructure and application, thereby enabling customers to concentrate on their core businesses. These services were aimed at delivering value across the value chain so that IT operations and networks were streamlined and made more flexible (**Exhibit 2**). In the process, they had the benefit of experience that their own IT staff lacked and also transform capital expenditure into operating expenses. The existing infrastructure could thus be leveraged to develop new revenue and reduce overall operation overheads by 15-25%. Tech Mahindra introduced these services at a time when focussing on core competence was the key to survival and success. The turbulent economic environment, combined with increasing network complexity challenged traditional solutions and distracted organisations from their core businesses. Tech Mahindra captured this potential opportunity by providing outsourced services with high quality standard, accountability, and in a

cost-effective manner. Within the managed services, Tech Mahindra had specialised competence in Global Managed Services. They were equipped to bring the required synergy in various interfaces and interdependencies within solutions, operations, and support levels.

Managed Services offered a portfolio of services including Application Assurance services, Managed solutions and Remote Monitoring and Management of IT Infrastructure to the telecommunications sector as an end-to-end managed engagement. The company provided customer-focused long-term programmes bringing forth experience, capability, tools, and methodologies. These programmes envisaged various scenarios such as closure, development, feature enhancements etc, running it as a coherent service, and bringing in significant benefits to the end customers.

The Managed Service Offering comprised Service Order Management and Revenue Management. Service Order Management included Surveillance/Remote monitoring, infrastructure management, and Application support services. RMM of IT infrastructure was suited for companies who preferred to retain ownership of the hardware and infrastructure, located at their own premises, while passing all or partial management responsibility to take advantage of the vendor specific skill sets. Availing Remote Monitoring and Management was becoming prime option for companies wanting to concentrate on running their business. It was the right solution for enterprises who wanted to take maximum advantage of the benefits of managed services, better availability and performance, or freeing upon overtaxed technical staff when it came to round the clock coverage, at the same time keep their infrastructures and systems in their own facilities.

Application Support Services encompassed First Line Support (L1), Second Line Support (L2), and Third Line Support (L3) services. The various interfaces and the interdependencies within the support levels implied that only an end to end provider was best equipped to bring in the synergies required within the various levels of support. Application Support services provided centralised information and support management services to handle customers' internal queries and operational problems about related processes, policies, and systems.

Revenue Management provided a wide range of operations support services for a service provider in the area of customer care and billing, with a focus on revenue assurance (**Exhibit 3**). Revenue Management offered operations support for call collection and mediation, marketing back-office support in terms of managing products and bundles, and managing charging and discounting business rules. It also supported all real-time and batch business processes such as rating, discounting, exposure control, bill processing, bill presentment, accounts receivables, and collections. On a day-to-day engagement, Revenue Management meant managing activities such as operations, planning, scheduling and monitoring for automated jobs and online applications, execution of batch operations, audit, MIS and 'on-demand' report generation, exception reporting and correction, data analysis and correction, apart from providing support to the dependent user groups. In most of such engagements, the performance and efficiency measures were driven by Service Level Agreements (http://www.techmahindra.com/content/services /IT_services/ managed_services.shtml accessed on 01.09.06).

The relative advantage was from their two decades of application outsourcing experience; flexible methodologies in tune with customer processes; world-leading track record for telecom industry; and continuous efficiency improvement (http://www.techmahindra.com/content/services/IT_ services/solution_ integration.shtml accessed on 01.09.06).

R&D Services The R&D Services provided solutions for Equipment Manufacturers. The traditional business model for equipment vendors had changed and the telecommunications market was drawn against a new business landscape. It became imperative for equipment manufacturers to manage efficiently this shift of interests to remain competitive. This entailed a trusted partner, with the best-fit of technical skills and business experience of overcoming the new telecom challenges.

Tech Mahindra provided technology solutions to leading Telecom Equipment Manufacturers (TEMs) worldwide. Its product engineering services offered a wide spectrum of wireless, wire line, and

convergence technology areas defining the migration to next generation networks. It offered solutions for technology transformation for extending product lifecycle, new technology adoption, and addressing new markets; product lifecycle management for development (Software, Embedded & Hardware), maintenance, customer support (Tier-1 to Tier-3), product sustenance and product ownership; testing including life cycle testing; interoperability & compliance, network integration and test automation; NMS/EMS instrumentation; modelling and simulation; post deployment support/training; and IT infrastructure services.

With a world-leading track record of successful deliveries on large projects involving the core telecom technology domains of switching, signalling, access, optical transmission, and Intelligent Networks, Tech Mahindra's expertise yielded a multitude of outstanding achievements (http://www.techmahindra.com/content/services/IT_services/product_engg.shtml accessed on 01.09.06):

- Re-architecting PSTN Class 4/5 Switch as NG soft switch
- Architecture, design and implementation of an IP based Signalling Server
- Feature enhancements and sustenance of a 2G+ CDMA MSC
- Feature enhancements for a Wideband Wireless BTS System
- Design and development of an NMS for a local exchange and Class 4 soft switch
- Development and Maintenance of AIN applications
- S/w , H/w feature development and sustenance of a Digital Loop Carrier (DLC)
- Sustenance & Development of a Multi Service Access Node(MSAN) with triple play features
- Feature enhancement and support of an NG Optical Add Drop Multiplexer
- Development and integration of VOIP Stacks in multiple equipment vendor products.

BPO Services Extending from IT services, Tech Mahindra moved forward to provide an e2e package for its telecom clients. This included providing them with world class outsourcing opportunities for their processes as well. Global leaders were looking at cost advantages and streamlining of the processes due to increasing competition. Offshore outsourcing became part of overall business strategy. Tech Mahindra took the solution delivery route rather than the service delivery route. They combined technology, process knowledge, domain strength, and consulting skills to provide the right outsourcing advantage to clients. The Tech Mahindra parentage gave the BPO offering the required strength in technology and domain knowledge. The focus however, was towards technical support, ranging from network planning and order management to fault tracking and billing. Tech Mahindra provided full lifecycle services for interconnect billing including invoice production, tariff updates, and reject queue management to service providers in India (http://www.techmahindra.com/content/services/BPO/bpo.shtml accessed on 01.09.06).

Strategy

The strategy of the company was to maintain and enhance their position as a leading provider of IT services to the telecommunications industry by offering a portfolio of IT services. The strategy rested on six pillars - growth from existing clients; diversification into new geographies; capability augmentation through acquisitions and joint ventures; strengthening the brand in Indian and global markets; increasing productivity and efficiency; and maintaining high quality employees.

Tech Mahindra enhanced business of existing clients by expanding the breadth of services offered and addressing new areas within the clients' organisations. They focused on high end, high value-added services such as managed platforms, managed services and consulting, which were long term in nature. Their success with British Telecom and AT&T spurred them to replicate this success with other clients.

Historically, the firm had been dependent on BT as a client and Europe as a geographic area for most of the revenues (Business India, 2006). In 2004, 88% of the revenues were attributable to Europe and 80% to BT. This dependence was gradually declining as a result of their client acquisition and geographic expansion. By 2006, 77% of the revenues were attributable to Europe and 69% to BT. They built relationships with well-known global software vendors to expand their presence in Europe, North America, and Asia-Pacific Region, which represented a significant growth opportunity. They leveraged existing accounts to enter new countries. Apart from BT, O_2 and Vodafone were the major clients in Europe. The relationship with O_2 in UK assisted to win engagement with O_2 in Germany. Relationship with independent software vendors (ISVs) was also a key to expansion to continental Europe. Approaching clients in collaboration with widely recognised ISVs complemented their marketing effort. Cooperation with ISVs as systems integration partners brought them closer to the ultimate client. This helped them enter new markets such as Taiwan.

Till November 2005, Tech Mahindra's growth had been entirely organic. In November 2005, they acquired Axes, which enabled expansion in the Telecommunications Equipments Manufacturers (TEM) segment by enhancing the client relationship with Alcatel and Motorola. The company was engaged in the development and marketing of hardware and software system packages providing research and development, product engineering, and life cycle support to leading telecom equipment manufacturers. The focus of Axes was on product engineering and lifestyle management relating to telecommunications equipment used in transmission, switching and access, in both legacy and next generation networks. Axes operated by taking ownership of product lines from its clients and provided support across the product lifecycle including development, maintenance, and customer support. This enabled Tech Mahindra to understand network equipments and platforms used by TSP clients.

In August 2006, Tech Mahindra and Motorola formed a joint venture, CanvasM, for the design and delivery of content services and customised application solutions. The portfolio of CanvasM included messaging, location-based services, entertainment, e-commerce, and enterprise productivity applications. Tech Mahindra contributed its experience in applications development and integration capabilities, while Motorola contributed its applications portfolio, applications and service delivery platform, and mobile technology expertise (Express Computers, 2006).

Operations

The services of Tech Mahindra were focused on TSPs, TEMs, and ISVs. 90% of the revenue was from the TSP clients. TSP clients included both fixed line and mobile operators who offered voice and data services through their networks. Tech Mahindra provided solutions to TSP clients across the entire range of their business processes, systems, and network integration activities ranging from consulting on business and operating process to the development of their BSS and OSS systems, and integrating those systems with the underlying network technologies. The development of BSS and OSS systems involved the development and integration of platforms providing customer relationship management, billing, network planning, rollout, and network management functionality, based on both customised solutions and COTS products.

Tech Mahindra offered product engineering and product lifecycle management solutions to manufacturers of telecommunications equipment, ranging from switches used in the network of fixed line operators to handsets used by mobile subscribers. They had access to clients' intellectual property rights and Tech Mahindra employees contributed to several patents owned by clients. Solutions offered to TEM clients were centred around the core goal of developing telecommunications equipment tailored to the needs of TSPs and the market in which they operated. Tech Mahindra's familiarity with the IT needs of TSPs enabled them to provide valuable input into the design and manufacturing of equipment by TEM clients. This also made them a preferred partner for solutions integration and rollout of network technologies in live environments.

ISV clients were providers of *Commercial Off The Shelf* (**COTS**) packaged solutions. Packaged solutions were engineered to an industry wide standard such that they could be used by any company in that industry, as opposed to proprietary software, which was customised to the needs of specific clients. COTS provided the advantage of faster time-to-market and ease of customisation and ongoing support. The TSPs perceived COTS solutions as critical components in the development of next generation systems. An integrated solution for TSPs involved a variety of COTS solutions, which were customised and integrated with a number of home-grown systems. Tech Mahindra provided engineering and solution integration services to ISV clients. They also developed products for clients who were software developers, to be used in packaged solutions for ultimate clients.

Infrastructure

Over 11,000 professionals provided service to clients across various telecom segments, from multiple offshore development centres across 7 cities in India and UK and 13 sales offices across Americas, Europe, and Asia-Pacific. Through a rich Telecom heritage, Tech Mahindra built long-term sustainable relationships with telecom customers through delivery of IT services that helped them achieve significant ROI and the greatest competitive advantage in the telecom marketplace. In order to deliver superior solutions to clients and achieve greater operational efficiency, the firm had a decentralised delivery model comprising 12 independent delivery units (IDU) supported by competency and solution units (CSU).

Each IDU had up to 1,000 professionals focusing on specific areas of delivery. The IDUs were loosely broken down along client lines, but for larger clients such as BT, they had several IDUs, which were further broken down by the type of services offered. This helped them in placing greater focus on the client by providing each client with a single point of contact. Conversely, for smaller clients in regions which they had recently entered, an IDU covered several small clients from that specific region. IDUs were empowered to make their own decisions regarding recruitment, compensation, and promotion. Each IDU ensured seamless delivery for a particular client, identified opportunities for marketing new offerings to clients, and ensuring quality and client satisfaction. Tech Mahindra added value to client businesses through well-established methodologies, tools and techniques backed by its stringent quality processes (http://www.techmahindra.com/content/about/comp_overview.shtml accessed on 01.09.2006). They also had their own targets for utilisation and other metrics, which were internally monitored.

Although IDUs operated separately, valuable knowledge was shared across them. IT professionals were rotated among the various IDUs to ensure that knowledge gained from serving a particular client or sector was disseminated throughout the organisation. The rotation also ensured that utilisation rates remained high. The IDUs operated from nine delivery centres located across India, where all the offshore resources were stationed. Approximately 65% of the revenue of the firm was attributable to offshore work. Apart from these, there was a delivery centre in Milton Keynes, UK. Some delivery was also carried out in client offices spread across North America, Europe, Middle East, and Asia Pacific. In addition, some services were delivered by IT professionals on-site, particularly during the initial stages of an engagement during the knowledge transfer phase, after which the firm transitioned to delivering services from India. For mature engagements, where the firm was familiar with the client needs, a significant proportion of the work was performed in India.

To enable delivery of services through the offshore model, the firm had extensive telecommunication linkages between client sites and delivery centres. They had a network architecture that provided connectivity between development centres and clients via the internet. This network provided seamless access and used advanced routing protocols. Though the firm relied on third party ISPs and TSPs to provide these services, they used multiple service providers using multiple routes and media to attain high levels of redundancy, availability, and performance. Dedicated teams monitored network operations 24x7.

The delivery model was supported by MASTER methodology for delivery of solutions to clients. This methodology involved **a**nalysing of a business need for the client; developing an appropriate **s**olution to address the need; **t**ransitioning or implementing that solution by setting up a delivery mechanism for the services; and **e**xecuting the solution to deliver ongoing benefits to the client. The process enabled them to build a **r**elationship with clients based on continuous improvement.

A key aspect of the delivery model which provided competitive advantage was the alignment of the IDU with CSUs. CSUs provided domain knowledge on each of the offerings, which helped in delivery of solutions to clients. The firm developed R&D capabilities in key technological areas including OSS, BSS, NGN, security, embedded solutions, network design and engineering, and mobility solutions. For each of these technological areas, there was a CSU which was responsible for R&D, marketing support, and provision of software solutions to clients. CSUs identified trends and developments in technology which changed the way TSPs operated. CSUs were staffed with experienced consultants and architects from the telecommunications industry. These units kept abreast of developments in the industry and developed solutions, frameworks and components to stay ahead of competition. R&D capabilities were further enhanced through the launch of a "Next Generation Telecom Solutions Lab" in cooperation with Intel. The lab showcased next generation telecommunications applications such as IP Multimedia subsystem (IMS) based Video on Demand (VoD) with real time charging, IP conferencing, and Universal Personal Number hosted on Intel Carrier Grade Servers. This lab was able to ensure the efficient delivery of integrated platform solutions for the telecommunications marketplace.

Sales and Marketing

The sales team identified sales opportunities to existing and potential clients and was spread across the world. The global sales network comprised 16 offices in 11 countries. The sales and marketing strategy was premised upon both geographic segments and client engagement organisations for large mature relationships (**Exhibit 6**). For large mature relationships such as BT, the firm had a client partner organisation which was aligned to the organisation structure of the client. The client partners, CSUs, and senior delivery executives worked together to identify opportunities for the marketing of new products of clients. The marketing strategy was geographically based for smaller accounts and new relationships. The sales force of these accounts, supported by geography specific sales support organisations, CSUs and delivery experts, focused on identifying marketing opportunities.

The marketing strategy involved forming relationship with packaged software vendors and equipment manufacturers to jointly pursue solution integration opportunities with the TSP clients. A Global Alliance and Partnership team was responsible for managing the partnerships. The team was aligned with the CSUs. Cooperation with partners enabled them to keep abreast of market trends in order to market high quality solutions to clients. To expand geographically, the firm partnered with ISVs to jointly market the services.

Subsidiaries

The company had nine subsidiaries.

Tech Mahindra (Americas) Inc. USA—**TMA** was incorporated on 29th November 1993 at New Jersey as a wholly owned subsidiary for acting as a service provider for sales, marketing, onsite software development, and related services.

Tech Mahindra GmbH Germany—**TMG** was incorporated on 18th July 2001 at Düsseldorf as a wholly owned subsidiary for acting as a service provider for sales, marketing, onsite software development, and related services.

Tech Mahindra (Singapore) Pte. Limited —**TMS** was incorporated on 30th April 2002 at Gateway Tower Singapore as a wholly owned subsidiary for acting as a service provider for sales, marketing, onsite software development, and related services.

Tech Mahindra (Thailand) Limited—**TMTL** was incorporated on 26th August 2005 at Bangkok as a representative for acting as a service provider for sales, marketing, onsite software development, and related services.

PT Tech Mahindra Indonesia—**TMI** was incorporated on 24th March 2006 at Jakarta as a representative for acting as a service provider for sales, marketing, onsite software development, and related services.

Tech Mahindra (R&D Services) Limited - Axes Technologies (India) Private Limited was incorporated on 30th August 1995. **TMRD** was acquired from Trans Global Technologies Inc. USA and Mr. Paul Pandian pursuant to a share purchase agreement on 15th November 2005. After acquisition, it became a public company with its registered office at Bangalore with effect from 17th February 2006.

Tech Mahindra (R&D Services) INC USA—**TMRDI**, a 100% owned subsidiary of **TMRD** was incorporated at Delaware on 10th May 2001. The company was engaged in the business of providing staffing services to **TMRD** as well as marketing, managerial, and administrative functions to service TMRD's customers in USA.

Tech Mahindra (R&D Services) Pte Limited—**TMRD Singapore** was incorporated at Singapore on 8th March 2000. The company was engaged in developing and implementing state of the art software and telecom products. TMRD and TMRDI held 60% and 40% of the equity, respectively.

Tech Mahindra Foundation was incorporated at Singapore on 22nd March 2006 as a wholly owned subsidiary of Tech Mahindra for charitable activities.

On 17th October 2006, the Frost & Sullivan Market Penetration Leadership Award was presented to Tech Mahindra for garnering the highest revenue and market share in the industry, as the company displayed excellent performance and penetration in telecom verticals. Tech Mahindra also received the Market Leadership Award for the Offshore Security Consulting for Next Generation Networks and Applications for 2006, emerging as the leading provider of security consulting services for the next generation network space in leading telecom companies across the world (http://www.techmahindra.com/content/pressroom/PressReleases.jsp? id=312390& year=2006 accessed on 02.11.2006). A visibly elated Tech Mahindra team expressed their views:

"The New Generation Networks (NGN) can offer a large number of services globally across multiple networks. The customer experience of new services needs to be rich and global, with boundaries, simple to use and deploy. This presents unprecedented security challenges in terms of fraud, attacks and leakage. Tech Mahindra security portfolio is aimed to build security up front within the NGN architecture as against bolting it down as an after thought. Investments in creation of this expertise has given Tech Mahindra the leadership position in this emerging area".

Dr. Prem Chand, Vice-President, Security Consulting & CIO, Tech Mahindra

"We have a very comprehensive portfolio of solutions to help the telecom industry meet the challenges of a highly competitive environment –and we continue to see rapid growth across the entire portfolio. The Frost & Sullivan Awards are a clear re-iteration of our leadership in this space, which we look to further consolidate in coming times"

Rajesh Chandiramani, Head – Marketing, Tech Mahindra

"Tech Mahindra has continually demonstrated solutions for monitoring market changes and for implementing superior market strategies. For example, it has undertaken initiatives to deal with service specific security like IPTV, which is one of the killer applications of NGN Telecom. By utilizing such strategies for success, the company has established itself as the market share leader in the security consulting space for next generation networks and applications"

Aditya Sapru, Partner & M.D, South Asia and Middle East, Frost & Sullivan

While much jubilation was on, Anand Mahindra was reflecting on the past achievements of the company—on how it had emerged as one of the leading players in the Telecom Software space, due to a combination of technological capability, a committed workforce, and strategic partnerships with industry leaders - and was thinking of how to build designs for the new generation.

Exhibit 1—Tech Mahindra–Summarised Income Statement

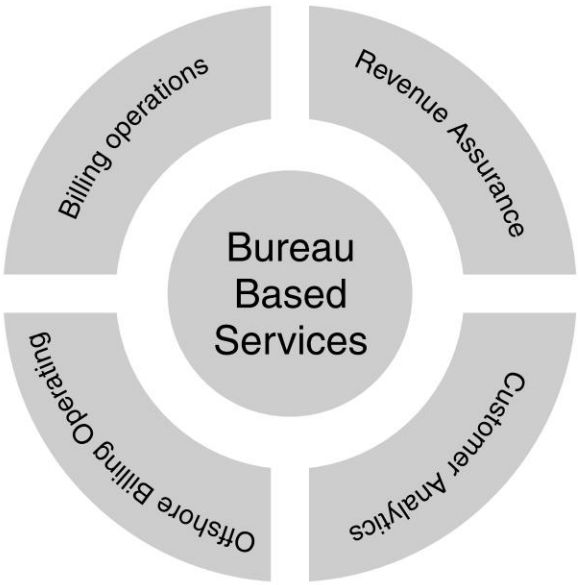
	2006	2005	2003	2002	2001	2000	1999	1998	1997
Income	1,276.7	959.34	623.04	527.44	391.33	240.32	175.18	101.37	62.79
Net sales	1,242.7	945.64	623.04	527.44	391.33	240.32	175.18	101.37	62.79
Other income	34.01	8.55							
Non-recurring income		5.15							
Expenditure	974.8	810.62	395.18	322.4	263.75	159.06	105.34	67.96	43.47
PBDIT	301.88	148.72	227.86	205.04	127.58	81.26	69.84	33.41	19.32
Interest				19.51					
PBDT	301.88	148.72	227.86	185.53	127.58	81.26	69.84	33.41	19.32
Depreciation	39.75	32.11	22.53	24.65	8.88	6.2	3.89	2.85	1.33
PBT	262.13	116.61	205.33	160.88	118.7	75.06	65.95	30.56	17.99
Tax	26.76	14.22	33.79	34.6	22.11	12.03	12.21	2.02	5.87
Deferred tax	2.45								
PAT	235.37	102.39	171.54	126.28	96.59	63.03	53.74	28.54	12.12

Rs (Crore)

Exhibit 2—Tech Mahindra Methodology for Managed Services

Strategise – understand Business Drivers and set-up long-term and short-term goals
Evaluate – Business Processes set-up, Best Practices Set-up, People plan to realise strategy
Design – Architecture - Hardware / Applications / Network/ Security; Vendor identification and qualification
Execute – Set-up, People, Processes, Technology, Timelines, Dependencies
Operate – Manage and operate the Infrastructure, Monitor and review for continuous improvement.

Exhibit 3—Revenue Management Services



- Remote Billing operations outsourcing
- Managing and operating Billing Service Bureaus
- Type of billing operations - retail, wholesale, interconnect. Billing Operations is related to mediation/ call collection, CRM/Customer Care, order management, products and packages, call rating, bill cycle processing, bill presentment, accounts receivable processing, and collections processing
- Revenue Assurance / Fraud Management

Exhibit 4—Tech Mahindra's Technology Expertise

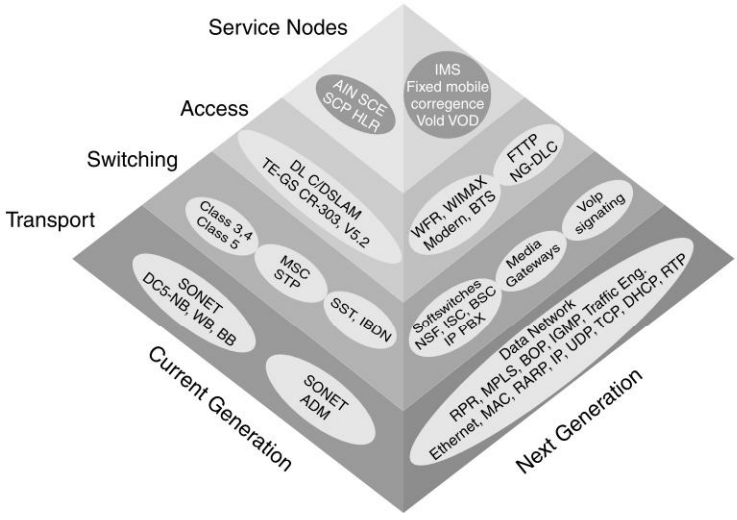


Exhibit 5—Organisation Structure

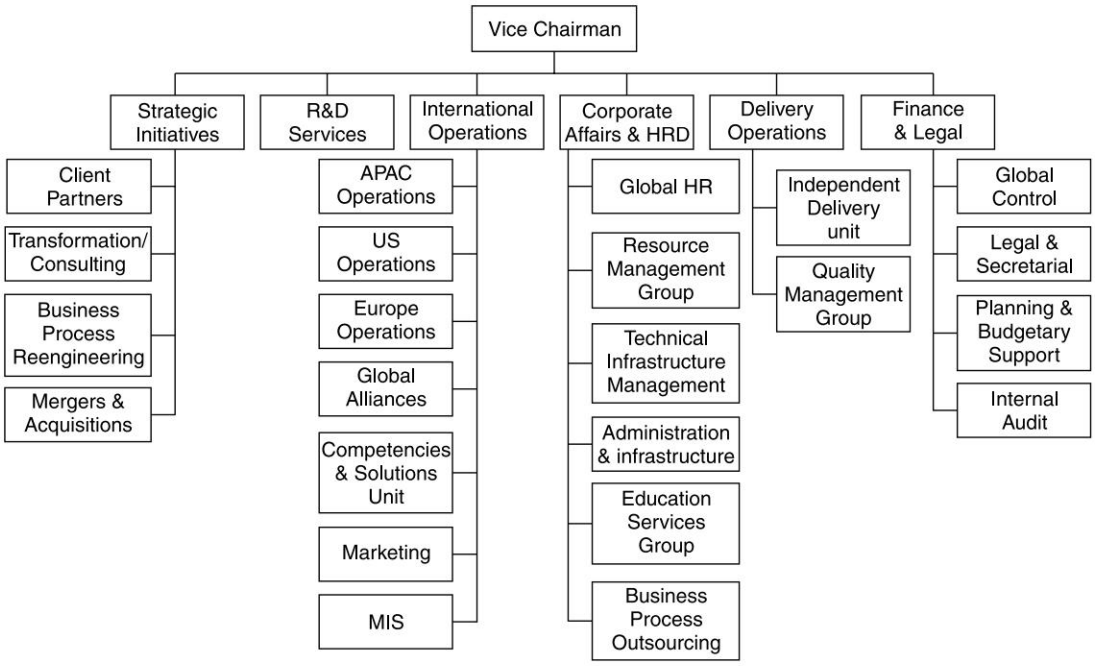


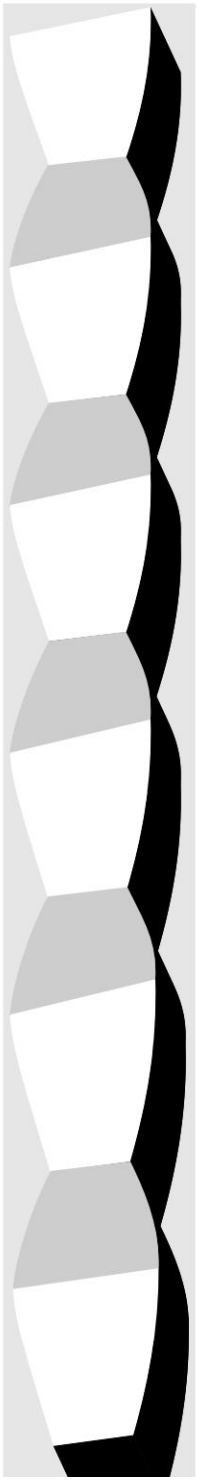
Exhibit 6—Tech Mahindra's Client Concentration

Clients	**% of Revenue Contribution**	
	2005	**2006**
Top clients	80	68
Top 5 clients	86	87
Top 10 clients	90	92

Revenue	**No. of Clients**	
	2005	**2006**
> US$ 1 million	10	14
> US$ 5 million	2	6
> US$ 10 million	1	2

REFERENCES

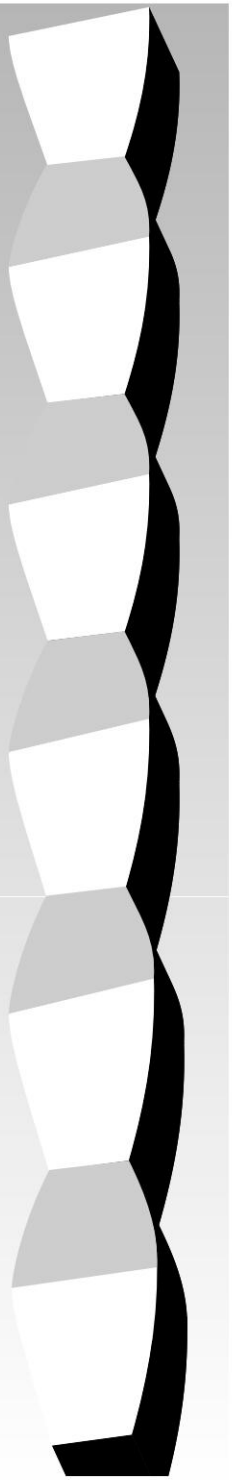
Annual reports of Tech Mahindra
Business India. Aug 13, 2006; pg 62; Shoring Up
Business Line, Feb 17, 2004 pg 4; MBT is Now Tech Mahindra
Express Computers. Aug 14, 2006; pg 11; Tech Mahindra and Motorola in Joint Venture
http://www.techmahindra.com/content/about/comp_overview.shtml Accessed on 01.09.2006
http://www.techmahindra.com/content/client_success/BI_DATAWAREHOUSING.pdf accessed on 25.10.06
http://www.techmahindra.com/content/client_success/DRM_Case_Study.pdf Accessed on 25.10.06
http://www.techmahindra.com/content/client_success/Mobility_SMS.pdf Accessed on 25.10.06
http://www.techmahindra.com/content/client_success/NGN.pdf accessed on 25.10.06
http://www.techmahindra.com/content/client_success/Security_Manged_service_for_access_mgt.pdf accessed on 25.10.06
http://www.techmahindra.com/content/client_success/Tech_Mahindra_BPM.pdf Accessed on 25.10.06
http://www.techmahindra.com/content/client_success/Tech_Mahindra_Interconnect_Billing_Ops.pdf Accessed on 25.10.06
http://www.techmahindra.com/content/client_success/Tech_Mahindra_Performance_Management.pdf Accessed on 25.10.06
http://www.techmahindra.com/content/client_success/Tech_Mahindra_OSS_Provisioning.pdf accessed on 25.10.06
http://www.techmahindra.com/content/client_success/Tech_Mahindra_Test_Execution.pdf Accessed on 25.10.06
http://www.techmahindra.com/content/services/BPO/bpo.shtml Accessed on 01.09.06
http://www.techmahindra.com/content/services/IT_services/app_dev_mgmt.shtml Accessed on 01.09.06
http://www.techmahindra.com/content/services/IT_services/consulting.shtml Accessed on 01.09.06
http://www.techmahindra.com/content/services/IT_services/managed_services.shtml Accessed on 01.09.06
http://www.techmahindra.com/content/services/IT_services/product_engg.shtml Accessed on 01.09.06
http://www.techmahindra.com/content/services/IT_services/solution_integration.shtml Accessed on 01.09.06
http://www.techmahindra.com/content/whitepapers/BPM_Understanding%20BPM.pdf Accessed on 25.10.06
http://www.techmahindra.com/PressReleases/TCHMAHINDRA_ST1706060_Indian_IT_firm_to_build _regional_HQ_here.pdf Accessed on 01.09.06



The McGraw-Hill Companies

Case 6

Cyber Media—
The Leadership Quest



The globalization track that we have taken is something that is definitely going to take Cyber Media places. We are the first media group in India to launch a truly global publication … the company is essentially entering into specific areas which are high growth areas, …we definitely would ensure that there is a good return for the investor.

Pradeep Gupta
26th October 2005

Singapore was emerging as Asia's global hub for biomedical sciences with $1.7 billion worth of investment committed by the Singapore government. Agency for Science, Technology and Research (A*STAR) and Economic Development Board Biomedical Sciences Group (EDB BMSG) were working together to develop and promote Singapore's capabilities. Apart from funds channelled towards investments, Singapore's National Science and Technology Board allocated US$ 852 million for R&D in the biotech sector. A further US$ 1.14 billion was set aside to attract leading research organisations in Singapore to invest in local and foreign biotech start-ups. In terms of its biomedical sciences

manufacturing output, Singapore set itself a target of $7 billion by 2005. Knowledge-driven and innovation-based industries, particularly the biomedical sciences, were seen as key to sustaining the country's future economic growth. Government investments and incentives, a skilled workforce, robust intellectual property laws, an ambitious regulatory system, world-class public sector research, state-of-the-art communication systems, and efficient immigration procedures were helping to attract multinational giants to set up R&D centres in Singapore. These elements were also fostering a variety of local biotech start-ups.

CyberMedia planned to address this growing opportunity through the launch of its existing publication BioSpectrum at Singapore (Insight Media; 2004-e). In early 2000 Bio-Technology industry was at a very nascent stage of evolution. Cyber Media (India) Ltd. brought out BioSpectrum magazine in India in 2003, which dealt with the Biotechnology industry (Agency FAQs; 2004). The magazine enjoyed first-mover status and rapidly gained market share. In May 2005, the company proposed to publish the magazine at Singapore as regulatory environment in Singapore required a publishing company to undertake the project with the approval of the Media Development Authority of Singapore. They hoped to launch the magazine by early 2006.

HISTORY

Established in 1982 by Pradeep Gupta, a first generation entrepreneur, **CyberMedia** was South Asia's largest specialty media house, with **9 publications** in the infotech, telecom, consumer electronics, and biotech areas; and an end-to-end media value chain including the internet, events, and television. CMI attributed its success to its strategy of focusing on high growth areas like IT, communications, and biotech (Data Quest; 2004). By the end of 2005, Cyber Media India Ltd. ranked 710th in Business Today's 2005 listing of India's most valuable private sector companies based on market capitalisation (Business Today; 2005). The group's Media business included the print titles **Dataquest, PCQuest, Voice&Data, BioSpectrum, Living Digital, DQ Channels, and DQ Week** (Chennai, Delhi, and Mumbai). www.ciol.com was India's largest technology portal and included online editions of all CyberMedia titles. CyberMedia Events conducted events including Bangalore IT.com, Nasscom, IT Kerala, and Hi-Tech Pune. CyberMedia TV developed knowledge-oriented general interest programmes on mass channels. The group's media services included market research, content outsourcing, multimedia, gaming, and media education (Dalal Street Investment Journal; 2005). Media Services included IDC India, the leading IT and telecom research company in the region; CyberMedia Services (content and publishing BPO services); CyberMedia Research, which focused on the media and entertainment sectors; Cyber MultiMedia, the multimedia and gaming development and distribution company; and the School of Convergence, for content creators and media managers.

CyberMedia's publications reached 12 lac readers and 7 lac online communities. Its publications were considered leaders in their respective categories and enjoyed strong brand equity in the Indian Information, Communication & Technology industry. Cyber Media gave awards to key industry performers and also ranked companies annually e.g. DQ Man of the Year, DQ Top 20, PCQuest Users' Choice, and Voice & Data Man of the Year, Biotech etc. These awards were benchmarks for corporates in the IT, telecom, and technology areas. CyberMedia started off in IT, expanded into ICT area and then in the "knowledge" domain. Due to this focus, CyberMedia withstood the downturn in the ICT industry in the years 2001 and 2002. This was due to the distinct segmentation of each of the publications and clear focus on the target audience due to which it could maintain readership and advertising rates for publications. With diversification and strong industry position in publications, research, events, multimedia, TV, and new initiatives in education and BPO publishing, CyberMedia developed relationships with companies, both Indian and multinationals, in the IT industry. These relationships were leveraged to address various client needs including advertising, event participation and recruitment and became a one-stop content and service entity for the entire Indian IT, telecom,

biotechnology, and consumer electronics industries. The company's value system rested on integrity, innovation, excellence, and influential and caring meritocracy (**Exhibit 1**).

PRODUCTS AND SERVICES

The vision of the company was to expand globally in the knowledge domain through quality media products and services. CyberMedia served both as an operating company for the publishing business as well as a holding company for investments in other media businesses (**Exhibit 2**).

Media

Publishing Industry CyberMedia was among the top magazine publishing companies in India, particularly in the IT, Telecom, and technology segments. The aim was to create a blend of global and Indian content to give Indian professionals operating worldwide, the insight, information, and inspiration to make smarter decisions about business, finance, and careers and keeping them current on a variety of issues and events pertaining to financial trends and projections, and technology and its applications. There were 9 publications catering to the segment. Dataquest was the first to be launched, followed by PCQuest, Voice&Data, Living Digital, DQ Channels India, The DQ Week, and BioSpectrum.

DataQuest published fortnightly, was launched in 1982, and targeted the information technology segment aimed at decision makers—including top business heads, consultants and channel partners—across the spectrum of the technology industry ranging from the small, medium, and large enterprises to government and public sector units. The magazine was positioned in the "Business of Infotech" area providing information for both buyers and sellers. Corporate clients included Hewlett Packard, Oracle, Samsung, Seagate and IBM among others. DataQuest had a readership of 157,000, and was the No.1 publication in this category. The DQ Top 20 issues, based on a nationwide survey across more than 1,500 IT companies in India, were a reference source for everyone in the IT industry.

Voi*ce&Data*, a monthly publication launched in 1994, targeted the telecom and data communication industries and its business customers, addressing primarily the telecom and networking segments. It was aimed at senior technical, business, and marketing managers and purchase decision-makers across telecom service providers, equipment vendors, corporate users, regulatory authorities, and R&D institutes. Its V&D 100 issue was a reference source for communication professionals. The V&D Gold Book was a one-stop-source for telecom products and services for the enterprise. Its Top View seminars and panel discussions resulted in Operation Bandwidth and the Wi-Fi initiative. Main competitors included Network Magazine, Communications Today and Network Computing.

DQ Channels India, a fortnightly publication, was positioned for the IT traders and advisory segment to provide business information, market news and perspectives directly relevant to channels. It took up issues for the trade such as octroi, excise, warranty and vendor support. Channels included companies that were marketing and distribution partners for OEMs and product manufacturers. DQ Channels had a readership base of approximately 56,000 among IT distributors, dealers, resellers, systems and network integrators, software specialists and OEMs.

BioSpectrum, the biotech industry took shape in 1999 and witnessed the emergence of over 100 promising start-ups, launched by leading scientists from top-rated research centres. Almost all the major pharma companies started biotech divisions. The industry was concentrated in six bio-clusters in Bangalore, Hyderabad, Chennai, Mumbai-Pune, Ahmedabad-Vadodara, and Delhi-Chandigarh, employing over 6,000 biotechnologists. The industry was expected to grow at a CAGR of 22% to reach Rs 89 billion market size by 2008-09. India was

among the 18 top global biotech clusters and the 2nd largest supplier of essential vaccines in the world, after the US. With a large and diverse disease population, India was likely to become a global hub for clinical trials of the new vaccines. The market for clinical services was about $ 103 billion. India was also seen as a major centre for contract manufacturing. The bio-agri sector was the 2nd largest with the approval of first BT cotton variety in March 2002. A dozen seed companies planned to introduce BT cottonseeds in 2004. Bioinformatics companies were the other promising segment.

The acquisition of BioSpectrum from its publisher, IQ TechMedia Private Limited in October 2002 was part of a strategic move of CyberMedia to expand its presence into biotechnology and bioinformatics. The magazine was re-launched in February 2003 and focused on technological breakthroughs, policy issues, regulatory frameworks, people, products, and services including biotechnology, genome research, bio-informatics, microbiology, agriculture biotechnology, healthcare, topical issues of Intellectual Property Rights regime, and bio-environment issues. The Group retained Bangalore as the base for the magazine as that city had emerged as a strong biotechnology hub in India. The magazine leveraged the extensive distribution network of CyberMedia. BioSpectrum conducted the first Biotech industry survey in Sep 03 and instituted the Biotech industry awards in Dec 03, and a special report on the UK Biotech industry. In a short time span, it became the voice of the Biotech industry. It had a readership of 40,000. A website, www.biospectrumasia.com (Asia's first exclusive portal dedicated to life sciences industry), offering detailed coverage of business developments and path-breaking happenings in the Asia-Pacific region was also launched. (DQ Channels; 2006).

The DQ Week launched in 1996, was a weekly publication having three editions – Chennai, Delhi, and Mumbai. It was the most credible media source for regional IT channels, with a readership of 60,000. It reached 21,000 channel partners in 533 cities thereby having the strongest upcountry reach among all technology publications. It was also the official publication in at least 20 smaller towns for the local events organised by the channel associations of those towns. Target audience included channel managers and business owners. Customers included IT distributors, dealers, resellers, systems and network integrators, and small enterprises. The products were positioned for smaller advertisers in the IT value chain. There was no competing product.

Publishing Customers *PCQuest* launched in 1987, was a monthly publication, positioned as a guide for implementing technology and targeted the computing/networking segment. The magazine was aimed at professionals in the technology domain—including technology heads, enterprise business managers, network specialists, software developers, engineers, and corporate managers—who required in-depth information on computing technologies and IT solution implementation. PCQuest had many firsts to its credit – the first to provide cover mounted CDs with each issue, the first to set up a Bulletin Board System, the first to launch Linux through its CDs, and the first to offer cover mounted DVDs. PCQuest's competitors included Digit and Chip. PCQuest also instituted PCQuest User's Choice awards for vendors/OEMs in the Indian IT industry.

Living Digital (earlier Computers@Home, established in 1996) was the first digital lifestyle magazine and the only Indian magazine focusing on 'before-you-buy' information like reviews, catalogues, product feature, comparisons etc., for over 20 digital product categories covering mobility, digital imaging, entertainment, and computing. In 2003, Computers@Home was repositioned as Living Digital, targeted at non-technical professionals like doctors, chartered accountants, PC owning households, novices and other users of IT. The magazine offered insights into technology use and purchase in the personal space including music, travel, movies, work, personal finance, and automobiles. It came with a user-friendly CD loaded with free software. The magazine had a readership of 465,000 per issue. 87% of its readership was in metros, 56% in the 20-34 year age group, thereby making it a strong product for the gadget aspirants who wanted to buy smart and live

smart. A re-launch of Living Digital with a new logo, superior paper quality, and additional columns and sections at a higher price of Rs 75/- against the original Rs 55/- and with 26 extra pages was planned for the first week of Apr 2006 (Agency FAQs; 2006-a). There was no other magazine in this category.

Operations

CyberMedia publications and other divisions gathered news through a variety of means and media, consistent with the varied requirements of an online technology portal with thrice-daily updates, print publications that ranged from weekly to fortnightly to monthly, and market research activities with both periodic reports and newsletters and customised projects. For most of the print publications group and the online arm, the core newsgathering entity was CyberMedia News. This internal, dedicated technology wire service had reporters in 14 locations and covered IT, telecom, and biotech industries across these locations. All the news, reports and features were filed electronically from all locations, using Cyber Media's own networks as well as public ISP services. These were edited by teams of professionals at three locations: Bangalore for ciol.com and BioSpectrum; Gurgaon for Dataquest, Voice&Data, Living Digital, the DQWeek network of newspapers; and Mumbai for DQChannels India.

Some magazines drew on specialised research. PCQuest and Living Digital used technology research and product test results from CyberMedia Labs, the company's internal lab for product and technology testing, the first and largest such lab in South Asia. Dataquest and Voice&Data used their research team for critical industry surveys such as Top 20 and V&D100, and also outsourced research to CyberMedia's tech research company, IDC India. Each publication had a team of reporters and correspondents which focussed on features and more specialised news. This was filed back as news into the central news pool, managed through a CyberMedia News portal.

A variety of technologies were used for information gathering and processing including wireless laptops and mobile phones, the internet, leased lines, personal wired and wireless broadband connections, etc. This gave CyberMedia reporters a significant edge in their speed of being able to file even before an event ended from within the event. Ciol.com, the company's technology portal, also managed the print publications' websites. CIOL used state-of-the-art news production and editing, and communications systems for quick and efficient gathering and dispersal of news. Breaking news from publications reporters was also fed to CIOL to be uploaded instantly. CIOL compiled and edited this information at Bangalore and then uploaded it to its webservers located in Santa Clara, California.

CyberHouse, the corporate headquarters at Gurgaon, housed the editing, design, and pre-press operations, and was online 24 hours, with desktops and internet connectivity to all editorial, sales, marketing, and support people, and laptops to editors and managers. Design software was in use over the in-house desktop publishing network since 1989, on PageMaker and QuarkExpress, and high-end PCs and Apple Macs, supported by a high-resolution professional Creo scanner for visuals. These electronic pages were output onto film positives on the in-house high-resolution image setters, with precision densitometers and other devices for quality assurance checks.

The Company's sales team was structured product wise in the larger cities, and region wise in the smaller cities. International advertisers were serviced through agents, except for Singapore where the Company had its own office. The Company had a strength of 40 direct sales professionals used for maintaining relationships with advertisers to increase their spends by showing them value, increasing the advertiser base, and selling customized options as per the client's need.

Events The live entertainment and event-management industry in India was at an evolutionary stage and was dominated by the unorganised sector. However, gross earnings from entertainment and event management

aggregated over Rs 3.3 billion. Event management of promotions and launches constituted the major part of the sector's earnings, with revenues of Rs 1.7 billion. Businesses included a significant portion of their communication budget for BTL advertising including events, mailers, in-product advertising etc. Media companies performed better if they had an events strategy to leverage their brands as 15-20% of the spend was devoted to events.

CyberMedia Events was spun off as an independent company in the year 2000 for managing events including exhibitions, conventions, seminars, and workshops on various topics connected with the application of technology. CyberMedia Events conducted more than 100 events each year, which included international events such as Bangalore IT.com and Nasscom exhibition; national events such as IT Kerala, Hi-Tech Pune, Services@India at Pragati Maidan; regional events like PCQuest Series. It leveraged upon its strong vendor relationships, expertise to customise, industry insight beyond the capability of other event management companies, and credibility with state governments and industry bodies. A team of professionals was dedicated to the task of organising events. In order to learn and improve constantly, a detailed feedback and evaluation system was set up to determine benchmarks and ensure customer satisfaction. In December 2005, Cyber Media and Expomedia Group PLC signed a 10-year JV agreement to collaborate on organising international events in the ICT and life sciences areas for the first time in India to leverage Expomedia's network of international offices in over 10 countries, international client base of over 8,000, and experience of over 100 exhibitions worldwide (DQ Channels India; 2005-b).

Internet India's Internet user base was rapidly picking up pace with the reduction in Internet access charges, increasing PC and telephone penetration, and growing competition among the ISPs. According to an estimate made by the Internet Service Providers Association of India (ISPAI), approximately 360 towns in India had access to the Internet. The number of unique users was 13.3 million in 2003, which was expected to grow to 36.8 million by 2007, with maximum growth in homes and small businesses. E-commerce spending was Rs 236 billion in 2003. This was expected to grow to Rs 3,616 billion by 2007 at a CAGR of 98%. It was estimated that B2B would account for 90% of the total revenue. The online business was showing a strong resurgence worldwide, with online advertising at about 1% of the overall advertising budget. It was expected that internet advertising expenditure would be between 2-5% of the total ad spend in two to three years. This would mean a ten-fold increase in online advertisement business.

Cyber India Online Limited (CIOL) was an IT online media company set up in 1996, soon after the Internet came to India, but much before the hype around the online business set in. The Company was founded as a subsidiary in 1999 with the mandate of providing IT-related news, information and services to the vast community of IT savvy individuals, and to make it a value transformation platform for the IT vendors, solution providers, services companies, and individuals. From the beginning, CIOL put together a self-sustaining model as a way of functioning. Services provided included content management, custom publishing, and web development. Sources of revenue included advertisements (more than half of the revenues), subscription revenues from certain portions of the site that operated as paid sites since April 2002, and e-commerce revenues through partners who used the website for offering recruitment, shopping, training, and travel services. CIOL, while banking on news feed from CyberMedia News and Reuters, also had its own editing staff. News updates took place every three to four hours. Online and off-line events were held to debate and discuss various issues pertaining to the use and implementation of IT technology as well as those relating to emerging technologies.

As a result of CIOL's initiative, it had 305,000 subscribers to its various newsletters, more than 730,000 unique visitors, and over six-million page views per month. It also had access to large quantities of quality data generated both in-house and sourced from other content creators. This enabled them to establish credibility with IT professionals in India and abroad by leveraging its other businesses and an in-depth understanding of the needs of advertisers, resulting in a market share of 60%, and multiple revenue streams ensuring they do not solely depend on one source. Major customers included IBM, SAP, Intel, HP, AMD etc. CIOL built

online communities in India which included 1,200 CIOs of top companies, 1,800 CXOs of small and medium businesses, and 37,000 developers.

CyberMedia Dice Careers Ltd. was a technology focused job board dedicated to the rapidly growing technology recruiting sector in India. Its mission was to help businesses source and hire the most qualified technology and engineering professionals, and to provide those professionals with the best job opportunities in their respective fields. Their unique selling proposition was an understanding of the needs of technology professionals and the companies that depended on them. It was a JV between two technology specialists, CyberMedia and Dice, the leading provider of online recruiting services for technology and engineering professionals in the United States (Insight Media; 2004-d). With a 14-year track record in meeting the changing needs of the technology sector, Dice's specialty industry focus and exposure to the most skilled tech-centric audience online fostered a talent marketplace where employers reached hard-to-find, experienced, and qualified technology and engineering professionals.

The JV, entered into four-years on 2nd September 2004 and headquartered in Bangalore, India drew on the expertise of CyberMedia in the India technology media community, and of Dice in providing online recruiting services for technology and engineering professionals. The objective was to serve the career needs of technology professionals and the recruiting needs of employers of technology professionals in India (The New Indian Express; 2004). Vertical industry focus enabled them to provide customers with access to experienced and uniquely qualified technology professionals. Value was added for prospective employees by searching database of job postings, and by using career resources, including certification test preparation and assessment products.

CyberMedia Dice also introduced CyberMedia Dice - MeasureUp Index that was provided free to each job seeker who registered a profile on their site. The MeasureUp Index helped a recruiting manager identify potential employees in a more efficient manner, and helped job seekers demonstrate their competencies to prospective employers. CyberMedia Dice developed the new product in association with MeasureUp, a subsidiary of Dice Inc. and an industry leader in practice test and assessment products. Developed by industry certified experts, MeasureUp practice tests and assessments were continually enhanced to include the latest technologies and features to help jobseekers achieve career development goals.

TV The number of TV households and Cable and Satellite households were growing at 9% and 17% respectively. It was expected that by 2008, TV households would increase from 82 million to 111 million at a CAGR of 6.2%. During the same period, C&S households would increase from 41 million to 64 million at a CAGR of 9.3%. The rural areas had potential for growth and conversion. The medium had undergone a significant change from the days of one black and white viewing channel to the colourful multi-channel viewing experience. The general entertainment channels (Regional and National) were the bread and butter for software producers. The television content industry was pegged at Rs 25.16 billion (US$ 559 million) for the year 2003, with regional programming contributing the largest proportion (38%) of the total revenues.

TV Software: CyberMedia TV began operations in 1995. It created programmes in the 'intelligent information' space, both within the ICT sector as well as in careers and business-related programming. The division produced over 150 half-hour IT programmes –all aired on India's public broadcaster, Door Darshan. Past programmes comprised Zenith Computer Show, Computer Career, Computers for You, and CSI Quiz. Zenith Computer Show was the first IT program to be broadcast on the prime time in India on DD2 Metro channel, with a viewership of over 1 million and over 52 episodes.

CyberMedia TV moved beyond this area into the mass career information segment. Since 2003, it started producing a popular mass-audience career programme with a skew towards women. The programme title branded by Hindustan Levers was called *Fair & Lovely Career Baatein*. It was aired weekly on Doordarshan News. CyberMedia TV was in talks with various satellite television channels to exclusively produce programmes and enter into a tie-up with the public broadcaster for supplying content in these areas. Creative brainstorming

involved media experts at one level and representatives of target groups at the other, to identify the most attractive concepts for programming. The two data streams were combined to come out with unique ideas and concepts, which were further evaluated. Customer feedback was an important process laid down by the division to improve quality of deliverable.

Services

Media Services Business Various value-added media services provided a wider spectrum of the media business. This helped addressing customers' needs by providing them a wider range of services under one roof besides creating synergies within the business. Corporates, governments, NGOs and other organisations spent a substantial amount of money on market research. For large and medium-sized organisations, regular market research inputs were a must to understand current and potential customers better, identify emerging segments/opportunities, understand competition, validate data, and identify gaps among many others. The total size of the market was estimated at Rs 3.0 billion growing at 12–15% per annum. Multimedia included a range of services such as development and distribution. Market potential for a few multimedia related devices and products such as digital cameras, Web cameras, CD-ROM, and gaming devices was estimated at Rs 3.0 billion. High growth rate of IT in homes was one of the principal drivers of the distribution business. Media services included different kinds of businesses and there were no overall surveys or charting of the media service business as a whole. Market Research helped a media house to address the customer's needs by providing them with much needed research information.

Research Market research services broadly encompassed syndicated and customised services covering areas of hardware, software, and consumables (Biospectrum; 2004). Depending on service, corporates, consumers, channel partners were regularly researched in metro and non-metropolitan towns and cities. Clear processes were set up for conducting assignments right from the time a request for proposal was raised by a potential customer to the delivery of the report.

IDC (India) Limited, the Indian franchise of IDC, was established in 1987 as a part of the Cybermedia group. IDC Inc, one of the world's largest market research and consulting organisation focusing on the ICT industry, had a mission to provide strategic and tactical guidance to builders, providers, and users of information and communication technology in order to help them make appropriate business decisions. IDC India was India's most comprehensive and dependable resource for market research and consultancy in IT, ITES, and telecom. They had over 25 researchers and analysts with branches at Chennai, Bangalore, and Mumbai, and was headquartered in Gurgaon. IDC India forecasted IT markets and technology trends and analysed IT products and vendors, using a combination of primary research and in-depth competitive analysis.

IDC rendered services ranging from supply side research, consumer research, software and services research, corporate research, and continuous Information Service. IDC India, a franchisee of IDC Inc., paid a royalty to it for accessing their international reports, content, and methodologies. Its services included customised research, multi-client studies and continuous information services. The organisation carried out exhaustive end-user, vendor, and channel research regularly deploying different methodologies. IDC (India) built an extensive national databank based on numerous customer contacts every year (over 50,000). It was regarded as a credible source of data, quoted widely in the industry. IDC was the organiser of 'Directions', an annual strategy conference for vendors, which was attended by professionals at senior management level. 'Global IT Forum on Outsourcing' with international speakers was also organised. Its PC tracker tracked PC shipments on a quarterly basis for over 10 years. IDC also tracked software & services, peripherals, servers, work stations, storage, hand held devices, and datacom & networking markets. IDC (India) conducted research globally and

formed the basis for India's export strategy in the early 90s for the Indian Government in its World Bank funded report on India's Software Export strategy. It worked closely with various industry bodies such as Nasscom, CII, Assocham etc. IDC (India) competed with Gartner, Forester Research, IMRB, and AC Nielsen.

IDC (India) was structured to provide comprehensive end-to-end solutions. The basic structure of IDC was made up of groups focussed on providing market view of hardware, software services, and communication industry integrated closely with the intermediary channels. Spanning the market-focused groups were the groups driving user research, verticals research, go-to-market services and the consulting services.

User Research The IT and Telecom industry was dynamic with frequent changes in products and their characteristics. Sometimes, the usage of products and services changed almost overnight. In such a fast changing and growing market, the key for long-term success was to know the customers. Any sales or marketing strategy was incomplete and ineffective without a thorough understanding of the users/potential users of the products/services in question. IDC India User Research Group catered to this critical need of IT & Telecom companies. With understanding of both individual and commercial users, along with a command on research techniques, this group helped clients overcome the toughest challenge of winning over the customers. This was a horizontal group of IDC India that spanned across all product and service categories. Both IT and Telecom products were researched in this group. The major segments handled by this group are PCs, Printers, Servers, Laptops, Storage, IT Services, Telecom Services (GSM/CDMA), Value-Added Services, Mobile Handsets, Telecom Equipment, Datacom Equipment, Smart Cards, etc.

Several research approaches were used by this group, depending on the research product, segment, and market characteristics. Broad classification of the genre of the most commonly done studies were Usage & Attitude, Segmentation, Need Profiling, Concept/Product Testing, Buying Behaviour, Market Communication, Customer Satisfaction, Employee Satisfaction, Estimation & Projection, Spending Pattern, etc. The group studied all types of users including individuals, households, small business, SMB, large corporate as well as government, and education segments. The group had specialised teams to conduct different types of studies—Quantitative, Qualitative, Mystery Shopping, etc. A team of field and operations people used statistical analyses to identify the hidden and unseen trends and characteristics, with an aim to provide most actionable feedback to the client.

This group provided the clients with the advantage of user understanding, which made the job of the sales, marketing, and strategy managers much easier. It provided advantage in terms of minimising cost associated with making a wrong decision, getting competitive advantage of knowledge, selecting the product/marketing ideas, retaining valued customers, expanding business by identifying new pastures, and comparative analysis with industry benchmarks.

India was the fastest growing IT hardware products market in the Asia-Pacific region. Most of the prominent global as well as local vendors were operating in the competitive Indian market. Although, India was a diverse country with a huge population base and a significant enterprise universe, it had one of the lowest PC penetrations. This was perceived to be the greatest opportunity for the future by the hardware vendor community. Additionally, the Indian Software and BPO industry were also creating a great potential for employment. All of these made India one of the most exciting markets for IT hardware vendors. The challenge was of understanding the marketing structure and conquering the geographical diversities.

Effective global business planning started with accurate intelligence on technology trends, user requirements, spending, market forecast, market shares, and competitive strategies. IDC had the vision to quickly identify the best growth opportunities in the IT market place and formulate strategies for hardware vendors. The Hardware Research Division of IDC was used by more than 90% of hardware vendors. The research done by the division provided forecast of each technology market, which vendor communities used for strategic and tactical planning.

IDC India Hardware Research Group approached its market research and consultancy practice from a both bottom-up as well as the top-down approach. The data was collected with extensive channel surveys and validated at various levels. The group's insight into the industry was based on deep and varied interactions, on a consistent basis, between the experienced analysts and the stakeholders of the Indian hardware industry, backed by regular feedbacks and directions from the regional and global IDC analysts. In the whole process, the group was also assisted by the globally accumulated market knowledge and best practices of IDC.

Leveraging its competence in Computing Product Research (Personal Computers, Servers, Workstations, Disk Storage and Smart Handheld), Peripherals Research (Printers, Multi Function Devices, Printing Consumables, Copiers, Digital Cameras, Hard Disc Drives, Monitors, Large Format Printers, Scanners and UPS), and Channel Research (IT Retail market, city wise Printer market and city wise UPS market), the company provided an in-depth technology understanding, reliable and up-to-date market intelligence, and action oriented recommendations.

India had built significant brand equity in the global market in the field of software & services. The software & services research group at IDC India conducted research on the IT industry, with the intention of helping builders, providers, and users of ICT to take the right business decision. With its global and local repository of knowledge gained from research conducted in this space, it was positioned to provide market intelligence, research and consultancy services needed to formulate strategies. The Software group comprised System Infrastructure Software (System Software, Network Management Software, Storage Software, Security Software, Networking Software and System Management Software), Application Development & Deployment Software (Information Access and Delivery, Information and Data Management Software, Application Life-Cycle Management, Other Development Tools, Application Development Software and Application Deployment Software), and Applications (CRM Applications, ERM Applications, Supply Chain Applications, Collaborative Applications, Content Applications, Engineering Applications and Consumer Applications). The Services Group comprised System Integration, Hardware Deployment & Support, Custom Application Development, Network & Desktop Outsourcing, Network Consulting & Integration, Software Deployment & Support, IS Outsourcing, IS Consulting, IT Education & Training, System Infrastructure Service Providers, Application Management, and Application Service Providers.

India was also one of the fastest growing regions for both communication services as well as equipment. Playing a major role in this growth were many global and local companies involved in providing telecom services in an increasingly deregulated situation. Many supplied equipment and managed the networks of these service providers as well as enterprise users. As different telecom services were introduced in the market, a huge base of household and individual consumers of services and communications devices was in the making. All this made India one of the most exciting markets for communications services and equipment in the world.

As mentioned earlier, IDC had a global and local repository of knowledge and market intelligence gained from its various activities in the communications space. It was well positioned to provide the protagonists of this space the intelligence, research and consultancy services needed to exploit the opportunities that the market presented. IDC exploited the various marketing challenges and issues involved in the competitive and unique market. They provided services in the areas of Communication Services (Broadband, Business Network Services, IP Based Services, Residential, Small Business, and Wireless Communications), Communication Infrastructure (Enterprise Networks, LAN, Wireless LAN, LAN Cabling, WAN, IP Telephony, Network Infrastructure, Service Provider Infrastructure and Wireless Infrastructure), Consumer Equipment (Broadband Home Networking, Mobile Devices and Wireless), and E-commerce (B-to-B and B-to-C).

The communication methodology involved Multi-pronged approach (Vendor / Service Provider interactions, Channel partner interactions, Correlations with other markets, and Proprietary IDC models for forecasting and data analysis), and Multiple data cuts (by verticals, by technology, by organisation size, and by geography).

Vertical Research The objective of the Verticals Research Group of IDC India was to assess the status of six key vertical industry segments and chart out in detail the critical business imperatives that would drive their IT spending. IDC India VRG mapped the integration of IT with the business objectives of organisations and the impact of internal factors as well as the external environment on their IT spending. Value was added to its research effort by tracking industry-specific updates in the business press, viewing news clippings, and attending vertical industry seminars and get-togethers. The six segments included *Government (*National IT Policy, National e-Governance Action Plan, key government IT nodal agencies, urban as well as rural G2C services, their accessibility and affordability, computerisation initiatives of key Central and State government departments, government IT planning and decision making processes); *Banking and Insurance; BPO/ITES* (content creation and development, technical support services, engineering design and R&D services, back-end human resources, financial accounting etc.); *Manufacturing* (automobiles, auto components, petrochemicals, textiles and garments, consumer durables and FMCG); *Telecom* (basic telephone services, GSM services, WLL/CDMA services, and broadband services/convergence); and *Life sciences* (pharmaceuticals, biotechnology and healthcare segments). Research was conducted using secondary data from industry journals and trade publications, existing IDC reports and vertical industry databases. Expert opinion on the impact of important policy/regulatory changes on the industry was sought, and in-depth interviews with CIOs/IT heads of representative companies/organisations in the vertical industry segments were employed to capture the qualitative and quantitative aspects of their IT planning and purchase decision-making.

Consulting Services With its deep understanding of the IT markets in India and worldwide, IDC was positioned to add value to a client's organisation, business strategy, and marketing tactics by helping IT/BPO & ITES/Telecom vendors, industry associations, governments, and financial institutions in the development and implementation of their business strategies, and support them in enhancing their capabilities and competitiveness. The Consulting Services practice drew upon the accumulated expertise and knowledgebase of the different IDC research streams, a study of environmental factors, and knowledge and insights gained through continuous interaction with the industry.

Go-To-Market Services IDC's Go-to-Market Services (GMS) was a collection of IDC content and services packaged to complement and support the marketing partner, and sales initiatives of customers. GMS combined powerful lead generation tools with high-value content and supporting services, to help build awareness, drive leads, and advance the sales cycle. IDC offered a broad selection of GMS components to support businesses in every stage of the relationship development cycle. Each component addressed specific relationship building and communications priorities. IDC's GMS programme was vendor neutral and complemented go-to-market strategies, by utilising existing research, and presenting it in market friendly packaging. IDC insights, based on global and regional research, were designed to help businesses communicate with their customers and partners more effectively.

Multimedia

CyberMedia Digital Ltd. was established in 1997 with a view to enter the multimedia content business. Its core business was to develop and market high quality multimedia content. Some of its development projects included developing the Quizmaster CD-ROM for the US market for Encyclopaedia Britannica, and developing a Series of English and Foreign language learning using BBC content (DQ Week; 2005). International customers included Simon & Schuster Interactive, DMP Spain (for BBC), Incagold etc. Indian customers included VSNL, Reliance, Nasscom, Tata McGraw Hill etc.

CyberMedia Digital also developed some of its own products such as The Road to Freedom, Indian Wildlife, Buddha, and Indian History. CyberMedia Digital was amongst the leading OEM suppliers of multimedia products including Internet starter kits and gaming products. OEM customers included Starhub, Maxtor, Iomega, HP, and Olympus, all based in Singapore. Indian customers included VSNL, Samsung, Intel, LG, VSNL, HP, HCL, Tata Nova, NOW, Glide, Indian Newspaper Society, PCS and many more. Through its network of about 700 retail outlets, it distributed over 400 titles of different genres. It had distribution rights for world-renowned publishers like Encyclopaedia Britannica, Activision, and BBC. CyberMedia Digital's competencies included direct presence in Singapore, strong network of contacts with IT vendors, relationship with publishers, cross-promotional ability, nationwide distribution network, experienced IT developers, and a strong marketing team.

BPO

In early 2000, the Business Process Outsourcing (ITES-BPO) industry emerged as a significant revenue generating area for India's software and service companies. Although cost-reduction was the key driver for ITES-BPO activities in the past, more and more companies regarded these services as strategic and essential elements for organic growth. In 2003, the Global Business Process Outsourcing (ITES-BPO) market was approximately USD 690 billion. By 2007, the potential ITES-BPO market was likely to increase to USD 922 billion. In terms of market size, North America was expected to account for nearly 62% of the total ITES-BPO market in 2007 while Western Europe and Asia Pacific were likely to account for approximately 23% and 15% of the total ITES-BPO market, respectively.

The Indian ITES-BPO industry offered several service lines including Customer Care, Finance, Human Resources, Billing and Payment Services, Administration, and Content Development. Following are the market size figures for 2003-04 (in million): customer care USD1,200; finance USD 820; HR Services USD 70; and Content Development (publishing, websites, movies, animation and gaming)USD 520.

India was turning into a knowledge hub for the world publishing industry. The average revenue productivity per person being $ 15,000/person/year (Rs 2.3 billion by 160,000 people), the projected growth of the ITES-BPO market would require a total work force of 250,000-350,000 by the year 2008.

The content BPO business included publishing, websites, animation, movies, and gaming. The market for the editorial and pre-press was also growing with more and more publishers in the US and UK planning to outsource their requirements to Indian companies. At the same time, a number of new units were adding capacity resulting in severe competition. Many large publishers also decided to setup captive units in India such as MacMillan & Pearson. USA & UK were the two major markets that were witnessing upswing in the overall demand. There was also a change in the demand pattern of electronic media.

CyberMedia Services BPO was the main thrust area for the Company. CyberMedia leveraged on its IT, content development, publishing, and other strengths to carve a niche in the growing BPO space. CyberMedia Services entered into arrangements with local agents to address the European market (Business India; 2004). These local agents were responsible for spearheading the front-end activities such as marketing and sales, and CyberMedia Services provided the back-end support of people, processes, and technologies. CyberMedia services offered integrated outsourcing services to create, update, and convert content across multiple media formats to meet specific needs of the customers. Service offerings were based around five core competencies – Content Creation Services, Production Services, Data Conversion Services, Digital Asset Management, and BPO Services. All services followed a very stringent and well-defined process. Content creation conformed to international standards such as AICC and SCORM. Usually a prototype of the first deliverable was developed for scrutiny and approval of the client. This ensured quality and productivity at each stage as well as robustness of the process. The work norm was so defined that interaction with client was

possible at each process level to meet client expectations. Customers included Thames & Hudson, BBC Worldwide, Geddes and Grosset, Simon & Schuster, Hylas Publishing, Mitchell Beazley, Ingenta, Exevo, and Compset Inc. among others.

To build a global brand portfolio across all media platforms, CyberMedia India entered into a JV with CMP Media of New York in October 2005. The JV, CMP-CyberMedia LLC combined CyberMedia's BPO portfolio with CMP's Managing Offshore, an online newsletter, to develop a comprehensive portfolio including print, online content, and events for the ITES-BPO industry. The new brand focused on providing outsourcing related information for companies (*Voice & Data*, 2005; *Data Quest*, 2005; *Insight Media*; 2005).

CyberMedia entered into a partnership with Chakra Interactive to distribute WorldChakra off-the-shelf game-packs - initially through retail outlets in Delhi, and nationwide later. The game-packs came supported with a wide range of Java-enabled handsets. The customer purchased a game-pack backed with a scratch-card containing a unique personal identification number that had to be sent to a phone number via SMS. The customer then got a one-click download link through which to download the game on the mobile phone (DQ Channels India; 2005-a).

Cyber Media also had plans to jointly introduce a new monthly BPO magazine along with the United Business Media (UBM) group of the United Kingdom by early 2006. The magazine, with a print-run of 40,000 copies targeted at BPO companies in North America and India. CMI would be responsible for the editorial and production process while UBM would oversee the editorial inputs and distribution (Financial Express; 2005-b).

Education

The School of Convergence, started jointly by Cyber Media Foundation Ltd (CMFL) and International Management Institute in October 2001, introduced a 2-Year Post Graduate Diploma Course in Content Creation and Management (Financial Express; 2001-a). The mission of the school was to be the premier educational institution of its kind offering the highest quality of teaching in content creation and management across all media; by providing a relevant and contemporary curriculum based on cutting-edge technology. It imparted education and training in content creation and management in diverse media: print, radio, television, cinema, and Internet. Cyber Media entered into an alliance with Kaleidoscope Entertainment Pvt. Ltd., an internationally recognised film & television production house with critically acclaimed films like Bandit Queen, Fire, Electric Moon, Saathiya, and Maqbool among others to its credit, for media education at the School of Convergence.

Some of India's best-known media organisations including Bennett Coleman & Company, Business Today, CNBC–TV 18, CNN-IBN, Discovery Channel, Miditech, NDTV, O&M, Sagar Arts, Star TV, and Zee TV employed SoC students. Spurred by its success, the School of Convergence introduced part-time certificate courses for undergraduate students at several Delhi University colleges like St Stephen's (2003), Jesus and Mary (2004), and Gargi (2005) which became extremely popular. The School had specialised modular programmes at IIFT (New Delhi), IIM(Kolkata), and Film and Television Institute of India (Pune). Beginning July 2006, the school also planned to introduce Post Graduate Diploma in Strategic Advertising Management (PGDSAM) and Post Graduate Diploma in Integrated Communications Management (PGDICM).

The company moved up the value chain and focused its marketing efforts to get a share of the editorial work as well as re-purposing the content for various media. The company set up a facility comprising 360 seats in the area of content authoring, graphic design & illustrations, copy-editing, composition & data conversion, and re-purposing of content for delivery in various media platforms. It deployed 100 people in this business. It appointed agents in Australia, Singapore, UK, and USA and was opening its own marketing offices in UK and USA. The Company signed up contracts with major clients like Dorling Kindersley, Allegra,

HotMath, Thames and Hudson, Richmond Publishing, Britannica Encyclopaedia, and Ingenta and formed alliances with many vendors in the US for regular flow of work to improve capacity utilisation.

MARKETING & DISTRIBUTION

The Company had a total of 725 clients advertising in its publications. The top 10 clients contributed 32% to revenue, top 20 clients 41%, and the top 50 contributed 58% to revenue. The company had a mix of regional, national, and international advertisers. Regional advertisers primarily advertised in the regional channel publications whereas the rest advertised across all publications. CyberMedia's top 10 advertisers were HP, IBM, LG Electronics, Maxtor, Microsoft, Moser Baer, Oracle, Samsung, SAP, and Seagate.

Strong distribution of content was the key to success of a media company. To ensure countrywide distribution, services of leading distributor India Book House were employed to put out the magazines at over 2,600 locations in 225 cities and towns. CyberMedia had arrangements with established distributors across India including India Book House (IBH), the country's largest distributor of print titles; AH Wheeler & Co (AHW) covering all railway stations across India; and Malik News Agency in Dubai. This extended network was supported by a Central Services Department that serviced an average of over 60,000 subscribers each month for 20 issues of different publications. The extended stands and subscription network ensured a combined readership of 1,263,000 print readers. Online news content was available to around 300,000 registered subscribers and 750,000 unique visitors with over 4 million page views per month through 69 electronic newsletters and an integrated website www.ciol.com.

THE INDIAN MEDIA INDUSTRY

The Entertainment & Media (E&M) industry in India was one of the fastest growing sectors of the economy. The industry employed several million people and generated Rs 245 billion in revenues in 2003. TV and print were the two biggest components, accounting for approximately 74.3% share of the 2003 revenues. The print industry was about 175 years old in India, having its genesis in fighting for a cause, revolt, or spreading a message. After independence, many businesspersons kept running their publications in spite of making losses because of the power and influence these brought them. However, by the turn of the century, the situation was different with media being viewed like any other business - to generate profit for the shareholders.

The Print Media segment comprised newspaper and magazine publishing, and book publishing. The newspaper publishing market in India comprised spending by advertisers and readers on daily print newspapers. Spending by readers included both news-stand sales and circulations. India was emerging as a promising market for new publications, given its growing role in international business. The other significant growth driver was relaxation of the foreign ownership norms in the news and current affairs segment. With the Government's liberalisation policy, foreign investment, including FDI, up to 74% was permitted in Indian firms publishing scientific/technical and specialty magazines/periodicals /journals. Where only Indian editions of foreign scientific/technical/specialty journals were published with no foreign investment being allowed, the Ministry of Information and Broadcasting gave approvals on case-to-case basis. Communication facilities were granted to foreign news agencies only where the distribution of news within the country was effected through an Indian news agency owned and managed by Indians, which would have full and final authority in the selection of foreign news for distribution, and which would also be in a position to supply Indian news to the foreign news agency with whom they had the working arrangement. Direct distribution of financial news by foreign news agencies to selected clients for their own use, and not for further reproduction and publication, was allowed.

This increased India's ability to attract foreign capital and was acting as the springboard for many new publications in the country. The relaxation of the FDI limits for investment in the Indian print media market

was opening a plethora of opportunities in the magazine publishing market with foreign players like BBC Worldwide, which published around 50 magazines, tying up with the Times of India Group. Intelligence Computing Chip published by TBW and Par Golf from Exposure Media were also in the process of finalising tie-ups, while Bertelsmann, Vivendi Universal, and Time Warner had started exploring opportunities.

The magazine publishing market was sized at about US$ 238 million and expected to grow at 6% compounded rate annually over the coming five years. The magazine publishing market consisted of spending by advertisers in consumer and business-to-business or trade magazines plus spending by readers to purchase magazines via subscriptions or at retail outlets. As per the PWC survey, in Asia/Pacific, advertising was expected to increase at a 4.5 % compound annual rate, from $6.1 billion in 2004 to $7.6 billion in 2009. The growing focus on India in the international markets was driving the need for Indian content. As a result, there was a need for new newspapers and magazines as well as new editions of existing publications. Content was a major driver of the global publication industry. With increased exposure to global trends and changing mindsets of Indians, the content of publications was also undergoing change. This gave rise to greater demand for publication with new content and appearance.

Government initiatives to allow foreign equity participation in news publications were a boon for the industry. With greater inflow of funds, companies were investing in new technologies to spruce up content and delivery. New delivery platforms using digital technologies were enabling publishing companies to tap other sources of revenue. Some of these included putting up the content on the Internet thereby increasing the reach. This enabled the companies to command higher advertising revenues due to the reach as well as convince readers to sign up for the subscription of these publications. The Entertainment and Media Industry presented significant avenues for growth for foreign players. This was driven by an expanding economy with focus on increased job creation and consequent rising disposable income, additions of households with increasing spending power riding on the service sector boom, access to untapped rural potential through technological changes that opened this market, enabling government initiatives and growing convergence in the information and broadcasting space. This sector valued at almost US$ 7 billion was expected to grow at about 14% in the coming years.

The Indian media industry comprised 50,000 newspapers and magazines, a growing base of Cable & Satellite (C&S) households; 28 million mobile phone subscribers; an installed base of nearly 11 million PCs; and an estimated 13 million Internet users. India was emerging as a promising market for the publishing industry. As a result of India's status as a good IT hub for outsourcing by U.S. companies, young Indians between 20 to 24 years old were finding jobs with call centres straight out of college. This consumer base had disposable income of about 20-30% higher than prevailing wages, which they were spending on books, movies, music, cell phones, food, and branded clothes. The Indian software and IT enabled industry was expected to contribute 20% of incremental GDP growth forecast between 2002 and 2008 and create over 2 million jobs by 2008, with software contributing approximately 1.1 million and the ITES sector an additional 1 million jobs. In addition, the parallel support services industry was expected to create employment for another 2 million people. Spending power was steadily increasing and it was observed that between 1995 and 2002, nearly 100 million people became part of the consuming and rich classes. Over the next five years, 180 million people were expected to move into the consuming and very rich classes. On an average, 30-40 million people were joining the middle class every year, representing huge consumption spending in terms of the demand for mobile phones, televisions, music systems, cars, credit goods - a basket of consumption pattern typically associated with rising income. In India's urban areas, the consumer mindset was changing due to increased exposure to global influences via media and other interactions leading to higher aspirations, which provided a further fillip to leisure related spending.

As per the Readership Survey 2001, the Indian magazine market comprised consumer titles, and business and professional titles. Consumer titles included 'general consumer' titles and 'consumer specialist' titles.

Specialist titles targeted people with particular interests (such as music, home, lifestyle, information technology, sports, music and others), or specific gender and age categories (women, men, teenagers, children etc). There was a distinct shift in advertising from general interest magazines to specialist and women magazines. While overall magazine readership in India decreased by 8% from 1999 to 2002, business magazine readership increased by 15%. Business professionals felt that the major business magazines existing in India required a global perspective to make informed business decisions, particularly financial and technological one in the Indian context. Neither the Indian business magazines nor the imported foreign business magazines fulfilled this need.

In keeping with global trends, India was witnessing an increasing uptake of new distribution channels through which consumers were obtaining entertainment **(Exhibit 3)**. A distribution channel that was gradually picking up steam was the Internet based medium of distributing content. Online distribution of entertainment—both music and films — was expected to increase with the increased uptake of broadband based Internet which was at low levels in India. However, with the Government of India thrust on Internet and broadband penetration, these channels were expected to play a significant role in the coming years. In October 2004, the Government announced a new broadband policy to take high speed access and its applications to the masses.

In addition to new distribution channels, emerging technologies were helping reinvigorate existing segments in this market in India. The Telecom Regulatory Authority of India (TRAI) which had cable and broadcasting services under its purview was planning to digitalise the cable TV network in recognition of the need for additional capacity for broadcasting new channels. This would allow transmission of more channels on the same bandwidth, thereby expanding the market for both advertisement and subscription services.

While Pradeep Gupta was confident that the globalisation track was the way to growth, the board members were apprehensive considering the regulatory environment in Singapore. The project was to be set up as a wholly owned subsidiary of Cyber Media and required the approval of the Media Development Authority of Singapore. The complete project financing needs were to be met by the holding company, by either equity or debt or a combination of both. The international nature of BioSpectrum Singapore would also require the setting up of representative arrangements at Singapore, apart from infrastructural facilities such as office space, internet connectivity with the data hub etc. The board was contemplating the industry scenario and wondering how much sense it made for the company to go global and whether it would really ensure good returns for investors.

Exhibit 1—Value System at CyberMedia (India) Ltd.

Exhibit 2—Products and Services of CyberMedia (India) Ltd.

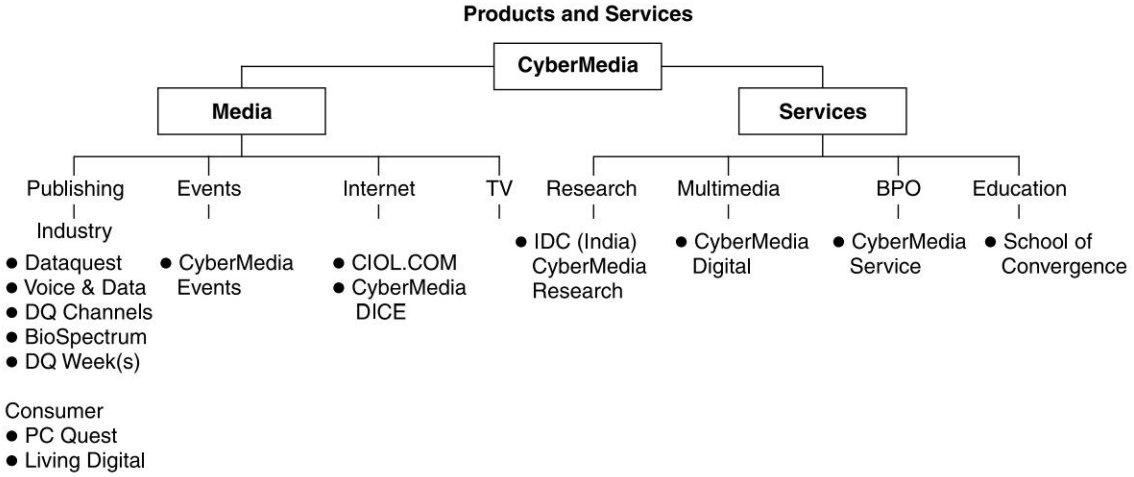


Exhibit 3—New Distribution Channels for Media

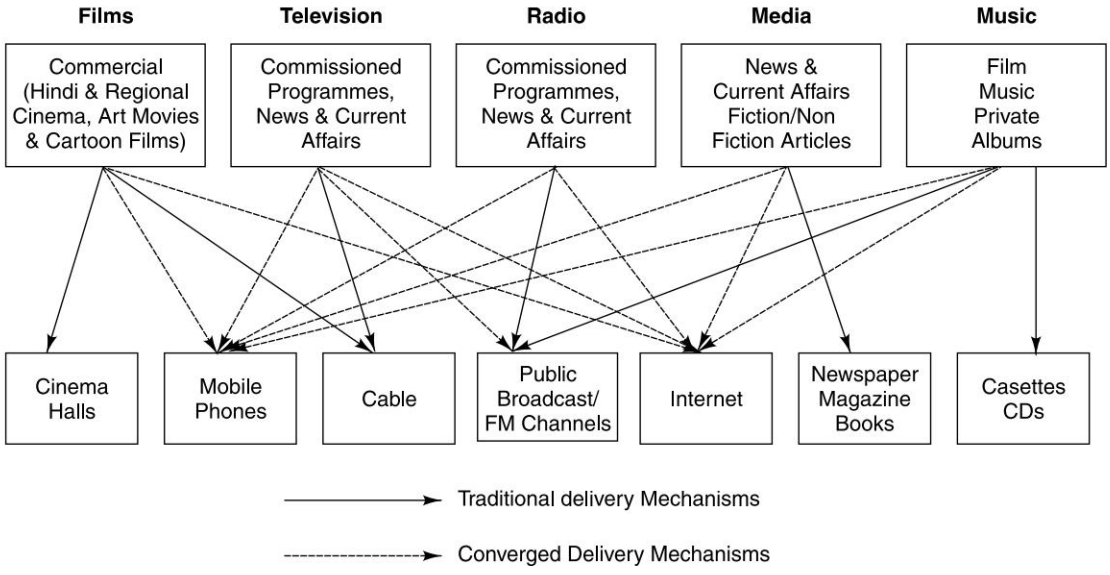


Exhibit 4—Profile of Executives

Mr. Paranjoy Guha Thakurta, Director, School of Convergence was a journalist with 27 years of experience in various media – print, radio, television and the internet – his areas of specialisation were the Indian economy, politics and the media. He had been anchor with Television Eighteen-CNBC India. He co-authored the book, "A Time of Coalitions: Divided We Stand" and directed the documentary: "Idiot Box or Window of Hope".

Mr. E Abraham Mathew, MBA had 19 years of experience in the IT and media industries. He was President in charge of CyberMedia's online and Life Sciences business. He had been awarded by Computer Society of India for the revival of the CSI exhibition.

Mr Prasanto Kumar Roy was the President of the Business Magazines Group. He was the chief editor of Dataquest, DQ Channels India, DQ Weeks and Voice&Data. He had many years of experience as a technology writer. Subsequently, he created India's first electronic bulletin board and online magazine (PCQ Online), the first magazine-run test labs, the first cover-mounted CD-ROM in Asia. He graduated in Physics (Hons.) from St Stephen's College, Delhi. He was the recipient of the Madhu Valluri Tech Journalism award.

Mr. Ravi Sangal an engineer with B.E., M.Tech. had the responsibility of developing CyberMedia's initiatives in media and entertainment space. He had been a consultant to many large organisations in India and also engaged by ITC/UN. He was an active IT committee member with organisations like FICCI and CII.

Mr. Hoshiediar Ghaswalla President in charge of the consumer publications and overall publication marketing had over 17 years of experience in marketing.

Mr. Rajiv Seth handled Content BPO business. He was the former MD of Tech Books India, where he was responsible for taking the operations from 100 seats to 1200 seats in 2 years.

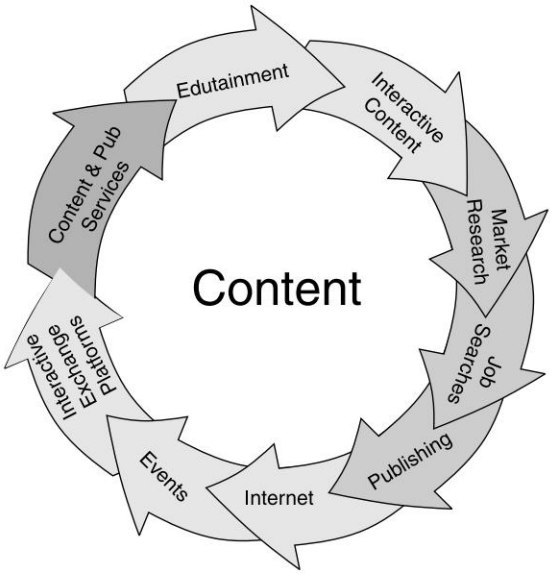
Exhibit 5—Profile of Board Members

Mr. Pradeep Gupta B.Tech. from IIT Delhi (1975) and PGDIM from IIM Calcutta (1977) was the main promoter and CMD of Cyber Media (India) Ltd. He was an industry veteran of 27 years, and highly reputed in the IT Industry. Some of Pradeep Gupta's memberships included General Partner, Infinity Ventures; Investment Management Committee of Punjab Venture Capital Ltd.; Chairman of e Gurucool.com; Founder Member, Association of Indian Magazines; Charter Member, TiE; Co-Chair: Pan IIT Executive Council, India; Trustee India Sponsor Foundation; Member, IT Vision Board, Amity Centre for Information Technology; Member of the "Information Technology Group" for Government of Delhi; Member of the "Information Technology Vision Group" for Government of Punjab; Member of the "Study Team on Microelectronics", for Department of Electronics, Govt. of India to recommend Microelectronic strategies for India; Former President, IIT Delhi Alumni Association; Former President, IIM Calcutta Alumni Association, Delhi; Member, Board of Advisors, AIESEC, Delhi University; Fellow of Institute of Electronics and Telecommunication Engineers; Member Board of Governors, Maharishi Institute of Management; Member, Academic Advisory Council, Aravali Institute of Management, Jodhpur; and Member, Board of Governors, Institute of Management
Studies, Roorkee. He was awarded Distinguished Alumni Award of IIT Delhi, 2001; Helen Keller Award for working in the Disability Sector; Award for Outstanding Contribution towards National Development by IIT Delhi Alumni Association; and Bharat Vikas Award by International Business Council.

Mr. Rohit Asava Chand With over 30 years of experience in the IT Industry, Rohit Asava Chand was the founder of Xansa (formerly known as IIS Infotech Ltd.) a leading software development and IT education company. He was also the promoter of the IT&T Group of companies, engaged in engineering design and BPO services. Rohit Chand was the co-founder of Foundation for Innovation and Technology Transfer at IIT Delhi; the General partner of Infinity Venture Funds and founder of Global Business School.

Dr. Ashok Agarwal Had over 33 years of IT industry experience. Mechanical engineering graduate from BITS, Pilani, postgraduate degree in Industrial engineering from University of Minnesota, USA and Ph.D. in Operation Research from University of Minnesota, USA. He was a professor at IIM Kolkata. He left academics to set up SQL Star International of which he was the Managing Director until 2003.
Mr. K.S. Mehta With over 25 years of experience in the area of computers, software consultancy and computer education, K.S. Mehta was a graduate in electrical engineering from I.I.T., Delhi.
Mr. Shyam Malhotra Executive Director and Editor-in-chief of all CyberMedia publications. Associated with CyberMedia since 1985 in varied capacities and had over 25 years of experience in the IT industry. He was a graduate in Electrical Engineering from IIT Delhi and has a PGDIM from IIM Kolkata.
Mr. K. K. Tulshan Executive Director and Head Infrastructure Group, had over 21 years of professional experience. He was a Fellow member of the Institute of Chartered Accountants of India.

Exhibit 6—Business Overview of CyberMedia



Source: http://www.cybermedia.co.in/business_overview.html accessed on 05.04.06

Exhibit 7—Customer Perception of CyberMedia

– "One of the most eagerly awaited issues is the July issue of DataQuest every year. The annual survey helps position various companies in terms of how they are doing, how they are not doing, where they are winning, where they are not winning" – Azim Premji, Chairman Wipro Ltd
– "..been reading DataQuest…it has done a great job in chronicling the travails, the achievements, and the challenges of the Indian IT and software industry"– Nandan Nilekani, MD, Infosys Ltd
– "DataQuest has been the first journal in IT … And it will remain at the top because it has been very sensitive to the needs of the IT industry"– FC Kohli, Deputy Chairman, TCS Ltd
– "I look forward to reading Voice&Data. It's played a very positive role in the Indian communications industry"– Sunil Mittal, CMD, Bharati Group
– "Voice&Data has been very attentive to the telecom operators, and has been successfully able to project their many concerns and desires"– Vinod Vaish, former DoT Secretary

- "Voice&Data has played a pioneering role in monitoring and promoting telecom scenario in India"– Prithipal Singh, former CMD, BSNL
- "BioSpectrum has played a pioneering role in raising the profile of Indian Biotechnology. BioSpectrum comes across as a responsible and a well researched publication that compares well with its international counterparts."– Kiran Mazumdar Shaw, CMD, Biocon
- "The DQ Week is an excellent publication which highlights the problems and areas of concerns for the channel community very effectively"– JP Modi, Chairman, Delhi Computer Traders Association:
- "It's a huge event, a very impressive one, so I think we can see many more opportunities and further cooperation, further links and that's why, the British Government is taking this event so seriously and regarding it as so important"– Stephen Timms, Minister for eCommerce & Competitiveness, UK on Bangalore IT.com event
- "CIOL is India's largest IT related portal in terms of content and the business potential that it offers" – Mediaturf Worldwide

Exhibit 8—Summarised Income Statement of CyberMedia

Cyber Media (India) Ltd.	**Mar 2000**	**Mar 2001**	**Mar 2002**	**Mar 2003**	**Mar 2004**	**Mar 2005**
Rs Crore (Non-Annualised)	**12 mths**	**12 mths**	**12 mths**	**12 mths**	**12 mths**	**12 mths**
Income						
Sales	40.92	33.33	25.4	26.09	30.57	38.24
Other income	0.56	0.8	0.39	0.16	0.4	0.24
Change in stocks	–0.3	0	0	0	0	0
Non-recurring income	0.07	0	0	0	0	0
Expenditure						
Raw materials, stores, etc.	5.81	4.89	3.38	2.77	2.18	2.51
Wages & salaries	4.71	4.75	5.11	5.04	5.29	6.6
Energy (power & fuel)	0.36	0.43	0.36	0.24	0.23	0.37
Indirect taxes (excise, etc.)	0	0.01	0.01	0	0.02	0.01
Advertising & marketing expenses	8.87	9.35	6.63	8.37	7.43	8.96
Distribution expenses	1.04	1.11	0.86	0	0.94	1.08
Others	16.56	10.98	7.21	6.85	9.32	12.09
Non-recurring expenses	0	0	0.02	0	0	0.05
Profits / losses						
PBDIT	3.9	2.61	2.21	2.98	5.56	6.81
Financial charges (incl. lease rent)	1.85	1.51	1.28	1.39	1.26	1.01
PBDT	2.05	1.1	0.93	1.59	4.3	5.8
Depreciation	0.48	0.56	0.43	0.49	0.59	0.85
PBT	1.57	0.54	0.5	1.1	3.71	4.95
Tax provision	0.18	0.06	0.05	0.36	1.13	1.6
PAT	1.39	0.48	0.45	0.74	2.58	3.35

(*Contd.*)

(*Contd.*)

Cyber Media (India) Ltd.	Mar 2000	Mar 2001	Mar 2002	Mar 2003	Mar 2004	Mar 2005
Appropriation of profits						
Dividends	0.49	0.44	0.11	0.16	0.22	0.82
Retained earnings	0.9	0.04	0.34	0.58	2.36	2.53

Exhibit 9—Summarised Asset Statement of CyberMedia

Cyber Media (India) Ltd.	Mar 2000	Mar 2001	Mar 2002	Mar 2003	Mar 2004	Mar 2005
Rs Crore (Non-Annualised)	**12 mths**	**12 mths**	**12 mths**	**12 mths**	**12 mths**	**12 mths**
Gross fixed assets	9.68	10.19	10.53	12.05	12.6	14.01
Land & building	2.77	2.77	2.77	2.77	2.77	2.77
Plant & machinery	3.94	3.98	4.13	3.02	3.25	3.83
Other fixed assets	2.97	3.44	3.63	6.26	6.58	7.41
Less: cumulative depreciation	1.51	2.07	2.49	2.95	3.54	4.23
Net fixed assets	8.17	8.12	8.04	9.1	9.06	9.78
Investments	1.39	1.53	1.69	2.13	2	2.36
In group / associate cos.	1.23	1.37	1.48	1.82	1.92	2.28
Other investments	0.16	0.16	0.21	0.31	0.08	0.08
Marketable investment	0	0.14	0.14	0.19	0.25	0.25
Market value of quoted investment	0	0.33	0.45	0.17	0.17	0.32
Inventories	1.44	1.39	0.36	0.38	0.53	0.73
Raw materials and stores	1.05	1.39	0.36	0.38	0.53	0.73
Finished and semi-finished goods	0.39	0	0	0	0	0
Receivables	8.1	7.65	8.9	9.14	10.58	11.89
Sundry debtors	6.87	5.72	7.03	6.22	8.28	9.55
Advances / loans to corporate bodies	0	0	0	0	0	2.16
Advance payment of tax	0.13	0.55	0.56	0.75	0	0
Other receivables	1.1	1.38	1.31	2.17	2.3	0.18
Cash & bank balance	0.18	0.29	0.09	0.13	0.59	0.34
Intangible / DRE not written off	0	0	0.12	0.2	1.56	5
Total assets	19.28	18.98	19.2	21.08	24.32	30.1

Exhibit 10—Summarised Liability Statement of CyberMedia

CyberMedia (India) Ltd.	Mar 2000	Mar 2001	Mar 2002	Mar 2003	Mar 2004	Mar 2005
Rs Crore (Non-Annualised)	12 mths	12 mths	12 mths	12 mths	12 mths	12 mths
Net worth	7.98	8.02	8.71	8.52	11.23	13.76
Authorised capital	2.5	3.5	3.5	4	11	11
Issued equity capital	2	2	2.35	3.19	7.18	7.18
Paid-up equity capital	2	2	2.35	3.19	7.18	7.18
Bonus equity capital	1.84	1.84	1.84	2.48	6.19	6.19
Reserves & surplus	5.98	6.02	6.36	5.33	4.05	6.58
Free reserves	5.36	5.4	5.74	5.33	4.05	6.58
Share premium reserves	0	0	0	0.15	0.21	0.21
Other free reserves	5.36	5.4	5.74	5.18	3.84	6.37
Specific reserves	0.62	0.62	0.62	0	0	0
Borrowings	6.7	6.24	6.95	7.41	7.39	7.43
Bank borrowings	6.52	5.55	3.21	4.32	6.93	6.94
Short term bank borrowings	3.87	3.93	2.68	3.55	4.5	5.01
Long term bank borrowings	2.65	1.62	0.53	0.77	2.43	1.93
Other borrowings	0.18	0.69	3.74	0.43	0.46	0.49
Secured borrowings	6.7	5.9	6.65	7.1	7.06	7.09
Unsecured borrowings	0	0.34	0.34	0.34	0.33	0.34
Current portion of long term debt	1.1	1.1	0.53	1.16	1.72	1.14
Deferred tax liabilities	0	0	0	1.32	1.55	1.8
Current liabilities & provisions	4.6	4.72	3.54	3.83	4.15	7.11
Current liabilities	4.11	4.28	3.43	3.67	3.94	6.27
Sundry creditors	4.07	3.98	2.93	3.48	3.71	6.09
Interest accrued / due	0	0	0.04	0.03	0	0
Other current liabilities	0.04	0.3	0.46	0.16	0.23	0.18
Share application money	0	0.22	0.34	0	0	0
Provisions	0.49	0.44	0.11	0.16	0.21	0.84
Tax provision	0	0	0	0	0	0.02
Dividend provision	0.4	0.4	0.11	0.14	0.19	0.72
Dividend tax provision	0.09	0.04	0	0.02	0.02	0.1
Total liabilities	19.28	18.98	19.2	21.08	24.32	30.1
Contingent liabilities						
Letters of credit	0	0	0	0	0	0.34
Total guarantees	0	0	0	0	0.01	2.75

REFERENCES

Agency FAQs. Oct 5, 2004; Cybermedia Announces Global Expansion with Multiple initiatives

Agency FAQs. Mar 21, 2006-a; Cybermedia Revamps 'Living Digital'

Agency FAQs. Mar 27, 2006-b; Cybermedia Launches Biospectrum Asia in Singapore

Annual Report of Cyber Media (India) Ltd. 2005

Biospectrum. Dec 31, 2004; About Cybermedia Research

Brand Reporter. Oct 15, 2005; Pg 28; Cybermedia - Advertise to Win

Business India. Jan 24, 1999; Pg 125; Views for News

Business India. Oct 24, 2004; Pg 29; Business in the News: Cybermedia

Business Line. May 30, 2001; Pg 9; Cyber Media School For Convergence at IMI

Business Standard. Mar 20, 2000-a; Pg 5; Ciol to Give up ISPs Infotech-Related Content

Business Standard. Mar 20, 2000-b; Pg 6; IT Portal Co Ciol Strikes Alliance with Indiatimes

Business Today. Dec 4, 2005; Pg 182; India's Most Valuable Private Sector Companies: the Other 500 -Cyber Media India Ltd (Ranks 710th in Business Today's 2005 Listing of India's Most Valuable Private Sector Companies)

Dalal Street Investment Journal. May 15, 2005; Pg 21; Cyber Media (India): A Good Quest (To Come out with a Public Issue in May 2005)

Data Quest. Jan 31, 1996; Vol. 5 ; Iss. 1 Pg 23; Pc Quest Launched in Nepal

Data Quest. Feb 15, 2000; Pg 57; Sizzlers 2000: Cyber India Online-A Company to Reckon with

Data Quest. Jul 31, 2004; Pg 192; Cybermedia is Top Business Publisher in India (In ABM-Business Strategic Group Report)

Data Quest. Sep 15, 2005; Pg 121; Cybermedia, CMP Announce JV

DQ Channels India. Mar 31, 2003; Pg 6; Cyber Media Launches DQ Week Mumbai Edition (To Reach Around 5,000 Re-Sellers in Western India)

DQ Channels India. Aug 15, 2004; Pg 8; Cybermedia Tops Indian B2B Publications

DQ Channels India. Dec 15, 2005-a; Pg 6; Chakra and Cybermedia Launch Cellphone Game-Packs (The game-packs support a wide range of java-enabled handsets.)

DQ Channels India. Dec 31, 2005-b; Pg 10; Cybermedia, Expomedia Join Hands in India

DQ Channels India. Feb 15, 2006; Pg 10; First Life Science Portal in Asia Launched

DQ Week. Nov 13, 2002; Pg 5; Cyber Media Enters Biotech Publishing

DQ Week. Aug 4, 2004; Pg 5; Cybermedia is Top Business Publisher in India

DQ Week. Oct 16, 2005; Pg 3; Cybermedia Digital Introduces CD-ROM & DVD of Encyclopaedia Britannica (For the Fifth Consecutive Year)

DQ Week. Feb 5, 2006; Pg 1; Cybermedia Q3 Up 28% (With Net Profit Of Rs17.68 Million for Oct-Dec 2005 Compared to Rs13.84 Million For Oct-Dec 2004)

Economic Times. Oct 21, 1995; Pg 13; Cyber Media Looks at Foreign Markets to Foster Growth

Financial Express. Mar 26, 2000; Pg 3; Gauge your Karma Index

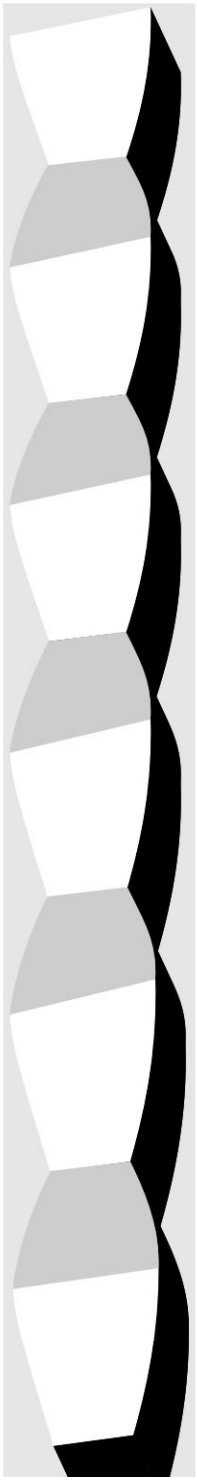
Financial Express. Aug 2, 2001-a; Cyber Media, IMI Join Hands to Set up School Of Convergence (Course to Cost Rs 3 Lac for Two Years)

Financial Express. Nov 19, 2001-b; Agrani switch to retail Britannica 2002 CD-ROM (first launch at superstore as part of tie-up)

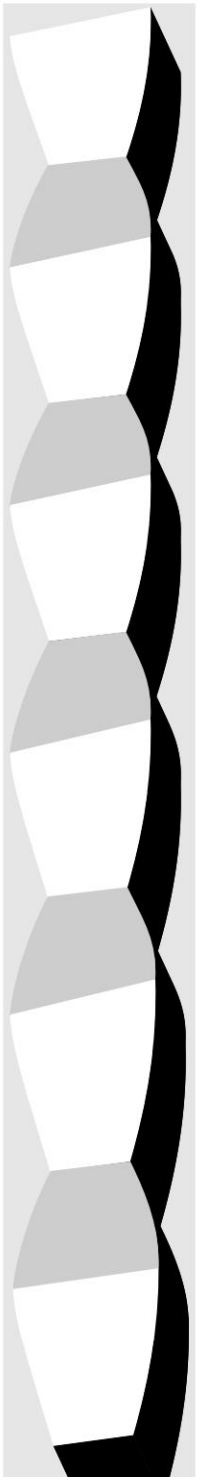
Financial Express. Dec 13, 2001-c; Cyber Media India surfs channels for small screen debut (Negotiations are on to commission IT-related programmes)

Financial Express. May 7, 2005-a; Pg 11; Cyber Media pledges flagship Dataquest Brand to raise funds (with State Bank of Mysore)

Financial Express. Nov 4, 2005-b; Pg 12; New BPO Magazine to be launched



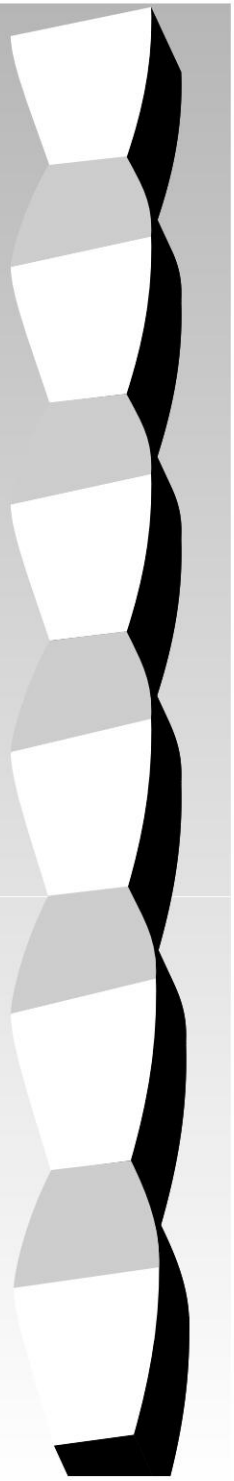
Fortune India. Nov 30, 2004; Pg 63; Cyber Media to raise Rs 17 Crore
http://about.cybermediadice.com/Accessed on 05.04.06
http://idcindia.com/about/about.htm Accessed on 05.04.06
http://idcindia.com/prodserv/consulting/consulting.htm Accessed on 05.04.06
http://idcindia.com/prodserv/gtm/gtm.htm Accessed on 05.04.06
http://idcindia.com/research/communications_research.htm Accessed on 05.04.06
http://idcindia.com/research/enduser_research.htm Accessed on 05.04.06
http://idcindia.com/research/hardware_research.htm Accessed on 05.04.06
http://idcindia.com/research/software_serv_research.htm Accessed on 05.04.06
http://idcindia.com/research/vertical_research.htm Accessed on 05.04.06
http://www.cybermedia.co.in/about_alliances.html Accessed on 05.04.06
http://www.cybermedia.co.in/about_milestones.html Accessed on 05.04.06
http://www.cybermedia.co.in/about_people.html Accessed on 05.04.06
http://www.cybermedia.co.in/business_media.html accessed on 05.04.06
http://www.cybermedia.co.in/business_media_services.html Accessed on 05.04.06
http://www.cybermedia.co.in/documents/analyst_conference_call_transcript.pdf dated 26th October 2005 Accessed on 05.04.06
http://www.cybermediadigital.com/aboutus.html Accessed on 05.04.06
http://www.cybermediadigital.com/aboutus.html#Profile Accessed on 05.04.06
http://www.cybermediadigital.com/aboutus.html#Values Accessed on 05.04.06
http://www.cybermediadigital.com/aboutus.html#Vision Accessed on 05.04.06
http://www.dancewithshadows.com/media/pwc-media-entertainment-report.asp Accessed on 06.04.06
http://www.pwc.com/Extweb/industry.nsf/docid/8CF0A9E084894A5A85256-CE8006E19ED? opendocument&vendor=#MP Accessed on 06.04.06
http://www.pwc.com/in/eng/ins-sol/publ/e_m_sec_rep.pdf Accessed on 03.04.06
http://www.schoolofconvergence.com/Accessed on 05.04.06
http://www.schoolofconvergence.com/Accessed on 05.04.06
Insight Media. Jan 24, 2004-a; Cyber Media Considering a New Magazine On BPO and ITES (New Magazine On BPO May be Named as BPOrbit)
Insight Media. Mar 12, 2004-b; Biospectrum Turns 1, Plans 2 More Editions
Insight Media. Aug 24, 2004-c; Cyber Media comes up with magazine on global outsourcing.
Insight Media. Oct 1, 2004-d; Cybermedia in Pact with Online Placement Service Provider Dice Inc
Insight Media. Oct 2, 2004-e; Cybermedia Plans Foray Abroad with 2 Publications
Insight Media. Sep 3, 2005; Cybermedia Inks JV With CMP Media to Create Global Outsourcing Portfolio
Insight Media. Feb 23, 2006; Cybermedia Buys 20 Pc Stake in US-Based Publishing Company, Sx2 Media Labs (and Shares Ownership of Computer Shopper)
Pitch. Oct 31, 2003; Pg 10; Media Marriages: Dealmakers Come to Town
The New Indian Express. Sep 30, 2004; Pg 13; Cybermedia Ties Up With Dice Inc (To Set up a Joint Venture Online Recruiting Firm in Bangalore)
Voice & Data. Nov 30, 2004; Pg 124; Cybermedia Goes to Sebi for a 17 crore IPO
Voice & Data. Oct 31, 2005; Pg 126; Cybermedia, CMP Media Announce JV



The McGraw-Hill Companies

Case 7

Suzlon Energy Limited—Riding on the Wind



From the design to the manufacturing and the actual operation of the sites, we do it all.

Tulsi Tanti, CEO

Suzlon Energy, Asia's fastest growing fully integrated wind-power company that ranked as the fifth largest in the world (Business Today, 2006), was promoted by Tulsi Tanti, and incorporated on April 01, 1995, with paid up capital of Rs 1 crore. Tulsi Tanti was primarily in the textile business and was introduced to wind energy through a wind power project that he commissioned for his textile factory (Economic Times 2006-b). Suzlon entered into a technical collaboration agreement with Sudwind GmbH Windkrafttanlagen of Germany in 1995 to source the latest technology for the production of Wind Turbine Generators (WTGs) in India (Financial Express, 1996). Sudwind GmbH Windkrafttanlagen was subsequently taken over by Sudwind Energiesysteme GmbH and a fresh agreement was entered into on September 30, 1996, under which Sudwind proposed to share technical know how relating to 0.27 MW, 0.30 MW, 0.35 MW, 0.60 MW and 0.75 MW WTGs in consideration for royalty to be paid on the basis of each WTG sold over the course of five years from the date of the agreement.

By 2006, Tulsi R. Tanti, promoter of Suzlon Energy, was named the fourth richest Indian with a net worth of Rs15,086 crore (Business Standard, 2005) and Suzlon had become India's leading manufacturer of Wind Turbine Generators, with accumulated sale of 1126 MW and 42.8% of the total capacity installed in India, mainly in the states of Tamil Nadu, Karnataka, Maharashtra, Rajasthan, and Gujarat. Besides manufacturing WTGs, Suzlon was also involved in wind resource mapping, identification of suitable sites and technical planning of wind power projects and provided after sale O&M services for WTGs. Suzlon's associate companies acquired sites that were identified as suitable for wind energy projects, which were then sold or leased to customers, and technical implementation of wind farms was undertaken. This included infrastructure development, installation of WTGs, and connection to power grids. It also drew up power purchase agreements with the state electricity boards. The company built the mills and charged 1% of total investment annually to maintain and operate the windmill, yielding 12-16% return (Times Of India, 2006). Tulsi Tanti intended to control the entire wind turbine generator space through vertical integration by establishing facilities to produce Suzlon Energy's needs for rotor blades, turbines, gearboxes, forgings, rings, shafts, and towers to reduce dependency on outside vendors, and control costs (Daily News & Analysis, 2006).

THE PRODUCT—WIND TURBINE GENERATOR

Suzlon designed, developed, and manufactured cost-efficient Wind Turbine Generators, including key components such as rotor blades, control panels, nacelle cover, and tubular towers. A wind turbine generator, or WTG, obtains its power input by converting the force of the wind into torque (turning force) acting on the rotor blades. The amount of energy that the wind transfers to the rotor blade depends on the density of the air, the rotor area, and wind speed (Exhibit 1).

The power generated by the WTG, usually at a voltage of 690 volts, is converted by a transformer to a "medium" voltage of 11 kV to 33kV – depending on the grid operator – and supplied into the grid. When several WTGs are operated together on a wind farm, the operator must ensure that turning on or stopping the WTGs does not cause electrical surges to be fed into the utility's power grid, which could cause damage when the electricity reaches end-users.

The kinetic energy of a moving body is proportional to its mass. The kinetic energy in the wind thus depends on the density of the air, i.e. its mass per unit of volume. In other words, the "heavier" the air, the more energy is received by the turbine. Further, air is denser when it is cold than when it is warm. However, at higher altitudes, such as in mountainous regions, air pressure is lower and, as a result, the air is less dense.

Wind turbines use the power of the wind to generate energy. This happens when the blades on the rotor capture the wind, which makes them turn. The rotor area determines how much energy a WTG is able to harvest from the wind. Since the rotor area increases with the square of the rotor diameter, a WTG of a given size receives four times as much energy as a WTG half its size. Wind speed is extremely important as that determines the amount of energy a wind turbine can convert to electricity. The energy content of the wind varies with the cube (the third power) of the average wind speed, i.e., if wind speed is twice as fast, it contains eight times as much energy.

A WTG comprises a tower (or mast), a nacelle, which contains the essential mechanical and electrical parts, and a rotor blade. However, the generation of electricity by a state-of-the-art WTG is a result of the specific interplay of various highly developed and synchronised components. The technical achievement in developing a WTG lies in harnessing the wind, the speed of which changes continually, and the power of which fluctuates depending on the air temperature, to generate a stable level of power regardless of wind conditions. The goal of the technical efforts and optimisation, therefore, is to generate the highest possible constant level of power output from all types of wind conditions. To achieve this:

(a) the height of the WTG's hub must be optimised in order to balance the increased expenses associated with taller hubs and the higher wind speeds a taller hub can utilise.

(b) the rotor blades must extract the maximum amount of energy from the wind and convert it into torque.
(c) the drive train along with the gear and the generator must efficiently convert the captured energy to electricity with as little capacity lost as possible.
(d) the power output of the WTG must be limitable to prevent damage to the turbine and adjustable to cope with the entire range of possible wind speeds.
(e) the controlling electronics of variable-speed WTGs must control the interplay of all components and optimise the amount of energy captured from the wind.
(f) the WTG turbine and its individual components must have the strength to withstand the forces acting on it and to seek to achieve optimal operation for the longest possible time.

In addition, micro-siting the location of each WTG in the wind farm is also a key factor, as too much space between WTGs will decrease the amount of wind intercepted while too close a spacing will lead to interference, resulting in downwind units being less productive **(Exhibit 2)**.

Wind turbines consist of four large main components: a foundation unit, a tower, a nacelle (turbine housing), and a rotor. In principle, the foundation unit takes the form of a giant concrete block buried in the earth. The nacelle is positioned at the top of the tower, and the rotor is attached to the front of the nacelle. The principal task of the tower is to raise the nacelle high into the air because the wind speed — and thus the power of the wind — is much greater 50–100 metres above the ground. The tower is also used to guide the cables from the nacelle down to the electrical grid in the ground. The nacelle contains the large primary components such as the main axle, gearbox, generator, transformer, control system, and electrical cabinet. The rotor consists of a hub to which three blades are attached.

When no wind is blowing, the turbine will adjust the blades to an angle of 45º, which is the position in which the turbine can draw as much energy as possible from gentle winds. The blades begin to turn very slowly, without generating any energy. This is known as "idling". When there is sufficient wind for the turbine to start generating energy — normally at wind speeds of around 4 metres per second, the blades will gradually start to rotate longitudinally towards an angle of 0º, which means that the broad surface of the blade is facing into the wind. When the wind strikes the blade, it generates overpressure on the front surface of the blade and under pressure on the reverse. In other words, the wind pushes onto the front surface and simultaneously generates a suction effect across the rear surface, and it is this difference in pressure that makes the rotor turn. Wind turbines typically generate energy at wind speeds of 4–25 metres per second. When turbines are generating electricity, the rotor speed is 9–19 rpm, depending on the wind speed and the turbine type. At the maximum speed of revolution, the blade tips reach a speed of 250 km/h.

The wind causes the rotor to turn, converting the energy in the wind into rotating, mechanical energy. This rotating, mechanical energy is channelled to a gearbox in the nacelle. From there, the energy flows to a generator, where it is converted into electrical energy. The purpose of the gearbox is thus to convert the slow speed of rotation of the blades into the high speed of revolution of the generator. This conversion is performed at a ratio of 1:100, which means that if the blades are rotating at a speed of 15 revolutions per minute, the generator will rotate at 1500 revolutions per minute (depending on the type of turbine). Through this process, the generator converts mechanical energy into electrical energy. The electrical control system in the turbine links up the generator, leading the electrical output generated through a high voltage transformer to the grid, which supplies current to point of consumption.

The Rotor Blades

The rotor blades form the motor of the WTG, which uses the rotor blades to collect kinetic energy from the wind and to convert this energy into a rotation of the rotor. The area swept by the rotor blades, the aerodynamic profile of the rotor blades, and the rotational speed of the rotor are the key factors determining the capacity of

the WTG. In WTGs with stall-regulation, the rotor blades are fixed to the hub, whereas in WTGs with pitch-regulation, they are attached so that they can rotate along their longitudinal axis. Most of the WTGs were manufactured almost exclusively with three rotor blades.

Energy Conversion *via* the Drive Train and Generator

Wind turbines are designed to ensure that their rotors always face into the wind. A wind vane positioned on the top of the nacelle controls this process. This instrument determines the direction of the wind – just like a weather vane. When the wind changes direction, a contact is activated in the wind vane, initiating the motors that turn the turbine into the wind. This is known as yaw. Turbine blades can also "pitch" — i.e. turn on their longitudinal axes to adjust to the wind speed. This ensures that the blades always capture as much of the power of the wind as possible, thus generating as much energy as possible. Wind turbines are designed to function optimally in wind speeds of 4–25 metres per second. In other words, turbines will always reap the maximum amount of energy from the wind at wind speeds within this range. The volume of energy a wind turbine can generate depends on factors such as the size of the generator, the dimensions of the rotor, and the strength of the wind. For example, a V90-3.0 MW turbine, which has a rotor diameter of 90 metres, starts to generate power in wind speeds as low as 4 metres per second, and achieves its maximum power output (3 MW) at 15 metres per second. When the wind speed reaches 10–12 metres per second, the blades will rotate longitudinally away from the wind slightly to prevent the turbine generating more energy than its components are dimensioned for. This is known as output regulation.

Depending on the technique employed to regulate and limit their capacity, WTGs are generally classified as stall-regulated or pitch-regulated.

Stall Regulation In a WTG with stall regulation, power regulation is achieved by causing the air flow to stall by means of the aerodynamic profile of the blade when a certain wind speed is exceeded, preventing the WTG from capturing an increasing amount of energy. In order to increase the energy yield in lower power classes, it is possible to design the generator in such a way that it can operate two different nominal rotational speeds in order to generate power more efficiently at various wind speeds. Stall-regulated WTGs are braked through the front 1.5 m to 3 m of the relevant rotor blade that can be rotated around its longitudinal axis. This is achieved through a hydraulic mechanism, which can turn the blade tip "out of the wind", acting as a type of aerodynamic brake similar to the landing flaps of an airplane. The brakes in every WTG serve as emergency brakes and, similarly to the hand brake in a car, to immobilise and secure the mechanical components. Stall regulation may be active or passive.

1. *Passive stall:* The turbine operates with a constant speed of revolution and has non-adjustable blades. In this case, aerodynamics will force the blade profile to stall, i.e. to generate turbulence, which limits uplift and thus stops the turbine drawing energy from the wind. This will occur at wind speeds in excess of 12–15 m/s, depending on the turbine type.
2. *Active stall:* The turbine operates with a constant speed of revolution but has adjustable blades. In this case, the turbine regulates output by turning the rear edge of the blades into the wind to produce a stall effect at wind speeds in excess of 12–15 m/s.

Pitch Regulation In a WTG with pitch regulation, power regulation is achieved by mounting the rotor blades on the hub so that they can be rotated around their longitudinal axis, in order to control their aerodynamic properties and thus their capacity to capture energy according to the wind conditions. When wind speeds (and thus the wind's energy content) are low, the rotor blades can be turned "into the wind" so that their angle of attack is maximised and, when a strong airflow creates too much energy, they can be turned out of the wind.

Pitch-regulated WTGs are braked by allowing the rotor blades to flap like flags in the wind. In addition, the nominal rotation speed of the generator in WTGs with pitch regulation can be adjusted to the prevailing wind conditions. These WTGs are therefore also described as variable-speed WTGs. In these units, an inverter is installed between the generator and the power grid, which enables the generator to generate electricity at different frequencies. In variable-speed WTGs with pitch regulation, the electronic controls are the "brain" of the WTG and adjust the angle of incidence of the rotor blades with the generator to keep them working smoothly together. The electronic controls measure the generator's power output and, through the pitch regulation, adjust the angle of incidence of the rotor blades accordingly. If the generator's power output appears to be dropping, the rotor blades are turned slightly more into the wind, but if the generator's power output exceeds a pre-defined maximum limit, the electronic controls cause the pitch regulation system to turn the rotor blades out of the wind. The use of pitch regulation and the related control options ensures that the wind turbine manufactures the maximum possible energy output from the wind in all wind conditions, taking into account not only variable wind speeds, but also the energy density of the wind. The colder the air, i.e. the denser the air surrounding the WTG, the higher the energy density. Consequently, cold wind blowing at the same speed as a warm wind carries more kinetic energy than warm wind. In order to obtain optimal energy output, the angle of incidence of the rotor blades can be adjusted as necessary. The advantages inherent in this method for the optimisation of output, in turbines with a capacity of approximately 1.5 MW or more or in regions with particularly difficult wind conditions, outweigh the substantial additional costs of-pitch regulated systems.

If the wind reaches speeds in excess of 25 metres per second, the turbine stops because such speeds place too much strain on turbine components. At the same time, wind speeds only rarely exceed the stop limit, so there is little need to generate energy from winds blowing at higher speeds. It would therefore be prohibitively expensive to design a model that could handle such high wind speeds. When wind speeds exceed 25 metres per second, the blades pitch to 90º, which means that the leading or rear edges of the blades (depending on the output regulation principle applied) point directly into the wind. This makes the blades function as giant air brakes, slowing the turbine down until it comes to a complete stop.

The rotor blades are attached to the hub, which in turn is connected to the rotor shaft. The rotor shaft transfers the revolutions of the rotor to a gear, which itself is linked to the generator of the WTG by way of a coupling. The unit comprising the rotor shaft, gear, and generator is termed the drive train of the WTG. The generator at the end of the drive train converts the revolutions of the rotor blades into electrical power. The WTG's gear serves to increase the rotational speed of the rotor to match the speed of the generator. Depending on the technical design, the generator can be operated either at a constant rotational speed (stall regulation), or at a variable speed.

Other Wind Turbine Components Another component is the support system, i.e. the tower of the WTG. Strong forces act on the mast over the entire life of the WTG; the nacelle of large models, the 2.0 MW S.88, could weigh approximately 67 tonnes, and its rotor blades approximately 30 tonnes. The tower has to withstand these forces and provide a secure foundation to the nacelle and the rotor without swaying due to changes in wind force, as this would result in the destruction of the WTG.

Suzlon manufactured a wide range of models from the S.33 with 0.35 MW nominal output to the S.88 with 2.0 MW nominal output. Apart from nominal output and size, the WTGs varied in technology used for output regulation–the smaller turbines used less complex stall regulation technology, while the larger turbines of 0.95 MW and above were equipped with pitch regulation. The advantage offered by the higher energy yield of pitch regulated models compensated the higher cost associated with pitch regulation. All WTGs featured an advanced control system that included precisely calibrated sensors that monitored factors such as temperature, wind speeds, and vibrations. Rotor blades were manufactured using the advanced Vacuum Assisted Resin

Infusion Moulding (VARIM), which resulted in each rotor blade having a lower weight-to-swept area ratio that assisted in reducing the cost per kWh of energy produced by the WTG.

Suzlon also manufactured the Mega Watt and Multi Mega Watt class WTGs. In the Multi Mega Watt series, the S.88, 2.00 MW was the largest capacity manufactured. This model had a rotor diameter of approximately 88 metres, with a swept area of 6,082 square metres. It had a three blade rotor, each approximately 42 metres in length, a cut-in wind speed of 4 m/s and could stay in operation up to a cut-out wind speed of 25 m/s, while reaching its rated output at approximately 14 m/s. The S.88 had electronic pitch regulation mechanism with three independent drives that turned the blades on its own axis to optimise and regulate the power output of the WTG. It was also equipped with a yaw system based on polyamide slide bearings and electrically driven yaw drives to adjust the direction of the WTG depending on the direction of the wind.

Suzlon's manufacturing was concentrated in Diu, Daman, and Pondicherry, with installed capacity of 100 WTG, 420 WTG and 720 WTG, respectively. Daman and Pondicherry facilities also manufactured nacelle covers and rotor blades (420 and 790 sets respectively), while control panels were manufactured only at Daman.

SERVICES—WIND FARMS

Suzlon provided "integrated wind energy solutions" to customers. These solutions covered the entire technical value chain, from the identification of suitable sites and the planning of wind farms to their technical implementation. For a 1.25 MW WTG project, 2-3% cost was incurred in acquiring the land, 16-20% in infrastructure development and the balance was the cost of the WTG.

Suzlon developed and implemented several large-scale wind farms throughout India. The advantage of wind farms was primarily related to expected economies of scale. The larger the wind farm, the greater the number of WTGs that could be installed, leading to project costs being lower on a per WTG basis. Similarly, larger projects had lower operations and maintenance costs per kilowatt-hour due to efficiencies obtained in managing a larger wind farm. According to a study by the American Wind Energy Association dated February 2005, assuming the same average wind speed of 18 mph and identical WTG sizes, a 3.00 MW wind project delivered electricity at a cost of approximately US$ 0.059 per kWh while a 51.00 MW project delivered electricity at approximately 40% less cost at US$ 0.036 per kWh. Detailed study on wind energy resources in India for the installation of wind power projects was started in 1986 by the MNES and CWET. The programme involved the identification of locations with strong winds that were close to electricity grids and had adequate land available nearby for prospective wind power projects. Once these were identified, wind-monitoring stations were established and data on wind speed and direction was collected and processed over time, at various heights in a particular location. The data collected by CWET was used by Suzlon to conduct wind resource mapping activities in areas, which were suitable for wind farms. Subsequently, their associate companies started the process of land acquisition and infrastructure development activities, and WTGs, including rotor blades and towers, were installed and commissioned. Operations and maintenance services for wind farms developed were also provided (**Exhibit 3**).

Planning wind farms included identifying suitable sites based on wind resource data collected from both Government sources and from own independent studies, inspecting the sites, calculating capacity levels, analysing project feasibility, and the availability of power transmission facilities. Once sites were identified, land was acquired from either Government or private land. For Government land, Suzlon or their associated companies applied to the relevant state governments for the allocation of land for wind power projects according to the current policies in those states. In cases involving the acquisition of land classified as "forest land", the

relevant government department was approached for the diversion of the forest land under the applicable policies for such diversion so that it could be used for wind power projects. Upon obtaining these approvals, plans and designs were developed to make the land suitable for wind power projects.

The design process of a wind farm required bringing together the individual WTGs and electrical components into an integrated solution while taking into account safety and capacity factors. Micrositing involved the identification of the exact locations where a WTG could be installed, taking into consideration the requirements of distance between two WTGs. Micrositing helped maximise land utilisation at each suitable site and assisted in optimising power generation at each site. The associate company SIL did infrastructure development and installation of WTGs. This included building of approach roads, evacuation facilities such as transmission lines to the nearest sub-stations — in some cases sub-stations as well, and levelling of land for WTG tower foundations. First, the tower was erected, after which the nacelle, hub, and rotor blades were positioned and assembled with the aid of cranes. The final steps were the installation of electrical components, grid connections, and commissioning. Each of the WTGs erected at the larger wind farm sites were connected to a CMS that was used for O&M activities.

O&M services were offered for WTGs, which included round-the-clock remote and on-site monitoring, maintenance and repair of the WTGs. The service package included preventive and planned maintenance of WTGs, transformers, and related structures. Free repair and maintenance services were provided for periods generally ranging from one to three years after commissioning the WTG. After the free maintenance and repair period, Suzlon provided O&M services to WTG customers through SWSL, pursuant to agreements, with terms ranging from as short as one year to as long as 17 years, with the typical term being from three to five years.

Some of the wind farms commissioned by Suzlon included :

Vankusawade Located on a mountain plateau 1,150 metres above mean sea level in the Satara District of Maharashtra, this site was located on one variable and rugged terrain with a length of approximately 29 kilometres and was Asia's largest Wind Farm. Suzlon installed and commissioned 556 WTGs of 0.35 MW each and seven WTGs of 1.00 MW each for various customers. A 220/33 kV sub-station was also constructed at this site with a capacity of 150 MVA.

Kovdya Dongar Kovdya Dongar is approximately 80 km from the town of Pune, Maharashtra. The site was located on a plateau, 950 metres above mean sea level altitude, and had high south westerly winds for a large part of the year because of its vicinity to the sea and its altitude. Suzlon installed and commissioned 57 WTGs of 1.00 MW each for various customers. A 110/33 kV sub-station was also constructed at this site with a capacity of 100 MVA.

Sankeneri Located in Tamil Nadu near Kanyakumari with a planned capacity of up to 500 MW. Suzlon installed and commissioned one WTG of 2.00 MW, 212 WTGs of 1.25 MW, one WTG of 1.00 MW, and five WTGs of 0.35 MW. A 220/33 kV sub-station was also constructed at this site with a capacity of 100 MVA.

Jaisalmer Located at Jaisalmer in the State of Rajasthan, this site had installations of over 160.00 MW consisting of 82 WTGs of 0.35 MW, 7 WTGs of 1.00 MW, and 106 WTGs of 1.25 MW. A 220/33 kV sub-station was also constructed at this site with a capacity of 100 MVA.

Chitradurga Located at Jogimatti, Taluka Chitradurga in Karnataka, at 1,120 metres above sea level. The terrain of the site was hilly plateau; and was located around 7 kilometres from Chitradurga accessible from the Bangalore-Mumbai highway. The total area of the wind farm site was 4.76 hectares, which was

suitable for a 20 MW wind farm. Suzlon installed and commissioned 19 WTGs of 1.25 MW each. A 33/66 KV sub-station was also constructed at this site with a capacity of 25 MVA.

Suzlon was in the process of completing a 1,000 MW Wind Park at Dhule, 30 Kms from Nundurbar in Maharashtra, which would be the world's largest Wind Park.

CUSTOMERS

Suzlon had three categories of customers—companies that had manufacturing units with high power consumption; companies with high profitability seeking investment opportunities with stable returns and that offered tax benefits; and power utilities and state nodal agencies. Some major customers were Alembic Ltd., Amarjothi Spinning Mills Ltd., Amarjothi Power Generation and Distribution Co. Ltd., Godrej Agrovet Ltd., Maharashtra Seamless Ltd., Revathi Equipment Ltd., Savita Chemicals Ltd., Shriram City Union Finance Ltd., Tamilnadu Newsprint & Papers Ltd., Bajaj Auto Limited, Ellora Time Ltd., the Ramco Group, Vishal Exports Overseas Ltd., Godrej Industries Limited, MSPL Limited, and REI Agro Ltd. In international markets, the first order was to supply 24 WTGs with 22.80 MW of total installed capacity for DanMar and Associates Inc., which developed a wind farm project in the state of Minnesota in the United States. The largest customer contributed more than 10% of the revenue (Rs 1,962.4 million), and the ten largest customers, excluding the top customer, approximately 26% (Rs 5,036.9 million).

SUPPLIERS

Most of the components were manufactured in-house as Suzlon was an integrated company. In March 2006, Suzlon bought Hansen of Belgium, the second-largest manufacturer of wind turbine gearboxes in the world for euro 465 million (Economic Times, 2006-a). The acquisition helped Suzlon to integrate gearbox technology into total turbine solution, making its product more reliable and competitive, and extend its reach across Belgium and Asia (Business India, 2006 & Business World, 2006). Other components such as generators, towers, bearings, and castings were procured from several different manufacturers either on a purchase order or through negotiated supply agreements. To minimise the risk regarding availability of key components and competition, Suzlon entered into exclusive supply agreements with suppliers, and they in turn maintained a minimum level of inventory to meet Suzlon's demand. Suppliers were given advances on orders, ranging from 5-25% of the value of orders placed, depending on the supplier and the components involved. Imported raw materials accounted for 50% of the total raw material cost.

Raw materials for rotor blades, such as glass fibre, foam, and epoxy resin were sourced from Saertex Wagener GmbH & Co. KG, Owens Corning Enterprise (India) Pvt. Ltd., and Saint-Gobain Syncoglas N.V. These raw materials were in the nature of commodities, and could be sourced from other suppliers in the event the suppliers failed to meet the manufacturing needs. Rotor blades for 0.35 MW WTG model were sourced solely from LM Glasfibre (India) Pvt. Ltd., the market leader for rotor blades, since the company met the requirements of product quality and technical standards.

The chief supplier of tubular towers for India was Barakath Engineering Industries (P) Ltd., with whom Suzlon entered into a five-year supply agreement for tubular towers. Gearboxes were supplied by Winergy AG, which was the market leader in gears for WTGs. The main suppliers of generators and generator components were Siemens Ltd. of India, Elin EBG Motoren GmbH.

Winergy AG. Gear rims and slewing rings were procured from IMO Momentenlager GmbH, brake callipers from Svendborg, Brakes A/S and yaw and pitch drives from Bonfiglioli Riduttori Spa, bearings for WTG hubs from FAG Bearings India Ltd. and SKF India Ltd., while castings from Patel Alloy Steel (P) Ltd.

STRUCTURE

Suzlon integrated consultancy, design, manufacturing, operation, and maintenance services to provide customers with total wind power solutions. The growth of the firm has taken place through their domestic and international subsidiaries, and a series of agreements. On 10th April 2001, Suzlon entered into an agreement with Enron Wind Rotor Production B.V. for the acquisition of the moulds and the production line and technical support and assistance for the production of the rotor blade type APX 60-P in India for a consideration of Euro 500,000. Enron granted rights for the manufacturing, marketing, and dealing with the products for an indefinite period. On 4th June 2001, Suzlon entered an agreement with Aerpac B.V. and obtained non-exclusive, non-transferable licence for an indefinite period for the manufacturing, marketing, dealing, and servicing of APX-60 type blades from them for consideration of Euro 200,000.

The parent company managed and coordinated the business activities of the subsidiaries, undertook product development activities, made decisions on manufacturing locations, identified sites, and conducted technical planning for wind farms.

SUBSIDIARIES

The company had seven domestic subsidiaries, six overseas managing subsidiaries, three research subsidiaries, and one overseas manufacturing company (**Exhibit 4**).

Domestic Subsidiaries

Suzlon Windfarm Services Limited (SWSL) This is a wholly owned subsidiary of the Company, was incorporated on July 27th, 1998, in the state of Gujarat, later shifted to Pune, for providing Operations and Maintenance services for WTGs. Suzlon entered into an agreement with SWSL on July 1st, 2005 and appointed SWSL as the operations and management contractor for O&M services. Under the agreement, SWSL would provide routine maintenance, security services, management services, technical services, and 24-hour preventive maintenance for the customers as part of the "total solutions" package provided by Suzlon. The company operated nine WTGs at Rajasthan and Andhra Pradesh.

Suzlon Generators On May 7th 2004, Suzlon executed a 75:25 joint venture agreement with Elin EBG Motoren GmbH of Austria for setting up a unit, Suzlon Generators for the development, manufacture, and supply of generators to the Company with the objective of reducing costs of imports and achieve backward integration. Under the agreement, Elin agreed to share technical information and raw material requirements to facilitate identification of the supplier and vendors in India. The intellectual property and design rights developed by the Suzlon Generators would vest with the Suzlon Energy. However, Suzlon Generators was entitled to use these rights exclusively for the manufacture of permanent magnet generators. Suzlon Energy purchased the entire production of Suzlon Generators at a fixed mark-up to the cost of production. On September 5, 2005, in-house manufacturing of generators for WTGs commenced on trial basis.

Suzlon Structures As part of the backward integration strategy, Suzlon periodically evaluated the feasibility of entering into joint venture agreements with partners who had developed expertise in the manufacture of key WTG components. On May 25th 2004, Suzlon Structures Private Limited was incorporated as a subsidiary of the company as a 75:25 partnership with the Kalthia group for manufacturing

tubular towers at Gandhidham, Kutch district in the State of Gujarat. Suzlon Structures was a joint venture with the Kalthia Group for the design and manufacture of tubular towers, which were best suited for the higher and heavier WTG installations. Suzlon provided management support to Suzlon Structures while the Kalthia Group had operational responsibility for the manufacturing plant.

Suzlon Green Power Limited or SGPL It was incorporated on January 25, 2000 in the state of Gujarat for setting up independent power projects with the primary aim of undertaking pilot wind farm projects to test and prove the commercial viability of WTGs. SGPL installed WTGs with a total installed capacity 5.80 MW in Maharashtra and Rajasthan.

Suzlon Gujarat Wind Park Limited It was incorporated on July 5, 2004 in the state of Gujarat and became a wholly owned subsidiary of the Company effective April 2, 2005. It was engaged in the business of setting up of wind-farms projects in Gujarat to take advantage of the regulatory environment that provided incentives to providers of renewable energy sources.

Suzlon Power Infrastructure Private Limited It was incorporated on June 10, 2004 in the state of Tamil Nadu and became a wholly owned subsidiary of the Company effective April 2, 2005. It was engaged in the business of building infrastructure for evacuation of power out of wind power projects. The firm constructed power transmission facilities to connect wind farms to provide grids through the construction of sub-stations and transmission lines.

Suzlon Engitech Private Limited
It was incorporated on May 3, 2001 in the state of Maharashtra and became a wholly owned subsidiary effective June 27, 2005. It was engaged in the business of manufacturing of engineering products.

SE Drive Technik GmbH It was incorporated on July 16, 2005 as a wholly owned research and development subsidiary in Germany to undertake the design, development, and manufacture of gear boxes prototypes for WTGs.

Overseas Subsidiaries-Manufacturing

Suzlon Rotor Corporation was incorporated on August 10, 2005 as a wholly owned subsidiary, in the United States of America in order to reduce the logistics costs of supply of products to these markets. Suzlon was planning to set up a rotor blade manufacturing facility at Pipestone, Minnesota, USA.

Overseas Subsidiaries—Managing & Demonstration

Suzlon Windpark Management GmbH, was incorporated as a wholly owned subsidiary in Germany to undertake the management of WOG, which was acquired in collaboration with SEG.

Windpark Olsdorf WATT GmbH & Co. KG ("WOG") was acquired through SEG and Suzlon Windpark Management GmbH. WOG had all the rights, claims, contracts and private and public permits to develop property in Germany and to use this property for the installation of a WTG with a power rating of up to 2.30 MW. WOG was a vehicle to install and demonstrate the 2.00 MW series WTG in Germany.

Overseas Subsidiaries—Marketing

Suzlon Wind Energy Corporation To establish a presence in the United States, which is among the top three wind energy markets in the world in terms of cumulative installations, Suzlon Wind Energy Corporation (**SWECO**) was incorporated at Delaware in 2001. The firm targeted companies interested in investing in renewable energy sources; utilities; wind energy project developers; and municipalities, schools and cooperatives interested in establishing captive power facilities. They focused on establishing ongoing business relationships with a core group of key customers, strategic investors, and financial investors, with a view to gaining access to wind power projects that these entities proposed to undertake, as well as securing exclusive WTG supply agreements with them. Direct sales efforts were focused in three high-potential growth geographic areas: the Midwest, the South (Texas, Oklahoma), and the West (California). SWECO assisted customers in obtaining project finance and provided technical services relating to the installation, and O&M of WTGs. The firm had successfully installed 24 WTGs with 22.80 MW of nominal output for a wind farm project developed by DanMar and Associates Inc. in the state of Minnesota in the United States. On 25th July 2002, SWECO incorporated Cannon Ball Wind Energy Park, a wholly owned subsidiary for setting up a wind power project in North Dakota, USA. In September 2006, SWECO finalised an agreement with John Deere Wind Energy (JDWE) to supply 247 MW in wind turbine capacity. The order, comprising 30 units of the S64-1.25 MW turbine and 100 units of the S88-2.1 MW turbine was to be delivered throughout 2007.

Suzlon Energy A/S or Suzlon Denmark A wholly owned subsidiary, this was incorporated in August 2004 to supervise the international (non-India) marketing activities of the company, as Denmark is a recognised centre for the global wind energy business. The choice of Denmark as the hub for the international expansion was based on several considerations. The Danes had many years of experience of wind turbine technology, both on the manufacturing side as well as the supplier side, and with the extensive research carried out at universities, Denmark gained a leading position within the wind turbine domain. This expertise got embedded at Suzlon's international business headquarters in Denmark, where the subsidiaries in the US, Australia, China, and Europe would benefit from extensive management experience complemented by competences in specific wind engineering disciplines, project execution, operations, service and maintenance, and financial engineering.

Suzlon Energy Australia Pty. Ltd., or Suzlon Australia This was a wholly owned subsidiary of Suzlon Energy A/S that was incorporated in January 2004 to establish a presence in the emerging Australian market for WTGs.

Research & Development Subsidiaries

Suzlon Energy GmbH, or SEG, engaged in developing and launching new WTG models was incorporated as AX 215 Verwaltungsgesellschaft mbH in 2001 and became a wholly owned subsidiary in 2002. WTG employed just 25 people and the design team was headed by T. Sphere, who had over 20 years of experience in the wind energy industry. SEG designed and developed new WTG models and focused on upgrading and increasing the cost-efficiency of existing WTG models. The company focused on increasing energy generation at lower cost without sacrificing product quality. They developed and commercially manufactured 1.00 MW, 1.25 MW and 2.00 MW WTG models. SEG also developed the design for MegaWatt and Multi MegaWatt WTGs and was developing prototypes for 1.50 MW and 2.10 MW WTG models. Further, SEG was involved in customising the various WTG components to suit different climates, ranging from India's tropical climate to the extreme cold of northern Minnesota. The entire electronic control circuits were designed with higher

thermal tolerances in order to cope with India's high ambient temperatures, while electrical and electronic systems were upgraded to withstand surges and power fluctuations.

AE Rotor Holding B.V. This was incorporated on June 8, 2001 in the Netherlands. AERH was a holding company for its wholly-owned subsidiary, AE Rotor Techniek B.V. AERT, a wholly owned subsidiary of AERH, was incorporated in 2001 to engage in the development of technology for rotor blades, a key component of WTGs. Moulds and prototypes for rotor blades were designed by AERT, which were then built by the engineering teams in India and used in the manufacturing facilities. AERT designed and developed rotor blades, a critical component of WTGs, for 1.25 MW and 2.00 MW WTGs., and also designed the moulds and tooling used for rotor blade manufacturing. The centre worked closely with various universities on the development of new blade designs and engineering solutions, based on latest Resin Infusion Moulding (RIM) techniques. This resulted in enhanced aerodynamic efficiency, by making the blades lighter in weight while increasing their strength, which in turn reduced the load on the Wind Turbine, translating to higher returns on investment for customers. AERT provided on-line support to the mould, rotor blade, and nacelle cover manufacturing units in India and conducted various training programmes in the Netherlands and in India for employees. AERH employed only 24 people, including employees at AERT. William Verheij, who had over 29 years of experience in rotor blade design and engineering, headed the rotor blade design team. On 1st November 2002, Suzlon entered into a product development and purchase agreement with AERH to procure designs for moulds and plugs of nacelle cover, and designs for moulds and plugs of nose cone for the 1.25 MW WTG. Under this agreement, AERH carried out the required product development and provided all documents, research, information, and designs, etc. to Suzlon in relation to the same. As per the agreement, if the products developed did not match the internationally accepted standards or were not as per specifications, AERH had to reimburse the claims made by customers owing to such failure. AERH was prohibited from entering into any agreement that could be in conflict with the agreement.

Associated Companies

Sarjan Realities Limited, or SRL, was engaged in acquiring land for wind farm projects by way of either purchase or lease. SRL held such land until a customer executed a purchase order and thereafter sold/leased/sub-leased portions of such land to customers. SRL also operated two 0.35 MW WTGs in the state of Maharashtra.

Suzlon Infrastructure Limited, or SIL, was engaged in developing wind farm related infrastructure and project execution and management for customers on the land acquired by SRL. The laying of foundations for WTG towers, the construction of the control rooms, transformers, evacuation facilities, electricals, approach roads, erection and commissioning of WTGs, and all other functions relating to the construction and development of the relevant wind farm site were handled by SIL. SIL also owned two 0.35 MW WTGs in Maharashtra and five 1.25 MW WTGs in Tamil Nadu.

Shubh Realty (South) Private Limited and *Shubh Realty (Gujarat) Private Limited* were also performing land acquisition activities.

Strategy

Suzlon strived to strengthen their position in India as a provider of integrated wind energy solutions, and to expand globally. To achieve this objective Suzlon wanted to expand the WTG product line and improve existing models, particularly in the MW and multi-MW class, and development and construction of a gearless 1.25 MW WTG and WTGs with 1.50 MW and 2.10 MW capacity, as well as improved control systems for

current WTG models. In order to lower manufacturing cost, have greater control over the supply chain for key WTG components, and enable quicker and more efficient assembly and delivery of WTG components, Suzlon began manufacture of rotor blades in-house in March 2005; tubular towers through the 75% owned subsidiary, Suzlon Structures; and generators through the 74.9% owned subsidiary, Suzlon Generators in September 2005.

To improve the cost-efficiency of generating power from wind energy, Suzlon focused on designing and developing more advanced WTGs, identifying sites which offered optimal wind conditions for WTG installations, reducing manufacturing and infrastructure costs, and by decreasing ongoing operating costs for customers. They started constructing additional manufacturing facilities for key WTG components, and planned construction of rotor blade and tubular tower manufacturing facilities in the United States, in order to meet increasing demand for wind energy projects in certain regions of North America. This would enable them to reduce costs associated with the transportation and delivery of these key, but quite large, WTG components.

Suzlon also attempted to expand their global presence while retaining strategic focus on the Indian market. The international target markets were North America, in particular the United States, which had many sites that offered optimal wind conditions for WTGs and also offered tax incentives for power generated by WTGs; China, where the level of demand for energy was high and where the government encouraged the development of renewable energy sources; and Australia, which had sites with optimal wind conditions and where the government declared its intent to encourage a sustainable and internationally competitive renewable energy industry.

Global Standing

The trends in the wind energy sector indicated a continuous scaling up of wind turbine generators. The demand for wind turbines outstripped supply, primarily due to the scarcity of key components. This contributed to the increasing price of WTGs, thus resulting in wind turbine manufacturers expanding capacity. The WTG market was characterised by strong concentration among a small group of manufacturers (**Exhibit 5**). Wind power projects around the world were getting larger in size and scale. The customer profile was undergoing a shift towards larger customers such as utilities and large energy companies. The Kyoto Protocol came into force on 16th February, 2005. The Kyoto Protocol laid down a worldwide target for reduction in the global emission of greenhouse gases by 5.3% during 2008-12, compared to their actual levels in 1990, or engage in emissions trading if they maintained or increased emissions of these gases. Approximately 165 countries have shown their support by adopting this protocol. European Union Directives stipulated the need to help double the share of non-fossil renewable energy sources, such as wind, from 6 percent to 12 percent of gross energy consumption in Europe by 2010. As a result of this, demand for non-conventional energy was increasing.

Suzlon had established itself as a leading player in the Indian market and among the top 10 players globally. BTM Consultant Aps estimated the share of Suzlon to be 42.8%, followed by Vestas, the Global leader in wind energy having 32%. Though Vestas' was the second largest player in India, it was the world's first and largest supplier of wind power systems with revenue of Euro 3583 million and had experience of setting up more than 30,000 wind turbines generating electricity around the globe. Backed by a quarter century of experience and innovation, Vestas' turbines were renowned for state-of-the-art efficiency and reliability. Their competencies covered everything from site studies to service and maintenance — to make turbine operation as efficient as possible. They advised customers on all aspects of the project including whatever regulations, permits, and financial requirements that had to be addressed before the first bolt could be tightened.

Vestas' strategy was to supply customised wind power solutions based on standard wind turbines and standardised options that could generate electricity of the optimal quality at the most competitive price. Vestas' principal activities included development, manufacture, sale, marketing, and maintenance of systems that

used wind energy to generate electricity. They supplied a full range of products, from individual turbines to the delivery of turnkey wind power systems. Vestas provided guidance to customers in connection with the development, financing, and ownership of wind turbine projects. Vestas distinguished itself by a high degree of vertical integration, manufacturing all components that could not be purchased from external suppliers in standard or slightly modified forms. By manufacturing the principal parts of the turbine itself, Vestas increased the flexibility of its product development, reduced its dependence on suppliers, and maintained high level of manufacturing expertise. To become an international leader and to ensure sufficient financial strength to continue internationalisation, the three main priorities were EBIT — of at least 10%, Net Working Capital at year end of a maximum of 20 – 25% of turnover, and a global market share of at least 35% measured in installed capacity (MW). This required substantial stretch goals. Vestas achieved a negative EBIT of (–3.2%) in 2005, mainly on account of low earnings from projects, component shortage, and warranty provisions. Due to rapid growth, component suppliers were unable to meet delivery schedules with quality components, thereby delaying projects and increasing the warranty replacements.

Shell spotted the opportunities inherent in using renewable energy as early as in 1997 when it established Shell Renewables as its fifth core business with three main objectives: expanding energy options; making alternative energy solutions competitive with conventional energy sources; and establishing a leading position in the alternative energy sector. On 29th November 2005, British Petroleum also introduced a new business unit - BP Alternative Energy. This unit combined all BP's activities related to the production and sale of energy with low or no CO_2 emissions – i.e. energy from wind, sun, hydrogen, and natural gas.

The Road Ahead

One of the major challenges faced by the industry was control over the entire supply and value chain. In early 2006, Tulsi Tanti was planning to set up and expand manufacturing facilities in India at a cost of Rs 2,000 million. To reduce the risk of sub-standard components and delayed delivery, he planned manufacturing facilities for components at Daman, Bhuj, Hyderabad, and Dhule (Business India, 2005). The company was planning to invest Rs.750 crore to expand its facilities in Baroda and Coimbatore, and set up a greenfield turbine manufacturing facility at Udupi in Karnataka with an investment of Rs.750 crore (Business Line, 2006-a). Tooling facility at Vadodara and a new storage facility at Daman were also planned. Tanti was planning to invest Rs 1,500 crore in a factory for manufacturing wind turbines of 1,500 MW in Karnataka (Business Line, 2006-b). Tanti also wanted to expand the existing facilities at Pondicherry to increase the storage capacity. Subsidiaries and joint ventures were planned for increasing manufacturing facilities in India, the United States and China, which would cost the company Rs 9,500 million. The company was likely to set up a turbine manufacturing plant in Portugal and increase capacity at its plant in China by 2009 (Business Standard, 2006).

However, behind all this optimistic planning, he was also considering the large amount of capital investment and the risk associated with it. Emergence of other sources of energy could directly compete with the wind energy on cost and generation efficiency. Other such parameters could also pose a risk. Increased competitive pressure from new entrants in the wind energy sector could lead to dilution of the Suzlon's market share. Reduction in incentives and increased regulatory pressures from governments could reduce investment in the sector affecting the Company's business growth. The question in everyone's mind was "Can Suzlon weather the global swings?" Tanti was convinced that though he could not change the direction of the wind, he could change the sails to reach his destination. Perhaps a management consultant could help him work out the final plan.

Exhibit 1—Process of conversion of kinetic energy from wind to electricity

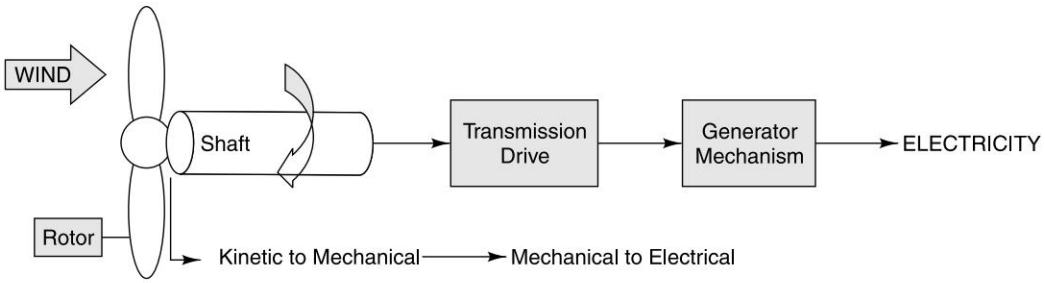


Exhibit 2—Key Components of a Wind Turbine Generator

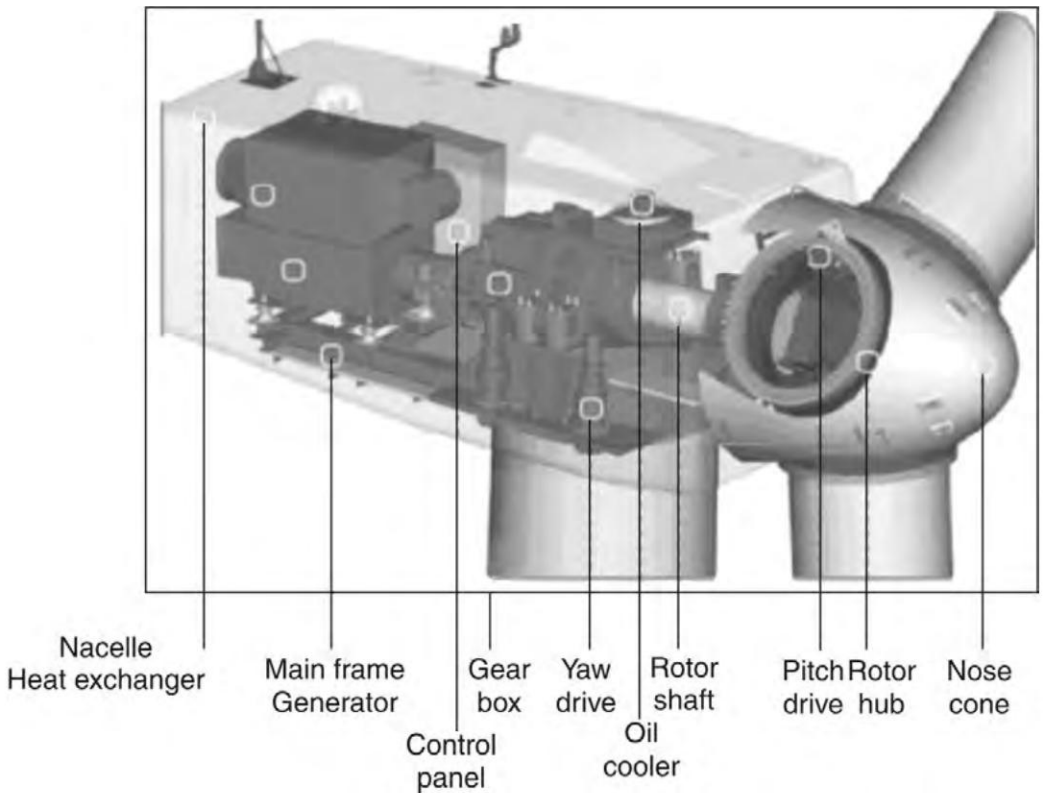


Exhibit 3—Technical Value Chain for Wind Farms

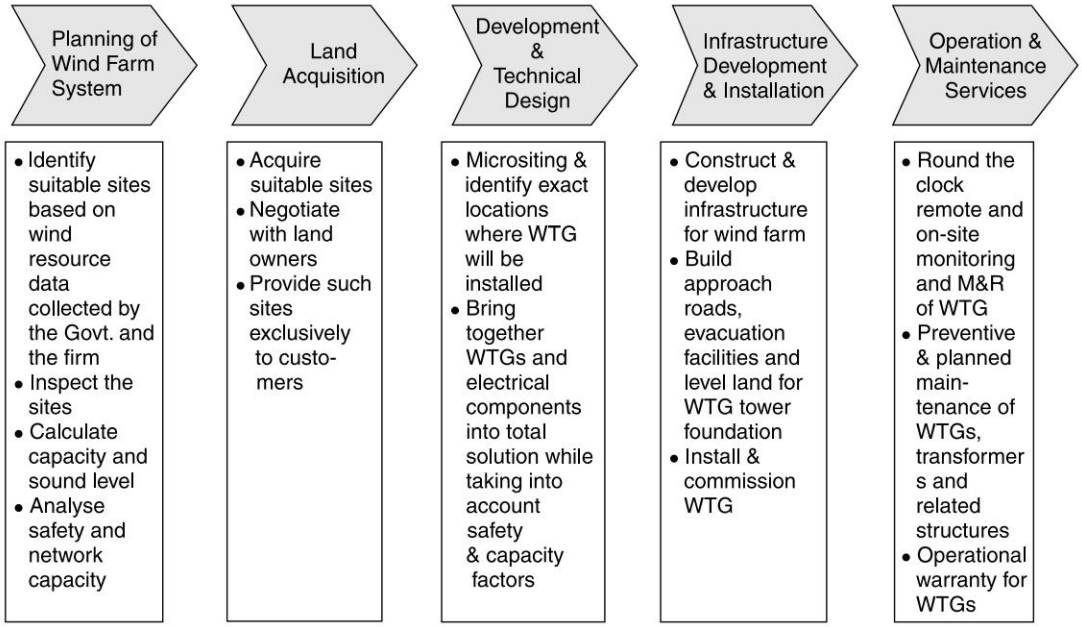


Exhibit 4—Structure of Suzlon Energy

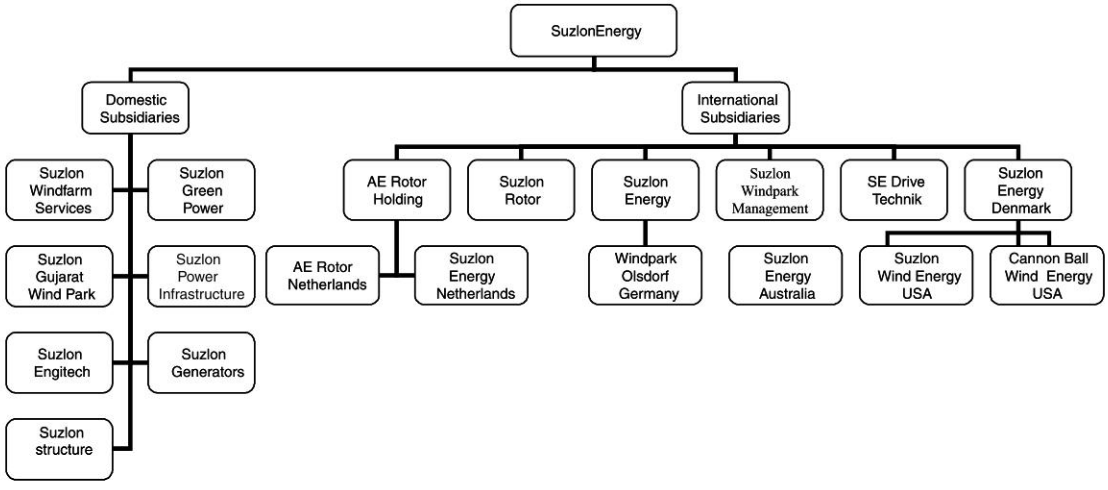


Exhibit 5—Market Share of Wind Energy

Country	Major Players	Accumulated MW	% Share
Denmark	Vestas, Siemens	21454	42.26
Spain	Gamesa, Ecotcnia	7182	14.15
Germany	Enercon, Nordex, Repower	10620	20.92
USA	GE Wind	5346	10.53
Japan	Mitsubishi	1019	2.01
India	Suzlon	785	1.55
Others		4359	8.59
		50765	

Exhibit 6a—Summarised Balance Sheet of Suzlon Energy-Assets

Balance Sheet (Rs Million)	2006	2005	2004	2003	2002	2001	2000	1999	1998
Total assets	4583.4	2024.5	1042.8	613.74	448.69	276.5	150.59	107.42	26.11
Gross fixed assets	437.39	220.97	168.75	80.36	54.1	19.16	10.97	4.55	3.58
Land & building	146.52	83.18	73.38	33.53	27.12	5.66	2.56	0.89	0.88
Plant & machinery	190.77	106.44	72.51	35.83	17.02	6.14	3.39	2.34	2.03
Other fixed assets	23.85	13.42	11.16	9.27	9.46	6.12	2.43	1.32	0.67
Capital work-in-progress	76.25	17.93	11.7	1.73	0.5	1.24	2.59		
Less: Cummulative depreciation	94.6	54.2	22.79	13.88	7.37	3.84	0.89	0.56	0.33
Net fixed assets	342.79	166.77	145.96	66.48	46.73	15.32	10.08	3.99	3.25
Investments	292.74	129.89	56.27	13.62	10.48	11.02	7.96	6.4	2.91
In group/associate companies	292.73	125.99	54.34	12.6	7.17	6.63	3.11	2.92	2.91
Other investments	0.01	3.9	1.93	1.02	3.31	4.39	4.85	3.48	
Marketable investment			2.95	3.2	3.74	4	4.06	2.7	2.63
In group/associate cos.			2.63	2.63	2.63	2.63	2.63	2.7	2.63
Quoted investment			2.95	3.2	3.74	4	4.06	2.7	2.63
Market value of quoted investment			0.37	0.34	0.41	0.39	3.07	2.66	0.18
Deferred tax assets	58.59	30.78	14.96	2.98					
Inventories	1104.5	494.58	201.71	84.25	26.54	36.18	21.34	6.64	0.44
Raw materials and stores	914.58	415.27	170.33	76.98	24.86	34.93	21.34	6.64	0.44
Finished and semi-finished goods	150.51	68.86	30.29	7.01	0.72	0.6			
Finished goods			14.12	4.11					
Semi-finished goods	150.51	68.86	16.17	2.9	0.72	0.6			
Stock real estate	39.4	10.45	1.09	0.26	0.96	0.65			
Receivables	2439.40	1102.85	562.45	392.94	320.59	113.56	69.61	84.56	6.71

(*Contd*)

(*Contd*)

Balance Sheet (Rs Million)	2006	2005	2004	2003	2002	2001	2000	1999	1998
Sundry Debtors	1583.91	676.33	310.43	245.43	214.11	70.92	55.74	79.5	2.8
Debtors exceeding six months	173.4	93.87	127.62	47.34	42.15	6.95	5.69	0.13	0.23
Advances/loans to corporate	347.59	244.52	123.83	60.39	34.5	7.59			
Group/associate cos.	345.55	244.52	70.81	25.51	8.6				
Other companies	2.04		53.02	34.88	25.9	7.59			
Deposits with govt./agencies						9.5			
Advance payment of tax	171.24	54.42	12.7	16.93	21.54	5.63	0.18	0.05	0.09
Other receivables	336.66	127.58	115.49	70.19	50.44	19.92	13.69	5.01	3.82
Cash and bank balance	316.24	88.21	60.36	52.24	43.51	100.23	41.51	5.79	12.76
Cash in hand	0.31	0.2	0.15	0.13	0.09	0.07	0.07	0.06	0.19
Bank balance	315.93	88.01	60.21	52.11	43.42	100.16	41.44	5.73	12.57
Intangible/misc. expenses n.w.o.	29.14	11.42	1.12	1.23	0.84	0.19	0.09	0.04	0.04
Intangible assets (goodwill, etc.)	29.14	11.42	1.06	1.2	0.79				
Misc. expenses not written off			0.06	0.03	0.05	0.19	0.09	0.04	0.04
Other misc. expenses not written off			0.06	0.03	0.05	0.19	0.09	0.04	0.04

Exhibit 6b—Summarised Balance Sheet of Suzlon Energy – Liabilities

Balance Sheet (Rs Million)	2006	2005	2004	2003	2002	2001	2000	1999	1998
Total liabilities	4583.39	2024.50	1042.83	613.74	448.69	276.5	150.59	107.42	26.11
Net worth	2822.25	929.57	416.83	284.56	225.27	132.73	53.88	31.27	9.12
Share capital	302.53	201.92	39.35	13.2	13.2	7.12	6.09	3.6	2.79
Equity capital	287.53	86.92	24.35	12.17	12.17	6.09	6.09	3.6	2.79
Preference capital	15	115	15	1.03	1.03	1.03			
Bonus equity capital	251.86	78.01	20.06	7.89	7.89	1.8	1.8		
Reserves & surplus	2519.72	727.65	377.48	271.36	212.07	125.61	47.79	27.67	6.33
Free reserves	2509.36	727.65	377.48	271.36	212.07	125.61	47.79	27.67	6.33
Share premium reserves	1311.02	29.85							
Other free reserves	1198.34	697.8	377.48	271.36	212.07	125.61	47.79	27.67	6.33
Specific reserves	10.36								
Total borrowings	335.37	322.54	228.74	87.63	44.71	20.68	12.84	17.71	1.07
Bank borrowings	139.3	218.23	162.62	69.35	27.02	20.61	10.48	7.77	0.56
Short term	114.02	202.85	101.89	29.93	24.95	18.11	10.48	7.77	0.01
Long term	25.28	15.38	60.73	39.42	2.07	2.5			0.55
Financial institutions						0.07	2.36	9.87	0.44
Foreign borrowings		13.09							
Other borrowings	196.07	91.22	66.12	18.28	17.69				
Current portion of LT debt	23.04	8.37							
Secured loans	276.61	285.46	180.46	79.35	44.71	20.68	12.84	17.64	1

(*Contd*)

(*Contd*)

Balance Sheet (Rs Million)	2006	2005	2004	2003	2002	2001	2000	1999	1998
Unsecured loans	58.76	37.08	48.28	8.28				0.07	0.07
Total foreign currency loans		13.09		3.33	15.22				
Deferred tax liabilities	0.59	3.17	4.43	1.86					
Current liabilities & provisions	1425.18	769.22	392.83	239.69	178.71	123.09	83.87	58.44	15.92
Current liabilities	858.32	529.19	357.86	214.45	152.17	105.15	79.36	57.52	14.46
Sundry creditors	558.26	479.64	277.29	165.46	76.55	42.58	48.35	48.79	12.17
Interest accrued / due	1.36	0.76	0.27	0.01					
Creditors for capital goods						0.5	0.32	0.61	0.5
Other current liabilities	298.7	48.79	80.3	48.98	75.62	62.07	30.69	8.12	1.79
Share application money					0.07				
Provisions	566.86	240.03	34.97	25.24	26.54	17.94	4.51	0.92	1.46
Tax provision	164.36	61	13	15.4	23.25	10.75	0.04		
Dividend provision	73.39	13.1	17.13	6.22	0.03	4.89	3.65	0.54	0.56
Dividend tax provision	10.29	1.84	2.24	0.8		0.5	0.42	0.05	0.06
Other provisions	318.82	164.09	2.6	2.82	3.26	1.8	0.4	0.33	0.84
Contingent liabilities Bills		3.32	9.03						
Contingent liabilities Total	181.65	60.45	61.25	24.62	28.66	50.86	10.62		
Contingent liabilities Liabilities on	69.73	13.09	7.43	3.08					

Exhibit 7—Summarisd Income Statement of Suzlon Energy

Income Statement	2006	2005	2004	2003	2002	2001	2000	1999	1998
Income Sales	3815.42	1917.50	790.62	332.6	524.91	387.53	153.07	111.6	39.93
Income Manufacturing	3725.26	1912.49	786.27	323.88	523.84	384.91	153	108.21	39.59
Income Trading				2.97					
Income Fiscal benefits		0.03	1.57	3.66					
Income Others	90.16	4.98	2.78	2.09	1.07	2.62	0.07	3.39	0.34
Income Other income	42.32	22.97	12.85	8.65	7.81	6.59	0.07	0.01	0.03
Income Dividend received	3.09	2.03	0.44	0.64	0.3	0.01	0.01		
Income Interest earned	33.32	20.56	12.11	7.55	7.32	6.04	0.06		
Income Miscellaneous income	5.91	0.38	0.3	0.46	0.19	0.54		0.01	0.03
Income Change in stocks	110.6	47.93	24.11	5.59	0.43	0.6			
Income Finished goods			12.31	3.65	0.31				
Income Semi-finished goods	110.6	47.93	11.8	1.94	0.12	0.6			
Income Non-recurring income	27.97	17.38	48.72	42.52	8.33	1.38	1.96		
Income Gain on sales of investment			0.9						
Income Tax refunds/ adjustments	27.97	17.08	10.18	0.36					
Income Other provisions written back		0.3	37.64	42.16	8.33				
Income Other non recurring income						1.38	1.96		

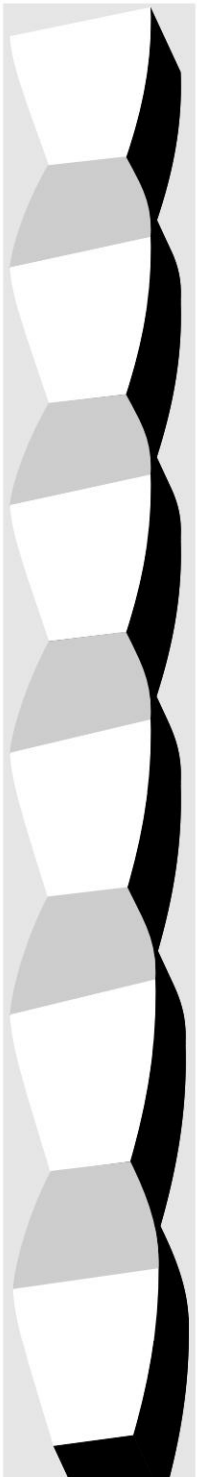
(*Contd*)

(*Contd*)

Income Statement	2006	2005	2004	2003	2002	2001	2000	1999	1998
Expenditure Raw materials, stores, etc.	2406.26	1195.93	544.14	219.44	319.34	240.75	99.98	72.84	27.89
Expenditure Raw materials	2279.70	1179.78	527.26	214.18	317.93	240.51	99.85	72.79	27.87
Expenditure Stores & spares	13.45	6.54	3.49	2.26	1.41	0.24	0.13	0.05	0.02
Expenditure Purchase of finished goods	113.11	9.61	13.39	3					
Expenditure Wages & salaries	62.96	35.32	17.66	10.72	8.44	3.67	1.82	0.85	0.46
Expenditure Energy (power & fuel)	1.77	1.12	0.56	0.29	0.11	0.03	0.03		
Expenditure Other operating expenses	50.19	40.73	13.52	6.47	4.04	24.25	9.73	7.94	2.46
Expenditure Royalty/ knowhow						0.03	0.2	0.54	0.3
Expenditure Insurance premium	4.3	2.81	1.55	0.77	0.23	0.93	0.24	0.41	0.24
Expenditure Indirect taxes	4.79	0.38							
Expenditure Repairs & maintenance	6.15	3.41	0.75	0.6	0.6	0.19	0.08	0.07	0.06
Expenditure Advertising & marketing	308.71	164.02	78.67	51.04	59.8	17.2	6.87	2.6	1.79
Expenditure Advertising	15.45	5.59	4.47	3.17	3.05	1.83	0.71	0.46	0.19
Expenditure Marketing	293.26	158.43	74.2	47.87	56.75	15.37	6.16	2.14	1.6
Expenditure Distribution	82.02	24.58	1.39	4.48		1.41	0.75		
Expenditure Provision for bad debts		8.93	4.8						
Expenditure Amortisation		0.06	0.03	0.02	0.02	0.02	0.07	0,01	0.01
Expenditure Miscellaneous expenses	34.13	25.14	19.37	12.26	12.7	6.67	3.34	2.48	1.27
Expenditure Less: Expenses	3.17	0.8							
Expenditure Non-recurring expenses	0.48	10.59	0.64	0.87	4.04		0.05	0.46	0.26
Expenditure Loss on sale of assets	0.44	0.44	0.64	0.16	0.33		0.02		
Expenditure Loss on sale of investment		10.09		0.69	0.26		0.02		
Expenditure Prior period taxes	0.04	0.06					0.01		
Expenditure Others non-recurring				0.02	3.45			0.46	0.26
Expenditure PBDIT	1042.02	496.37	194.77	83.17	132.39	101.91	32.38	24.36	5.76
Expenditure Financial charges	62.39	47.13	26.21	7.83	4.51	3.48	3.6	1.67	0.69
Expenditure Interest	42.52	31.92	19.84	5.62	2.13	0.88	2.38	1.09	0.5
Expenditure On short term loans	36.43	23.18	12.31	4.37	1.82	0.82	1.14	0.71	0.24
Expenditure On long term loans	6.09	8.74	7.53	1.25	0.31	0.06	1.24	0.38	0.26
Expenditure Lease rent	7.83	5.84	0.1						
Expenditure Other financial charges	12.04	9.37	6.27	2.21	2.38	2.6	1.22	0.58	0.19
Expenditure Interest capitalised			0.35						
Expenditure PBDT	979.63	449.24	168.56	75.34	127.88	98.43	28.78	22.69	5.07
Expenditure Depreciation	49.04	39.77	9.65	7.22	3.93	2.97	0.36	0.23	0.17
Expenditure PBT	930.59	409.47	158.91	68.12	123.95	95.46	28.42	22.46	4.9
Expenditure Tax provision	109.4	48	13.01	2.92	12.51	10.77	0.05		
Expenditure PAT	821.19	361.47	145.9	65.2	1 1 1 .44	84.69	28.37	22.46	4.9

REFERENCES

Annual Reports of Suzlon Energy Ltd.
Business India. Oct 9, 2005; pg 119; Suzlon Energy
Business India. Apr 9, 2006; pg 180; Suzlon Energy
Business Line. Sep 19, 2006-a; pg 3; Suzlon Bags Rs.1,190-Crore Order from US Firm
Business Line. Nov 07, 2006-b; pg 2; Suzlon Energy Unveils Major Expansion
Business Standard, Nov 17, 2005; pg 1; Suzlon's Tanti 4th Richest Indian
Business Standard. Oct 28, 2006; pg 6; Suzlon to Go Slow on Buyouts).
Business Today, May 21, 2006, Is Suzlon Built to Last?
Business World. Apr 3, 2006; pg 11; Suzlon Finds Missing Piece in Hansen.
Daily News & Analysis Aug 1, 2006; pg 19; Tulsi Tanti will Harness the Whole Windpower Chain
Economic Times. Mar 18, 2006-a; pg 1; Suzlon acquires Belgian Co. Hansen for Euro 465 Million
Economic Times. Mar 25, 2006-b; pg 4; Suzlon Takes Wind for A Ride
Economic Times (Kolkata Ed) October 28th, 2006-c, Look up to See Where the Wind has taken us, pp.24
Financial Express. Apr 10, 1996; pg 10; Suzlon Group's Growth Plan
http://en.wikipedia.org/wiki/Kyoto_Protocol Last Accessed on 23.10.06
http://en.wikipedia.org/wiki/Kyoto_Protocol Last Accessed on 23.10.06
http://www.suzlon.com/about-us.htm Last Accessed on 24.10.06
http://www.suzlon.com/asias_largest_wind_park.htm Last Accessed on 24.10.06
http://www.suzlon.com/images/you/SEL%20-%20US%20Order_John%20Deer.pdf Last Accessed on 31.10.06
http://www.suzlon.com/images/you/Suzlon%20H1%20FY06-07%20Results%20Release.pdf Last Accessed on 31.10.06
http://www.suzlon.com/news.htm Last Accessed on 24.10.06
http://www.vestas.com/uk/Products/TrackRecord/track.html Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/competencies/pc_Intro_UK.htm Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/historie/1898_1969_UK.asp Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/historie/1970_1979_UK.asp Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/historie/1980_1989_UK.asp Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/historie/1990_1999_UK.asp Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/historie/2000_UK.asp Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/historie/2003_UK.asp Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/profile/strategy/strategy_uk.htm Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/struktur/struktur_UK.html Last Accessed on 20.10.06
http://www.vestas.com/uk/profile/students_room/about_vestas/strategic_goals.asp Last Accessed on 20.10.06
Times Of India–Bangalore ed. Aug 2, 2006; Pg 19; Cashing in on Wind Power



The McGraw-Hill Companies

Case 8

Rewrite Rules at Pantaloon?

Focus on customers supported by systems and processes and a committed work force are the key factors that have contributed to our success and will help us scale up as we embark on our strategic growth plan.

Kishore Biyani,
Managing Director

Pantaloon Retail (India) Ltd. was one of India's largest organised modern format retailer and pioneers in setting up a nation-wide chain of format stores. It was an entrepreneur driven, professionally managed retailer focused on meeting the customer requirements for fashion, food, general merchandise, and home in both value and lifestyle segments. The firm retailed a range of branded and Private Label apparel, footwear, perfumes, cosmetics, jewellery, leather products, and accessories, home products, books, music, and toys with over 2,70,000 SKUs, complemented by services offerings. Focus on customers supported by systems and processes and a committed work force were the key factors that contributed to the success and helped in scaling as the firm grew. Based on the premise that the family attracts more customers into the store than individuals,

customer expectation were managed by offering them all the requirements for their entire family under one roof through a business model revolving around 'family focus' rather than 'individual' focus.

To complete the idea of a family store, besides garments, household items, consumer durables, home furnishings, food, and personal care products were also sold. This was complemented by cafes, food stalls, entertainment, personal care, and various beauty related services. The aim was to provide customers a unique shopping experience, comprising a vast range of lifestyle and value retail products, mix of retailing formats coupled with the facility of entertainment and leisure. The exclusive formats included:

Pantaloons: Lifestyle products under private labels and third party brands

Central: Seamless mall providing a wide range of lifestyle products across multiple national and international brands

Big Bazaar: Value retailing with a range of products from apparel, toys, accessories, consumer durables to household products and furnishing

Food Bazaar: Food and personal care products including dry groceries and FMCG products.

Pantaloons started operations with a trouser brand, Pantaloon, targeting the Indian middle class and upper class customers across age and gender. In the initial stages, they had small format outlets branded Pantaloon Shoppe, which were franchise operations. Realising the problems associated with franchise model, the firm decided to have their own retail outlets and "Pantaloons" was launched in 1997. In a short span of nine years, the business grew from one store in Kolkata in 1997 occupying an area of 8,000 Sq ft to 72 stores, and 22 factory outlets located in the multiple cities occupying an aggregate area of 21,07,608 Sq. ft. The firm focused on Lifestyle segment through 20 Pantaloon stores (Images Retail 2006), 3 Central Malls, 10 aLL, 5 Fashion Stations, and 1 MeLa store. In the value offering to mass customers, the firm had 34 Big Bazaar and 43 Food Bazaar outlets (**Exhibits 1-4**).

In October 2005, Kishore Biyani was planning further expansion by setting up of new stores/retail outlets, upgrading/modernisation of the existing stores by June 2007 at a cost of Rs 46.43 crore (**Exhibit 5**). Expansion/ upgrading of warehouses and information technology/ supply chain infrastructure at a cost of Rs 32.5 crore were also on the cards. While building the future growth plans for Pantaloons, Biyani was contemplating the organisational strengthening that would be required to support the expansion.

UNRAVELLING THE PAST

The firm incorporated as Menz Wear Private Limited in 1987 that started operations by selling branded garments under Pantaloon, Bare, and John Miller brands, grew from one store in Kolkata in 1997 to becoming one of India's largest organised modern format retailer (Financial Express, 2003). By 1999, it had 12 large retail stores in Hyderabad, Chennai, Nagpur, Calcutta, Thane, and Pune (Economic Times, 1999) and 40 small retail outlets constituting 100,000 square feet of area (Business Standard, 1999). Peat Marwick from KPMG was appointed for the valuation of brands for recasting them to achieve better growth (Financial Express 1999).

Big Bazaar, a hypermarket with over 2,00,000 products was launched on 12th October 2001 as the first offering in value retailing segment. The first discount store—Hypermart—set up at a cost of Rs16 crore, offering 1.5 lac items across 18 categories with discounts of 8-60% was opened in Hyderabad. Big Bazaar also tied up with The Great Mall of Hyderabad for selling its products at the shopping festival (Deccan Chronicle 2001). The saving on rentals, electricity, and air-conditioning charges, helped in achieving breakeven faster (Business India 2002). The savings achieved by removing inefficiencies from the distribution chain were passed on to the consumer. Price and product variety were the principal value proposition at these stores. This was achieved by selling a wide range of products and through the "Shop-in-Shop" format. As a result, a typical Big Bazaar comprised shops that stocked medicines, optical accessories, camera rolls, bakery products, dry fruits, crockery, glassware, health and beauty products, ladies accessories, electronics, infant necessities,

watches, clocks, computer accessories, food and beverages, stationery, readymade garments, household appliances, home furnishings, luggage etc. This was a win-win situation as the customer was assured of product availability, the shop owner had benefit of the infrastructure, and Pantaloons had assured income without needing to stock inventory. In addition, the Shop-in-Shop offering increased the customer traffic into the stores. To venture into gold retailing, *Gold Bazaar* was opened within Big Bazaar in 2002 (The Times of India 2003). Gold Bazaar sourced the jewellery from Chintamani Jewellers of Mumbai. Gold Bazaar offered various advantages like no weight reduction on exchange, transparent and fixed making charges, purity check through Carat meter, certificate by World Gold Council, 100% free insurance against theft, burglary and loss by National Insurance Company with every product, no-questions asked 15 day return policy, and free life time maintenance of the gold jewellery. The company entered into an alliance with ICICI Lombard to offer insurance on every piece of gold jewellery sold by Gold Bazaar. The company paid the premium for the first year and the customers were required to renew the policies from the second year onwards (Business Line, 2003). Big Bazaar was positioned as a place where the customers could shop for everything for which they went to market.

Food was the largest basket in terms of household expenditure, hence as a logical extension to Big Bazaar, a new format *Food Bazaar* was started in April 2002. It began as a part of Big Bazaar and subsequently operated as standalone outlets in addition to being part of Big Bazaar. Food Bazaar provided a wide product range from fresh fruits and vegetables to FMCG products and ready-to-cook products. It stocked 8,000 to 12,000 SKUs per location. Food Bazaar's core concept was to create a blend of Indian market and international supermarket atmosphere with the objective of giving the customer all the advantages of quality, range, and price associated with large format stores. Food Bazaar offered the Indian consumers convenience, cleanliness, and hygiene through pre-packed commodities while retaining Indian's preference of "See- Touch- Feel" created by displaying products out in the open at competitive prices. Food Bazaar also provided home delivery services to the customers.

Processed food and non-processed food were the dominant category. This category included products from various FMCG companies in India as well as a wide assortment of imported, health, and speciality foods. In 2003-04, a series of initiatives were launched to bring convenience into the daily shopping habits of the consumers that included:

Live dairy–provided fresh milk and milk products like *paneer, lassi, ghee*, and low fat milk

Live chakki and *masala* grinding facilities–customers bought wheat, spices and had them ground

Live bakery–provided freshly made bread and bakery products

Fresh juice corner–provided fresh juice

Live kitchen- customers could buy vegetables and get them chopped, fully- or semi-cooked.

Live services were introduced keeping in mind the Indian consumer preference of having fresh food. Spurred by the popularity of the services offered by Food Bazaar, the Private Label programme covering various products such as salt, ready-mix masala, tea (Food Bazaar Tea), basmati rice, dals/pulses (Premium Harvest), jams and sauces (Tasty Treat), handwash and shampoo (Caremate), cleansers (Cleanmate) etc. were launched.

Taking a cue from the success in lifestyle retailing, Central, a seamless mall was pioneered in India. The concept of seamless mall was relatively new to India and the design of the mall does away with in-between walls and Shop-in-Shops, thus offering customers unobstructed shopping experience. The first Central opened in Bangalore on May 14, 2004. Located in the heart of the city, the mall was spread over 1,25,000 sq. ft. across five floors and provided customers with a wide array of facilities ranging from shopping, eating, leisure, and entertainment across a range of brands (Economic Times, 2004). Central also had a Food Bazaar, food courts, and restaurants. The mall displayed over 300 brands under the categories of apparels, footwear, music, books, and accessories. It also housed coffee shop, food court, super-market, restaurant, pub, and discotheque, and offered other services like travel, finance, investment, insurance, concert/cinema ticket booking, and bill

payments. The mall was based on the theme of 'shop, eat, and celebrate' (Deccan Herald, 2004). The second Central was launched in Hyderabad in November 2004 covering an area of 2,16,000 sq. ft. In April, 2005 the third Central was launched in Bund Garden, Pune covering an area of 1,37,000 Sq. ft. Central provided a platform to showcase in-house labels amidst other national and international brands thereby improving the brand visibility of Pantaloon.

With increasing media penetration and proliferation of television channels some of which covered fashion extensively, the average Indian was being steadily exposed to bolder and more contemporary fashion. A thematic store, Fashion Station opened in Mulund, Mumbai in March 2005, positioned to meet the fashion requirements of this growing number of customers. It was spread over 25,000 square feet, and displayed a mix of private labels sold in Big Bazaar and Pantaloons. These were backed by the requisite fashion accessories and appropriate footwear, which gave an integrated feel to the store and met the entire fashion requirements of the customers. The second Fashion Station opened in Ghaziabad spread over 15,000 sq. ft. aLL was the latest format in the Lifestyle retail segment, which was an exclusive store dedicated to the fashion needs of plus size men and women that was launched as a single dedicated standalone store in Vashi, Mumbai on July 16, 2005 and at Andheri on August 21, 2005. The 'aLL' store had wide range of ready-to-wear fashionable Western wear, Indo-western and Ethnic wear in both formal and casual categories and accessories that were not easily available for plus size customers. To complement the collection, the store layout was designed keeping in mind the requirements of its customers (The Times of India, 2005). The sales staff were trained to provide a comfortable shopping experience to this new segment of customers.

With a record number of residential homes being bought annually in India and the organised retailing being largely absent in this segment, home solutions, MeLa was launched in Mumbai through their subsidiary Home Solutions Retail (India) Limited. MeLa provided a complete range of home furnishings, besides also offering a range of services including facilities and customised home solutions by in-house interior designers.

A project team was created to identify and roll out properties quickly and seamlessly. The operations team facilitated new stores to be opened quickly and integrated into the system, provide customers with the similar experience across all stores, and also scale up stores to meet growing customer requirements. In a span of two years, the firm grew from 5,61,000 sq. ft. in 2003 to 21,07,608 sq. ft in 2005.

LEVERAGING ALLIANCES

In December 2001, Pantaloon tied-up with the Andhra Pradesh Handloom Weavers' Co-operative Society (Apco) and the National Institute of Fashion Technology (NIFT) to launch a new ethnic range of handloom wear for women. NIFT created the new collection of *salwar-kameez* under the Pantaloon brand name, while the handloom material worth about Rs60 lac was sourced from Apco (Economic Times 2001-a). In the same month, it tied-up with retail portal Fabmart of Bangalore to undertake food and grocery retailing at its hyper-market outlets. Fabmart was selected for food and grocery retailing due to its technological expertise in managing the supply chain (Economic Times 2001-b). In mid-2002, Walt Disney India tied up with Pantaloon for starting exclusive shops to sell apparel, accessories, toys, and home furnishing products. Popular Walt Disney characters like Mickey Mouse, Winnie the Pooh, and Cinderella were sold through these shops (economic Times 2002-a).

In September 2002, Pantaloon entered into a deal with ICC Development International of Monaco, the event authority for World Cup 2003 for exclusive merchandising rights in India for apparels and accessories using the logo and mascot of World Cup Cricket 2003. Pantaloon used the World Cup logo and remodelled the caricature of the tournament mascot, Dazzle the Zebra, according to its commercial needs. Pantaloon also recreated uniforms and emblems of the 14 participating teams and launched about 60 products such as

T-shirts, socks, caps, key-chains, formal wear, and sporting goods priced between Rs49 and Rs2,000 (*Economic Times* 2002-b). In the same year, Pantaloon tied up with Flying Eagle of Dubai to open four large retail stores in the Middle East. The stores called Fashion Zone were spread over 40,000 square feet and were located at Dubai, Abu Dhabi, Alaein, and Sharjah. They targeted the large India populace in these places with high-quality apparel and lifestyle products. Pantaloon provided merchandise, software, and retail expertise to the overseas partner, while Flying Eagle provided space and a percentage of sales to Pantaloon (Economic Times 2002-c).

Mattel India entered into an alliance with Pantaloon in April 2004 to launch the first Barbie concept store in Mumbai. Pantaloon provided the infrastructure for the stores while Mattel offered the concept and expertise *(Business Line* 2004). During the same month, Pantaloon and Arvind Brands, India's leading apparel company, entered a strategic alliance to sell Ruf-n-Tuf jeans including denim jeans for men and women, denim cargos, cotton T-shirts, denim jacket, and denim shorts exclusively sold at Big Bazaar outlets (Retail Biz 2004).

EXPLORING THE FUTURE

Pantaloon was positioned as a leading retail entity in India and the intent was to enhance the position by focusing on the Indian market and investing in business growth. Consumers' tastes were shifting and the propensity to spend on new categories of merchandise was increasing along with needs for new services. Thus, the key element of the strategy was to increase offerings in order to capture a higher portion of the consumer spend by launching new formats or adding categories to the existing product range. The firm focused on enhancing the depth and width of merchandise, which offered a differentiating factor as compared to competitors and also enhanced margins. The firm became the exclusive retail licensee for Popeye and Disney for India.

Covering additional cities and increasing penetration in existing cities with a larger number of stores, increasingly of larger size would also enable them to penetrate into new catchment areas within these cities and optimise their infrastructure, which was designed for a higher scale of operations without significant increase in costs. The distribution and logistics infrastructure could handle larger business volumes at marginal addition to costs. Higher business volumes would also improve negotiating powers and result in further economies of scale.

OPERATIONS

Pantaloons integrated backwards into in-house manufacturer of part of the apparel products they sold. Due to in-house manufacturing, they had the ability to control garments from the initial stages in the value chain, to tide over unexpected demand and cope with the unpredictable world of fast changing fashion trends. The resulting seamless integration and relative independence from intermediaries represented a competitive advantage in terms of value, cost, and convenience.

The firm had a trouser manufacturing plant at Tarapur equipped with state-of art, fully automatic machines for fusing, serging, bottom-hemming, and welt pocket-making operations, and had a capacity of 3,000 trouser pieces a day. The plant had 300 machines, operated by 340 workers with 85% utilisation. The fabrics used in the manufacturing process were imported from Turkey and Dubai apart from local traders in India located at Ahmedabad, Mumbai, and Bhilwara. The expertise in manufacturing was leveraged to enhance product knowledge. The division worked closely with the design team and the research and development team to understand trends, develop products, value-engineer, and finally create season-wise collection catering to regional tastes.

Pantaloons also had Concessionaires arrangement under which they purchased the merchandise from the vendor and sold it to the final customer. Apart from this, under the Shop-in-Shop arrangement, private labels conducted their business in Pantaloon stores in demarcated areas and paid a percentage of the revenues subject to a fixed minimum amount. for the use of space. The vendors had their own billing and cash collection system, and independently managed operations.

PROCESS MANAGEMENT

Stepping away from the traditional brand management merchandising practice followed by most retailers, Pantaloons employed the concept of category management. Category management created products across the length and breadth of a category at different price points, fabrics, design, shape, seasons, colour, and size. Functions under category management were placed under 5 divisions:

Merchandising Merchandising strategy was developed for the category taking into consideration customer profile, classification, resource structure, vendors, fashion trends, items, and price points. The category manager visited stores regularly to check assortments of merchandise displays, stock levels, and old season merchandise, consulted with team leaders and sales people on problems and suggestions.

Sourcing/Purchasing Purchasing was based on range plan made for the season and re-orders were placed based on sales and stock levels. The Category Manager reviewed the actual sales versus planned sales and sourced the material based on feedback from storefront.

Logistics Ensuring dispatch of goods in right quantities and at the right time to reach stores with sufficient time in hand to promptly cater to customer demands.

Promotions Promotions/brand building schemes were planned and slow movers were identified and disposed.

Visual Merchandising This was the key to encourage purchase and involved store window, store directories, in posters, unit top poster / visual, placement of products, highlighting products in the store etc. The visual merchandising team decided on the theme as well as the manner of display across the stores nation wide.

SUPPLY CHAIN MANAGEMENT

The diverse requirements of different retail formats required a flexible model. For Pantaloons, the time to market was of paramount importance whereas for Big Bazaar, the cost to market was crucial. The Supply Chain function involved vendor management, quality assurance, and transportation.

Vendor Management This assumed critical importance in the multiple-product retail business. Strategic relationships were developed with vendors all over the country and a transparent vendor rating system rated each vendor across a variety of parameters. Regular interaction and rating system ensured that the vendors remained in sync with the firm's goals and targets. As a result of improvement in communication with vendor and vendor development initiatives like standardisation of norms for size and fits, and implementation of a vendor rationalisation program, the number of "A" rated vendors were over 80%. Supply chain department was awarded the ISO 9001:2000 certificate by Det Norske Veritas.

Quality Assurance This was strengthened with the implementation of internal quality control measures. Quality hubs were established at zonal level with a view to proactively prevent quality defects.

Transportation Pantaloons had a central warehouse and 12 regional warehouses located in Pune, Delhi, Ghaziabad, Nasik, Ahmedabad, Bangalore, Hyderabad, Gurgaon, Mumbai, Nagpur, and Kolkata. In case of lifestyle retailing, the entire apparel stock was delivered to the central warehouse, which serviced individual stores. A unique aspect of the supply chain model was the factory outlet, which was the last level of supply chain to ensure that slow-moving merchandise were disposed off on regular basis. In Big Bazaar, the merchandise was delivered directly from the vendors/manufacturers to regional/city warehouses, from where the products were transferred to the respective stores. Food Bazaar had both perishable and non-perishable products. Perishable goods like fruits and vegetables were sourced from the concessionaires and stocked directly at the stores. Non-perishable products were delivered directly from suppliers and manufacturers.

While intercity transport of goods to third parties was outsourced, intracity movement from warehouse to the stores was handled in-house through a fleet of owned vehicles. For lifestyle retail formats, the services of logistic solution providers were used in order to deliver products on time to the stores. For value retail, low cost transport arrangements were secured to optimise transportation cost. Warehouse operations were streamlined through the standardisation of racking system, scientific layouts, and implementation of automatic replenishment system.

INFORMATION TECHNOLOGY

The IT vision of Pantaloons was to address multiple aspects like connectivity, infrastructure, security, real-time information, and tools for financial management. The most rudimentary issue was ensuring seamless flow of data to the head office from regional offices, zonal centres, stores, and warehouses. All locations were connected through company wide virtual private network, stock and sales data from each store was consolidated on a daily basis allowing close monitoring and quick decision-making. Business planning occurred through a planning tool called 'Cognos Planning', while data analysis was undertaken through 'Cognos Powerplay', an analytical platform that enabled data to be drilled down to the lowest level.

The firm installed Closed Circuit Television at stores (CCTV) to relay live feeds to the head office and the zones. To enable quicker decision-making and reduce the lag time, needs of different users were addressed through a personalised 'dash-board', a graphical personalised interface through which one could access information available in the central database. Individual users could receive alerts based on their profiles and categories on various aspects related to stock, sales etc. Graphs pertaining to key performance areas would be generated enabling better control and informed decision-making. An integrated transaction system accumulated accurate real time data as each key function of the organisation performed its day-to-day operations. This included merchandise management, procurement, manufacturing, warehousing, logistics, inventory management, store operations, and customer management.

HUMAN RESOURCE

In a business where individuals comprised the principal asset, the structure of the people pyramid influenced the quality of knowledge captured, the speed with which decisions were made and the morale of the organisation. Human Resource was one of the critical support functions and key element of the corporate backbone. Pantaloons was a young and energetic organisation with average employee age of the 7,379 employees being 30 years. The environment developed a feeling of pride among employees on being 'Pantaloonians'. The Human Resource philosophy was driven by 'The Pantaloon People Management System', which was built on 5 pillars of people based growth — Culture Building; Performance Management through Balanced ScoreCard; People Processes; Management Processes; and Leadership Excellence.

Pantaloon had a functional structure. The organisation was structured as an inverse pyramid and decisions were taken closest to the point of customer action (**Exhibit 6**). Sales executives were encouraged to think

customer first. They were empowered to run their respective departments like 'small business owners'. The organisation's performance based compensation philosophy, 'Pay for Performance, Promote for Potential', was designed to attract and retain qualified employees.

OTHER PLAYERS

Shoppers' Stop

Shoppers' Stop Ltd, a K. Raheja Group company, opened its first department store in Mumbai 1991 and established itself as the ideal destination for shopping in a world-class ambience extended across 740,000sq.ft of retail space of 16 stores in 9 cities and targeted to expand in 12 new cities over 3 years. Average footfall on weekends was 30,000. The company also owned and operated a chain of book stores, Crossword, with 21 outlets in eight cities. The chain was the largest retailer for popular brands like Levi's Strauss, Pepe, Arrow, Zodiac, Ray-Ban, and Swatch. Almost every function, back-end and front, was clearly defined and there was a comprehensive warehouse management system to increase effectiveness of distribution as also a perpetual inventory count system at stores to control shrinkage. Shoppers' Stop was the first retailer in the country to have Bar-coded garments, Co-branded credit card, and Retail ERP.

Trent Ltd.

Established in 1998 as part of the Tata Group, Trent Ltd. operated Westside, one of India's largest and fastest growing chains of retail stores. The Westside stores had numerous departments Menswear, Women's wear, Kid's wear, Footwear, Cosmetics, Perfumes and Handbags, Household Accessories, Lingerie, and Gifts to meet the varied shopping needs of customers. The company had 23 Westside departmental stores (measuring 15,000 - 30,000 square feet each) in Mumbai, Bangalore, Hyderabad, Jaipur, Chennai, Pune, Delhi, Noida, Gurgaon, Ghaziabad, Kolkata, Nagpur, Indore, and Ahmedabad. The company hopes to expand rapidly with similar format stores that offer a fine balance between style and price retailing.

Trent ventured into the hypermarket business in 2004 with Star India Bazaar, providing an assortment of products at the lowest prices, exemplifying a '*Chota* Budget, *Lambi* Shopping' (Small budget, big shopping) motto. Star India Bazaar had one 50,000 square feet store in Ahmedabad offering staple foods, beverages, health and beauty products, vegetables, fruits, dairy products, consumer electronics, and household items at affordable prices and a range of fashionable in-house garments for men, women and children, exclusively available at the store.

The retail sector in India was witnessing a huge revamping exercise as traditional markets made way for new formats such as departmental stores, hypermarkets, supermarkets, and specialty stores. Western-style malls had started appearing in metros and second-rung cities. India's vast middle class and its almost untapped retail industry were key attractions for global retail giants wanting to enter newer markets. Shopping malls were becoming increasingly common in large cities, and development plans were projected at 150 new shopping malls by 2008. Rated the fifth most attractive emerging retail market, India was seen as a potential goldmine and the world's largest retailer Wal-Mart had plans for India. New York-based high-end fashion retailer Saks Fifth Avenue had tied up with realty major DLF Properties to set up shop in a mall in New Delhi. Tommy Hilfiger, retailer of apparels, was also planning one store each in Delhi, Ahmedabad, Lucknow, and Bangalore. The Dubai based Landmark group was contemplating launching hypermarkets and concept stores in high fashion apparel, children and footwear segments at an estimated cost of Rs 775 crore, which was 27 times of the existing asset base of Pantaloon. While this would definitely give a boost to the Indian retail sector, it set Mr. Biyani thinking.

"India is a big country where preferences change every 25 km and customer loyalties shift with every Rs 10. The economy has multiple tax points and the markets are heterogeneous. At Pantaloon, we needed a system designed to manage these dynamics, and information that had to be accurate as well as timely."

Kishore Biyani

While Kishore Biyani was contemplating the proposed expansion plan of Pantaloons to keep pace with the increasingly competitive retail business, he could not help reflecting on the systems and processes of Pantaloons that he had so thoughtfully developed. He did not want to deviate from his key philosophy 'Rewrite rules, retain values.' Would the prevailing systems and processes and a committed work-force, which were the key factors contributing to the success of Pantaloons be adequate to sustain the growth plan, or did it also require a hyper change?

Exhibit 1—Structure of Pantaloons

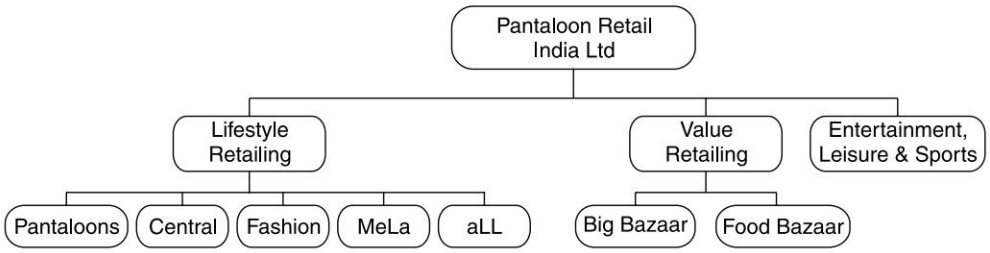


Exhibit 2—Pantaloon Stores in India in 2005

Sl.No.	City	Location	Area (Sq. ft.)
1.	Kolkata	Gariahat	16,000
2.	Hyderabad	Begumpeth	16,000
3.	Hyderabad	Himayat Nagar	9,000
4.	Chennai	Spencer Plaza	22,000
5.	Ahmedabad	Law Garden	27,500
6.	Kolkata	Camac Street	41,000
7.	Kanpur	Rave Multiplex	30,000
8.	Pune	Inox	8,000
9.	Mumbai	Phoenix, Lower Parel	50,000
10.	Gurgaon	Sahara Mall	17,000
11.	Mumbai	Centre One, Vashi	22,000
12.	Baroda	Inox	20,000
13.	Ahmedabad	10 acre Kankaria	20,000
14.	Bangalore	Sigma Mall	20,000
15.	Delhi	Crossriver Mall	20,000
16.	Delhi	West Gate Mall	20,000
17.	Indore	Treasure Island	20,000
18.	Lucknow	Sahara Ganj	20,000
19.	Mangalore	Bharat Mall	20,000
20.	Mumbai	Orchid Centre	20,000

Exhibit 3—Big Bazaar Stores in India in 2005

Sl. No.	City	Location	Area (Sq. ft.)
1.	Kolkata	VIP Road	25,000
2.	Hyderabad	Maheshwari Palace Mall, Abids	43,500
3.	Bangalore	Koramangala	36,000
4.	Mumbai	Phoenix, Lower Parel	40,000
5.	Mumbai	Mulund	56,000
6.	Gurgaon	Sahara Mall	45,000
7.	Nagpur	Landmark, Dhantoli Wadi Road	48,600
8.	Ahmedabad	Rudra Point	55,000
9.	Bhubaneshwar	Forum	40,000
10.	Nasik	The Zone, College Road	26,000
11.	Kolkata	Hi-Land Park	22,500
12.	Ahmedabad	Kankaria	66,300
13.	Ghaziabad	East Delhi Mall	50,000
14.	Durgapur	Dreamplex	26,000
15.	Mumbai	Lake City, Thane	42,000
16.	Mumbai	Growel Plaza, Kandivli	65,000
17.	Bangalore	Banshankari	98,300
18.	Sangli	New Pride Multiplex	24,100
19.	Delhi	Parsvnath Metro Mall, DMRC, Inderlok	32,500
20.	Delhi	DMRC, Wazirpur	35,000
21.	Vishakhapatnam	G V Manor Dwarka Nagar	47,200
22.	Agra	Taj Nagri, Fatehabad Road	na
23.	Ahmedabad	Bapu Nagar	na
24.	Ambala	Raj Market	na
25.	Bangalore	KSRTC	na
26.	Bangalore	BMTC Bus Stand	na
27.	Bangalore	Old Madras Road	na
28.	Bhubaneswar	Maruti Mall	na
29.	Haldia	Aakash Ganga Complex	na
30.	Indore	Treasure Island	na
31.	Mangalore	Bharat Mall	na
32.	Pune	Solapur Road	na
33.	Rajkot	Bharat Iskon Mall	na
34.	Mumbai	Mumbai Central	na

Exhibit 4—Food Bazaar Outlets in India in 2005

Sl. No.	City	Location	Area (Sq. ft.)
1.	Mumbai	Phoenix, Lower Parel	10,000
2.	Kolkata	VIP Road	5,000
3.	Hyderabad	Abids	6,500
4.	Mumbai	R Mall Mulund	14,00

(*Contd*)

(*Contd*)

Sl. No.	City	Location	Area (Sq. ft.)
5.	Bangalore	Koramangala	6,000
6.	Gurgaon	Sahara Mall	11,000
7.	Nagpur	Landmark	5,400
8.	Mumbai	Centre One, Vashi	9,000
9.	Ahmedabad	Kankaria	6,500
10.	Kolkata	Alipore	6,000
11.	Ahmedabad	Rudra Point	10,000
12.	Kolkata	Camac Street	5,000
13.	Bhubaneshwar	Forum	5,000
14.	Nasik	The Zone, College Road	26,000
15.	Bangalore	Hosur Road	9,600
16.	Mumbai	Goregaon	21,260
17.	Mumbai	Oshiwara, Andheri	19,980
18.	Kolkata	Hi-Land Park	7,500
19.	Mumbai	Eastern Mall, Malad	7,500
20.	Ahmedabad	Kankaria	14,000
21.	Ghaziabad	East Delhi Mall	10,000
22.	Durgapur	Dreamplex	5,000
23.	Mumbai	Thane	10,000
24.	Mumbai	Kandivli	10,000
25.	Delhi	Shipra, Ghaziabad	18,868
26.	Bangalore	Promenade	15,000
27.	Sangli	New Pride Multiplex	6,500
28.	Delhi	Parsvnath Metro Mall, DMRC, Inderlok	10,000
29.	Delhi	DMRC, Wazirpur	10,000
30.	Vishakhapatnam	G V Manor Dwarka Nagar	10,000

Exhibit 5—Expansion Plan of Pantaloons in 2006

Format	Location	Area (Sq. ft.)
Pantaloons	Noida	30,000
	Thane	20,000
	Pune	15,670
Big Bazaar	Delhi	35,000
	Pune	65,000
	Kolkata	52,300
	Vijaywada	40,000
	Ranchi	57,500
Food Bazaar	Delhi	10,000
	Pune	10,000
	Kolkata	10,000
	Vijaywada	10,000
	Ranchi	10,000

Exhibit 6—Inverse Pyramid Structure

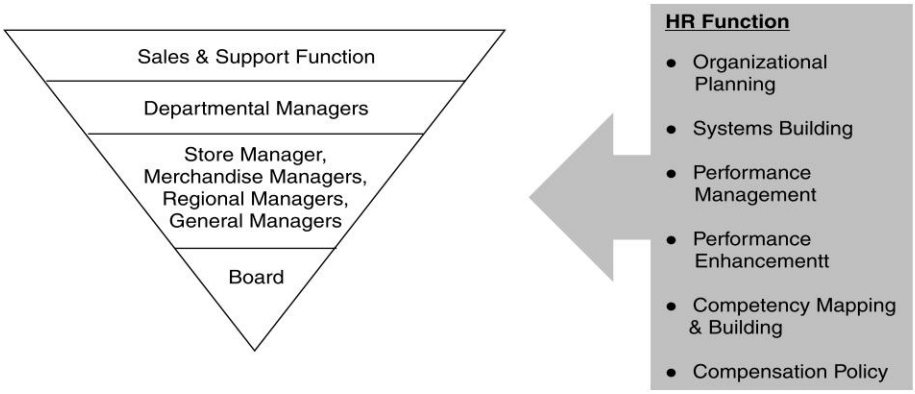
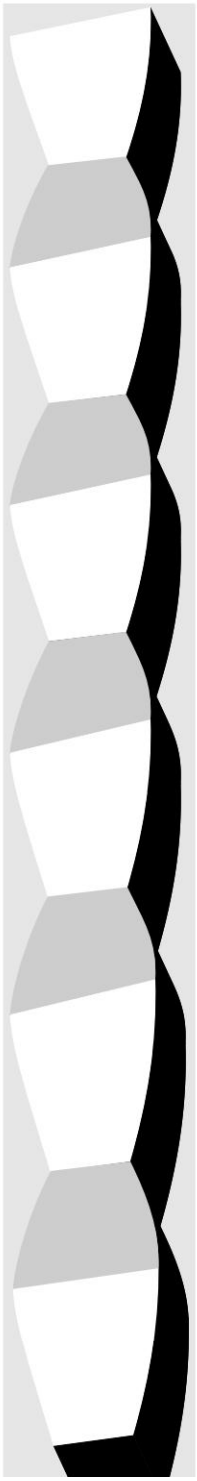


Exhibit 7—Comparison of Pantaloons with other Retailers

	Pantaloon Industries Ltd.	Shoppers' Stop Ltd.	Trent Ltd.
Sales	95.55	510.65	231.49
Raw material, stores, etc.	78.05	362.71	131.76
Power and fuel expenses	0.49	10.04	6.8
Salaries and wages	3.24	28.84	14.86
Advertising expenses	0	6.72	21.17
Marketing expenses	0.59	14.45	13.68
Operating profit	2.96	23.46	11.3
PAT (NOI, NNRT)	1.33	18.79	4.64
Gross fixed assets	28.74	140.51	80.96
Receivables	27.57	68.36	61.19
Return on networth	10.61	22.35	6.35
Return on capital employed	14.74	73.49	9.49

REFERENCES

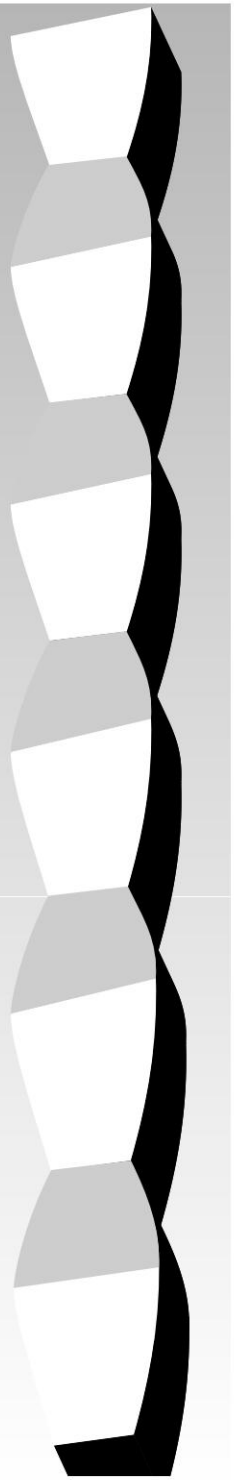
Annual Reports of Pantaloon Retail (India) Ltd.
Business India. Sep 15, 2002; pg 23; Mr BIG (BAZAAR)!
Business Line. Jun 27, 2003; pg 6; Now Gold Jewellery Comes with Insurance Package
Business Line. Apr 20, 2004; pg 6; Mattel, Pantaloon Tie up for Concept Store
Business Standard. May 6, 1999; pg 18; Pantaloon Girds Loins for Retail Thrust
Deccan Chronicle. Oct 15, 2001; pg 16; Pantaloon Opens Big Bazaar in Hyderabad
Deccan Herald. May 15, 2004; pg 15; Pantaloon Opens mall In Bangalore
Economic Times. Sep 22, 1999; Buy the Way: Pantaloon Fashions
Economic Times. Dec 21, 2001-a; pg 17; Pantaloons Opts for Ethnic Chic
Economic Times. Dec 27, 2001-b; pg 7; Pantaloon Inks Retailing Deal with Fabmart
Economic Times. May 17, 2002-a; pg 9; Walt Disney to Go Retail with Pantaloon Pact
Economic Times. Sep 16, 2002-b; pg 9; Pantaloon Signs up with ICC for World Cup Merchandising
Economic Times. Oct 22, 2002-c; pg 9; Pantaloon Set to Make Debut in Middle-East
Economic Times. May 15, 2004; pg 7; Pantaloon Launches First 'Seamless' Mall
Economic Times (Kolkata Ed.), 28th October 2006, Landmark to Extend Retail Footprint, pp 4.
Financial Express. Aug 18, 1999; pg 4; Pantaloon On Recast Drive, Ropes in KPMG for Brand Valuation
Financial Express. Feb 15, 2003; Pantaloon: Growing in a Crowded Space
Images Retail. Aug 31, 2006; pg 3; Pantaloon Retail India Ltd.
Retail Biz. Apr 30, 2004; pg 7; Pantaloon and Arvind Brands Tie up
The Times of India. Jun 6, 2003; pg 15; Pantaloon Hopes To Get the Midas Touch with Gold Chain
The Times of India. Aug 26, 2005; pg 19; Pantaloon Goes Big with Oversize
http://www.exchange4media.com/BrandSpeak/brandspeak.asp?brand_id=86 Last Accessed on 30.10.06
http://www.ibef.org/industry/retail.aspx Last Accessed on 30.10.06
http://www.mywestside.com/about_trent.html Last Accessed on 30.10.06
http://www.pantaloon.com/html/companyinfo.htm Last Accessed on 30.10.06
http://www.pantaloon.com/html/history.htm Last Accessed on 30.10.06
http://www.pantaloon.com/html/index.htm Last Accessed on 30.10.06
http://www.pantaloon.com/html/retail.htm Last Accessed on 30.10.06
http://www.tata.com/trent/index.htm Last Accessed on 30.10.06
http://www.tcs.com/0_features/articles/lead_features/pantaloon.htm Last Accessed on 30.10.06



The McGraw-Hill Companies

Case 9

Bata India Limited—Repositioned or Still Foot Weary?



"Bata India Limited, an integral part of the country's footwear industry, has always been known and recognised as one of the best brands that has been a part of everyone's life at some point of time. To face the challenge of a competitive environment and the ever-evolving preferences of the consumers, Bata India today wishes to reposition itself as a market driven, fashion conscious lifestyle company."

P.M.Sinha, CEO (2004)

In 2005, Bata India was repositioning itself as an affordable market-driven fashion-conscious lifestyle brand from a manufacturing oriented company. To improve the sales and profits, Bata India Ltd. was planning to increase penetration by setting up more retail outlets and taking space in shopping malls across the country. They planned to upgrade existing retail stores and set up wholesale depots in smaller towns and semi-urban areas. Their main efforts were to streamline the wholesale business, reduce costs, improve distribution logistics, and focus on launch of new products in order to improve the performance of the company.

INDUSTRY OVERVIEW

The leather Industry in India occupied a place of prominence in the Indian economy in view of its massive potential for employment, growth, and exports. India's abundance of raw materials (10% of the world raw material) in terms of raw skins and hides and its comparatively low tanning costs made it the second among the footwear producing countries next to China. India produced more of gent's footwear, while the world's major production was in ladies footwear. The domestic footwear market was highly fragmented between rural and urban sectors with a large part of the market belonging to the unorganised sector. Economic Intelligence Service, Centre for Monitoring Indian Economy Pvt. Ltd., in their publication titled "Industry Market Size & Shares" dated February 2005 estimated the total footwear production in India at 186 million pairs in 2003-04. The value of total sales was estimated to be Rs 53,000 million with domestic sales constituting Rs 27,581 million. In the urban markets, national and international brands were offering the latest in fashion and comfort at competitive prices. The burgeoning retail markets fuelled the boom. The rural market was large at approximately 70% of the total market but was dominated by the multiple medium-sized regional players and serviced through the traditional independent dealers. The industry size was estimated at 650mn pairs valued at Rs.75 billion.

The Footwear Industry was a significant segment of the Leather Industry in India. The industry was labour intensive and concentrated in the small and cottage industry sectors. While leather shoes and uppers were concentrated in large scale units, the sandals and *chappals* were produced in the household and cottage sector. In the case of chappals and sandals, use of non-leather material was prevalent in the domestic market. The major production centres in India were Chennai, Ranipet, Ambur, Mumbai, Kanpur, Jalandhar, Agra, and Delhi.

To play a lead role in the global trade, the Indian leather industry focused on innovative design, consistently superior quality, and unfailing delivery schedules. The Indian footwear industry got institutional infrastructure support through premier institutions like Central Leather Research Institute, Chennai, Footwear Design & Development Institute, Noida, National Institute of Fashion Technology, New Delhi etc. in the areas of technological development, design and product development and human resource development. The availability of abundant raw material base, large domestic market, and the opportunity to cater to world markets made India an attractive destination for technology and investments.

Organisation of the Industry

The industry both at manufacturing and marketing sides was fragmented into multiple regions. This was largely because of the large size of the country resulting in local preferences due to the economic, social and seasonal factors, and absence of a proper distribution network. Almost 70% of the industry belonged to the rural segment, which was serviced by the unorganised sector. The urban market was undergoing a large metamorphosis with the advent of new retail formats and brands and was serviced by both the organised and unorganised sector.

Supply and Demand

Almost 70% of the market was rural, largely serviced by the local or regional small-scale manufacturers, offering the price sensitive functional or utility footwear for the masses. The manufacturing remained localised primarily because of the regional or local preferences and seasonality, and lack of proper distribution network consequently impacting adversely on prices to the end consumers. In contrast, the urban market was rapidly changing with the advent of new format retail stores and international influence through Brand Marketing. Prices continued to be the dominant factor for the vast majority, but the younger consumers were becoming

more fashion and comfort conscious. Both the regional unorganised and organised manufacturers catered to this market. The organised sector operated at a national or regional level in both retail and wholesale. Bata India was the largest manufacturer and marketer followed by Action, Liberty, Lakhani, M & B footwear, Paragon, Ajanta, Khadim, Metro, Regal etc. Utility footwear followed by daily office or school uniform shoes dominated this market.

Global Footwear Trade

In 1999, the global import of footwear (leather and non-leather) in terms of value was around US$ 43,278 million. Out of this, import of leather footwear alone accounted for US$ 26,379 million and non-leather footwear US$ 16,899 million. In 1999-2000, export of leather footwear from India constituted 21% share of its total export of leather and leather products. Nearly 33 million pairs of leather footwear were exported out of which shoes/boots constituted 90%. The different types of leather footwear exported from India were dress shoes, casuals, moccasins, sport shoes, horrachies, sandals, ballerinas, and booties. India's export of footwear touched Rs 26,073 million in 2003-04. The major markets for Indian Leather Footwear were the U.K., the U.S.A., Germany, Italy, France, and Russia. Nearly 71% of India's export of Leather Footwear was to Germany, the U.S.A., the U.K., and Italy.

Regulatory Framework

The footwear manufacturing industry was governed by Central Excise and Customs; Factories Act and Labour Laws; and Environment Control Acts. On the marketing side, the Central and State Sales Tax Acts, Standards of Weights and Measures Act, and the Shops and Establishments Act governed it. Besides, there were specific state sponsored association and bodies like Council for Leather Exports, Central Leather Research Institute, and Footwear Design and Development Institute, which promote the industry for specific purpose.

Specific Industry Associations viz. Council for Leather Exports, Central Leather Research Institute, and Footwear Design and Development Institute declared various schemes on an ongoing basis to promote specific activities like export promotion, training design inputs, etc. The State Governments of Himachal Pradesh, Uttaranchal, Jammu and Kashmir, and Assam were promoting manufacturing by offering tax holiday for a period of ten years on full excise duty and income tax and a subsidy in sales tax, land/ building and plant/ machinery.

Political unrest, cross-border hostilities, civil commotion, and acts of terrorism either in India or outside India had direct and indirect impact on industry. A significant change in India's economic liberalisation and deregulation policies, including the shoe and leather industry, also affected business and economic conditions in India. As the quantitative restriction on the import of footwear was lifted, the market was flooded by imports. The Industry growth slowed down from 20% growth rate in the 90's to 8-10% during 2004. Increase in excise duty had a direct impact on the cost of footwear beyond a certain price range, especially volume articles of mass consumption usually purchased by the consumer with less disposable income. Dependence on natural products for raw materials such as rubber and raw hides was subject to the vagaries of nature. The rising costs of raw materials like PVC, petroleum based products, and leather were also a major obstacle in the industry's growth, in addition to the non-availability of world class components in India (Economic Times, 1996).

BATA INDIA LIMITED

Bata India Limited was India's largest manufacturer and marketer of footwear products. It sold over 60 million pairs per year throughout India and in overseas markets such as USA, UK, Europe, Middle East, and Far East.

Bata India was part of the global Bata Shoe Organisation that had a worldwide reach with operations across the five continents, managed by four regional meaningful business units (http://www.bataindia.com/ accessed on 10.04.06).

The company was incorporated by Tomas Bata of Czechoslovakia as "Bata Shoe company Limited" on December 23, 1931 with its registered office in Kolkata, West Bengal. The company was promoted by Leader A.G., St. Moritz, Switzerland, a member of the multinational Bata Shoe Organisation (BSO) with a 100% Equity Shareholding. The BSO consisted of independently run companies operating in several countries across the world. Bata Limited, Toronto, Canada acted as the headquarters of BSO. Bata Shoe Organisation provided an important interchange of new manufacturing technologies, machine design, factory layout plans, advertising, market forecasts, fashion trends, modern marketing techniques, new material and testing. Information on the most advanced machinery and technology for production of shoes were made available to the Bata group of companies, including Bata India Limited. The company set up the first manufacturing unit at Batanagar with land acquired from Port Commissioners and small land owners in the outskirts of Kolkata. The factory started manufacturing shoes in 1936 and the Kottayam Rubber Collection Centre came up in 1939. During World War II, the factory's production was geared to meet war requirements. This was followed by setting up of the factory at Bataganj, Bihar in 1942, the rubber/canvas factory at Faridabad, Haryana in 1951, and Asia's largest tannery at Mokamehghat, Bihar in 1952. Subsequently, the company became a private limited company "Bata Shoe Company Private Limited" on April 6, 1956. The company changed its name to "Bata Shoe Company Limited" upon conversion to a public company on April 18, 1973. The name was once again changed to Bata India Limited on April 23, 1973. It was a 51% subsidiary of Bata BV of the Netherlands.

The Peenya factory at Bangalore started in 1988. In 1994, the Export Oriented Unit at Hosur in Tamil Nadu became operational. By 1995, the firm operated a chain of 1000 retail outlets, 600 franchisees and over 200 wholesalers serving 10,000 retail outlets throughout India. The company was also exporting to developed countries such as Germany, Australia, USA, UK, Holland, Denmark, New Zealand, France, and Canada.

However, the year ending report on 31st December 1994 showed a drastic drop in profit from Rs 20 crore to Rs. 95 lac within a year. Bata became known as a foot-weary player in the media. Prasun Kumar Dutt, Managing Director of Bata India attributed the loss to conditions beyond the control of the company. This included withdrawal of excise exemption on shoes costing below Rs 200 in the 1993-94 budget. Thus, a rise of 20% in shoe prices by Bata India hit volumes as it became uncompetitive at the lower end. The middle class customers switched to other brands when the company started selling its medium and low range products at exorbitant prices, with frequent price mark-ups three to four times a year. The diversification into high value high priced products, which included retailing of garments and accessories to complement the leisure lifestyle shoes was the last straw (Business India, 1997).

At the same time cost of raw materials mainly rubber, textile, PVC compound, and rawhide were increasing. Rising interest rates put a higher interest burden (Rs 13.6 crore) on the company. The Hosur plant also came up in 1994 as a 100% export oriented unit and incurred a loss of Rs 2.3 crore in its first year of operation (Business India, 1995).

While sale increased by Rs 21 crore, cost had gone up by Rs 68 crore. The cost increase was attributed to restructuring of the product line and increased borrowings to finance them. Selling and distribution costs were also the highest in the industry as most of the Bata shops were owned by the company and staffed by employees. The company's focus of selling high value added footwear did not find acceptance in the market. To counter drop in volumes, Bata resorted to discount sales during March-April 1995, where 2 million shoes were sold at a 50% discount at a loss of Rs 41 crore. A marketing strategy was introduced which laid emphasis on the low priced lines of footwear that traditionally generated high volumes for the company. While this change yielded improved results, financial restructuring by infusion of equity capital to reduce dependence on debtors and improve liquidity was also planned to complete the turnaround effort.

Dutt realised the need for cost competitiveness and adopted cost cutting measures to become profitable. The first such step was to replace costly raw materials with cheaper substitutes, reduction in freight cost, and waste reduction by stringent quality control. Introducing a VRS package to downsize workforce and reduction in packaging cost was also planned.

In terms of size, Bata India was considered an operation of sizeable strategic importance for the Parent Company, Bata Shoe Organisation, the largest footwear manufacturer in the world, as it owned 51% in the company. When the performance started declining, the Asia Director Keith Weston, a turnaround specialist and his corporate team were shifted from Singapore to Bangalore to have direct control over the company by Toronto headquarters. Rupees 34 crore was given as advance by the parent company to be adjusted against equity in the rights issue. They also regained 51% holding by subscribing to the rights issue. An audit team was set up which identified disproportionately increasing expenses as the cause of the problem. The root cause of the decline was attributed to the changed marketing thrust on premium brands. After identifying the problem, Weston restructured Bata's production line to make 90% of the shoes for the low and medium priced segments (Business India, 1995-b). Reasonably priced "Super Hit" range of shoes was introduced (Business India; 1996).

The transformation started with selling off the company headquarters at Calcutta for Rs.19.5 crore. All the departments including planning and distribution and commercial departments were shifted to Batanagar, the company's oldest and largest factory premises. Then management changes started. Dutt was replaced with Keith Weston as Managing Director. Middleton was brought in as Deputy Managing Director and R. Senonner was in charge of marketing and retail. Collectively they restructured all the key departments. Inventories were blocking production and retail pipelines. These were cleared at a loss to get Bata functioning normally. The thrust shifted from marketing to optimise resources, cut operational cost, and concentrate on volumes to make the company viable. The main focus was on reducing raw material cost, which was 33% of the total cost, while increasing volumes without increasing price. Within a year sale increased from 48 million pairs to 51 million pairs. With the change in focus from high value addition to the bread and butter line product mix, consequently raw material mix changed. During the days of Dutt, high value products, which necessitated expensive raw materials and finished leather were manufactured through contract operations resulting in large outflow of funds. Weston cut down contract manufacturing to improve capacity utilisation, which was less than 50%.

Distribution expenses were reduced by Rs 3 crore by recovering bad debts and another Rs 4 crore by eliminating advertising, as it was felt that the Bata stores were providing adequate publicity. Focus was on price control and sustaining quality at reduced prices. The concept of popular pricing was introduced to bring back customers. This meant lower margins and need for further controls. To this effect, each unit was made into an independent profit centre. Operational restructuring, on the one hand, meant savings, and on the other, increased coordination and efficiency by combining offices and functions (Business India, 1997).

As a result of these reforms, Bata posted a 216% growth in gross profit and 11% increase in sales in the first half of 1998. Bata Shoe Organisation was optimistic regarding the turnaround performance. Suddenly, the telephone call from India to BSO on 24th July 1998 informing about the assault of managing director Keith Weston by three members of the Bata Mazdoor Union, disturbed them (*Business India*, 1998). All three members were dismissed and the dismissal was upheld by the tribunal in favour of the company (Annual Report 1999 pp. 21). Due to the incident, there were some doubts whether the turnaround was completed successfully. However, the company continued investment for growth. During 2000, Rs 12.83 crore was invested for developing and modernising stores, procuring balancing equipments and moulds, and improving MIS. Employees were sent to BSO international conferences and trained in wholesale and retail operations, human resources and merchandising strategies. In 2000, the company signed a ten year technology and service agreement with Bata Limited of Toronto, Canada (Annual Report 2000 pp.21).

Through 2001-2002, the company maintained thrust on innovation and creativity. The aim was consolidation and providing value for money to the customers, which was particularly needed in the wake of WTO and its impact. By 2005, Bata manufactured and marketed all types of footwear, footwear components, and leather and allied products. In addition, it marketed products related to footwear, accessories, garments, sports goods, and other merchandise.

Infrastructure

The company owned or operated national brands and international brands belonging to the global BSO. As per the international marketing principles and philosophy, the company marketed its footwear and allied products according to the customer profile and the market segment that it targeted. BIL's most modern leather shoe factory, at Hosur was geared to make international quality footwear for export. This factory was comparable to the best in the world with high degree of flexibility and was fully equipped to manufacture men's, ladies', and children's cemented and Moccasin shoes and other footwear.

In the year 2004, Bata commenced installation of the Point of Sales Management Information System (POS) for providing sales and inventory information across the company's stores. The company implemented the system in 140 retail stores to provide centralised on-line information about sales and inventory at the point of sale—retail stores. Such information enabled the company to plan production and optimise inventory levels with the help of information provided by the POS system about ongoing trends in sales and stock levels in each individual retail store.

Process and Technology

Bata had a tannery where raw hides procured from various sources were first soaked with lime and then pre-tanned with aluminium syntans and chrome to allow chrome penetration throughout the cross section of the leather. Splitting, shaving, pasturing, drying, and colour coating were then undertaken to make the leather fit for shoe manufacturing.

Shoe making could be described in two parts: (a) making of upper and (b) making of soles. Leather, with the aid of various cutting and stitching machines ensuring minimum wastage of leather, was given the desired shape. The sole was prepared by moulding rubber or polyurethane or PVC, or cutting leather, which was fixed with the uppers by the "stuck-on" or stitching process. However, in case of sports shoes, the uppers were made out of a combination of PVC, foam canvas, and leather. In the Direct-Injection process, the upper was placed over the sole mould and the heated soling material (PVC or polyurethane) was injected into mould. The technology was fairly labour intensive. However, to improve output, oval shaped rink assembly line was introduced to reduce time spent on movement of operators.

Research & Development

R&D activities focused on key areas of product, process, and material development, footwear moulds and leather and tannery technology with emphasis on solid waste utilisation to creating a pollution-free work environment. Some of the research resulted in breakthrough products like *Comfort*, using dynamic spring pads that acted as cushions on the feet, was commercialised for women's footwear. The cantilever sole design and extra padded insoles provided extra comfort. Another breakthrough was *Wind*, which had an in-built air circulation technology that allowed the feet to breathe fresh air (Rubber India, 2002). *Flexible* was inspired by Chinese reflexology. It had built-in massage points with flexi sole and arch grip system (The Telegraph, 2002).

Bata India proposed to introduce new footwear every week at different prices and focus on boosting volumes (The Asian Age, 2002). It used global technology and designs for providing different kinds of footwear items at varying prices. Bubblegummer shoes with perfumed soles were launched for children. In the PVC sector, it introduced a 'wipe-n-go' range of footwear for men that required no polishing. For women, it offered stitch-top formal wear (Business Standard, 2002).

Human Resources

Employees were categorised in descending hierarchy as Directors, Senior Managers (Senior Vice President, Vice President, General Manager), Middle Managers, Junior Managers, Selling personnel, Shop Managers, and Shop Employees. Additionally, the company employed direct and indirect workmen on its factory sites. The number of permanent employees on the payroll of the company was 9,969 as on January 31, 2005.

The company emphasised training and updating skills of its employees. To facilitate this process, the company maintained training facilities at its factory at Batanagar. Training was imparted to employees both in the classroom as well as on the shop floor. Regular training for *Management Trainees* was conducted over a period of one year, including six months on-job and six months in allied fields for the employees. Storemanco training for newly recruited/promoted *Shop Floor Managers* was conducted every two months. Quarterly Managerial skill development programs for newly recruited *District Managers* and Mandarco training for *middle management* level employees to impart basic managerial skills was conducted. *Workers* training program was also instituted to provide on the job training for basic shoe making to direct workers in the company's factories.

The company had eight trade unions and the biggest and oldest plant at Batanagar witnessed its last industrial unrest in 1992, when there was a strike from January 3 to May 25. This strike was resolved through tripartite settlement for a term of three years, which expired in 1995. The next settlement of wages was signed at a bipartite level, without disruption of work by a long-term agreement with Bata Mazdoor Union representing employees of Batanagar and Calcutta offices. In 1995, the INTUC led Bata Mazdoor Union demanded a price revision of Bata products, stating that the prices were uncompetitive. At about the same time, O.M. Bhutani, Finance Director, who was on en extended term also decided to quit.

During the years 2002- 2004, the company entered into agreements with its eight recognised trade unions wherein the dearness allowance was capped. The Long Term Agreements were concluded with the trade unions of Shop Employees and Factories located at Bataganj, Mokamehghat, Batanagar, Faridabad, Peenya, and Hosur. The agreements with the All India Bata Shop Managers' Union and All India Bata Shop Employees Union were concluded in January 2004.

Marketing

Bata was the largest player in the industry with around 9-10% volume share and a 60% market-share in the organised segment. It had a market share of 70% in canvas shoes segment and 60% in leather shoes. The thrust on marketing started in July 1992, when Prasun Kumar Dutt joined as Managing Director. He raised a rights issue of Rs 48 crore out of which Rs 10 crore was spent across a year and a half in refurbishing Bata shops. Dutt planned to convert the Bata shops into large departmental stores on the line of Marks and Spencers. His strategy was strengthening the premium brands like Hush Puppies, Westminster, Lotto, and Adidas for men and Marie Claire for women. Dutt was shifting the focus of Bata to the premium segment, but publicly maintained that the premium brand accounted for hardly 20% (Business India, 1995). BIL manufactured about 10% of the total Hawai's sold in India and competed with the unorganised sector with its price ranging from Rs35-Rs110 with unorganised sector's pricing at Rs.25-Rs.50. There was speculation in the market that

at such high price, clientele would switch over to price competitive manufacturers. However, M.M. Owla, a senior executive at Bata reacted to this by posing another question "How can a Multinational like Bata be compared with a small-scale shoe maker?"

Besides the eight internationally renowned brands, which included Bata, Hush Puppies, Marie Claire, Bubble Gummers, Power, Sandak, North Star, and Weinbrenner, Bata also offered a wide range of domestic labels like Quovadis, Jubilee, Featherlite, Ambassador, Signor, Hawai, Naughty Boy, Tennis, etc. Hush Puppies, Dog Likeness, Bounce & Design, Comfort Curve, and Body Shoe were owned by Wolverine World Wide Inc. Hush Puppies was one of the world's most comfortable shoe designed for both men and women. Marie Claire was for fashion conscious women who loved shoes that matched their wardrobe. Sandak was a tough shoe to weather any storm, while Weinbrenner was an outdoors shoe with rugged character and durability. Bubble Gummers were positioned for kids while Power was all about athleticism, for those who loved sports and enjoyed sporting activities.

The leading competitor in the popular segment of the organised market was Liberty Shoes. Other organised sector players were Phoenix International, Action Shoes, Lakhani Shoes, Woodland, Paragon, and Relaxo. Most global players like Adidas India, Reebok, Nike, etc were operating through their Indian subsidiaries with focus on premium sports shoes segment, which had an insignificant volume share. Competition was increasing in the domestic market due to popular brands such as Gaitonde, Red Tape, Lotus Bawa, which were gaining market share especially in the premium segment. Bata's trademarks were being copied by competitors selling footwear with such copied trademark at significantly low prices, as compared to Bata's prices. Bata leveraged on its established *brands* like Mocassino, Super Stride, Quo Vadis, Jubilee etc. At the same time, it created a niche for its new brands like Azaleia, Toppers, Bubblegummers, Weinbrenner, and Power International. The company focused on specialty value added products for better margins. It introduced new designs and economy range of products encompassing both style and quality.

Bata also marketed sports wear, readymade garments, hosiery, and other footwear accessories like socks, shoe polish, etc. The marketing division of Bata employed around 4,400 persons directly. In addition to selling footwear manufactured in its factories, the company also marketed footwear, accessories and other merchandise purchased by it from contract manufacturers. The marketing division was divided into retail and non retail.

Retail This segment primarily looked after the marketing efforts of the company operated outlets. For greater efficiency and coordinated marketing efforts, this segment was further sub-divided into two groups-*Flagship City* catering to the higher end products and to premier dealer outlets and *Family & Bazaar*, accounting for over 80% of the volumes sold, catering to economy products.

Non-Retail This segment catered primarily to the non-exclusive dealer outlets, which marketed the Bata range of products. This segment was sub-divided into two groups—exports and wholesale. The wholesale group looked after sales carried out through non-exclusive dealers across the country.

The marketing department was divided into four zones with a Senior General Manager responsible for each zone, supported by a Business Development Manager and several District Managers. The company had an advertising and sales promotion department to look after sales promotions, brand management, and other marketing tools engaged by the company to aid its product marketing efforts. This department worked closely with both the Retail and well as Non-Retail segments of the marketing division of the company. Over 60% of sales were for the men's range, while children's and women's range accounted for about 20% each. In women's segment, the *Sun-drop* range of casual ladies wear endorsed by Rani Mukherjee was popular.

Distribution Bata operated through a chain of exclusive own and franchise stores located in prime locations countrywide. 70% of Bata's sales were from its own retail outlets. Besides, there was a network of 300 exclusive wholesalers who serviced 30,000 retail stores all over the country. Overall, it had over 1,600 showrooms, 27 wholesale depots, and 8 distribution centres across the country. Bata India marketed its products through three distinct channels, retail, wholesale and export.

Retail Outlets With the shrinking of the world into a small global village, Indian consumers aspired for international taste and style. In addition, to make things easier for the consumer Bata introduced the concept of store classification and sub-divided it into Flagship, City, Family, and Bazar stores. Flagships were in metro cities at high-class locations supplying fashionable products, imported and international brands in air-conditioned and luxurious atmosphere with comprehensive mobile display units with new arrivals (Business Line, 2000). City Stores were located in Metros and semi-Metros at high-end commercial locations, catering to the needs of fashion-oriented middle and high-income group consumers. They were air-conditioned stores with panel display and mobile display unit for brand promotion with new arrivals. Family stores were at high Traffic commercial location in major and boom-towns providing medium to high priced basic footwear. These were non-air conditioned stores with total commercial look, mass display, standard panel, and stooping rods. Bazar were high traffic stores at non-commercial location as destination store and small existing stores in thickly populated and saturated markets. Basic and volume selling lines for low and medium segments and sub-standard clearance were available (Financial Express, 2004).

The company operated its own retail network of over 1,100 retail stores spread across the country. These outlets were serviced through six distribution centres spread out geographically and each responsible for a particular region The process flow began with the transportation of the finished products from the company's manufacturing units and contract manufacturers' plants to the distribution centres through the services of third party carrying and forwarding agents. The distribution centres in turn transported these products to the company operated retail outlets based on specific demand requirements. These retail outlets were manned by the company's employees and exclusively marketed the company's footwear brands. As part of its strategy to provide complete footwear solutions to customers, the retail outlets also marketed accessories like shoes laces, socks, and shoe polish. In certain outlets, the company also provided cosmetic services like pedicures, etc. Out of the 1,100 retail stores, the company had designated 84 stores as factory outlets that sold merchandise at marked down prices. These factory outlets were used primarily by the company to sell surplus or non-moving products and factory seconds stocks. Institutional sales as well as supplies to the civil and defence agencies were also taken care of through the company's distribution network. The company designated specific senior managers to oversee the marketing to this segment of buyers. The requirements were directly supplied from the company's distribution centres.

Wholesale Through this channel, the company supplied its products to non-exclusive wholesale distributors who in turn distributed the company's products to independent dealers across the country. The dealers covered under this channel were non-exclusive Bata dealers and hence sold footwear and related products of other companies also. To generate volume business in semi-urban markets, and markets that were unrepresented and under-represented, the company started Market Extension Programme, through authorised Bata dealerships. Under this programme, the company appointed authorised dealers, subject to certain selection criteria who run outlets that exclusively marketed the company's products and adhered to rules and regulations of the company. There were 470 such outlets in the country. The employees of the private dealer manned the dealer outlets. Dealerships were family stores located in major cities, some of them air-conditioned. Products consisted of medium to high priced shoes for the whole family. These shops dealt in local brands and unbranded shoes

from small manufacturers. Wholesalers were shoe traders who bought merchandise to resell to traditional dealers located in rural areas and street markets of major cities/towns. They kept inventory for replacement and sold on credit or cash basis. Their focus was on volume products and some of them sold to institutions. The wholesale division of Bata at Gurgaon catered to large industries and private/public institutions that required footwear for their own workers. Under the Dealer Support Program, independent dealers were allowed to use red and white square check signboard that bought 100% of their assortment from Bata depots. A product mix of low to medium priced shoes for the whole family was the focus. Departmental stores were big multilevel air-conditioned, modern, and full service stores located in major metro cities, with medium to high priced shoes for men, women, & children. The collection comprised products with local and international brands.

Exports The company also exported its products to countries like Germany, Australia, USA, UK, Holland, Denmark, New Zealand, France, Canada, Middle-East, and Far-East markets. It exported about 4 million pairs of shoes annually. Majority of the export was Canvas shoes under leading private labels to customers in the United Kingdom and France. Men's leather shoes were sold to established retailers in Europe, Middle-East, and Far-East. The company exported footwear to countries like United Kingdom, Middle East, France, Papua New Guinea, and Singapore. Exports were primarily bucketed into exports to BSO companies (marginal volumes) and non BSO markets. Non BSO operations could broadly be classified into three geographically defined groups.

United Kingdom This was the largest export market for the company with canvas shoes being the main product exported. The exported products were supplied direct to leading retail chains in the UK who sold these products under their own brand name rather than that of Bata.

South-East Asia and Pacific Rim Countries The major product exported to these markets was the Hawai range of *chappals*/slippers. The products were sold directly to leading retail chains under the Bata brand name.

Middle-East Asia Major products catering to this export market were leather shoes and *chappals*. The company marketed these products to wholesalers in the respective markets under its own brand name.

Quality Control

All products produced at the company's manufacturing units were checked for quality adherence before they left the factory premises. The techniques used for quality checks included sampling and physical tests. The merchandise was again physically tested for quality adherence by the store managers at each retail outlet. The company estimated that no more than 1% of the total produce of the company contained manufacturing defects leading to rejection. Retail outlets and dealers were empowered by the company to repair the company's products using local resources for which they were reimbursed by the company.

Collaborations

Marketing In addition to products manufactured by it, the company also sold footwear, accessories, garments etc. manufactured by international and domestic agencies/entities. The company entered into following arrangements with international shoe manufacturers such as Reebok, Adidas, M&B Footwear Private Limited, Tej International Private Limited, and Sierra Industrial Enterprise Private Limited for marketing their products though the company's retail outlets.

Reebok Under this arrangement, the company purchased shoes from Reebok as per its requirement and earned a gross margin of 36% of the retail price. Payments were to be made within 60 days by means of issue of cheque/*hundi*. Further, delivery cost of goods was borne by Reebok (Financial Express, 2001). The shoe range included sports shoes for walking, running, tennis, and training for personal fitness and sports. The shoes were priced in the range of Rs 900 to Rs 2,500. The product range would be expanded in stages by adding new specialised products.

Adidas Marketing Private Limited Adidas Marketing Private Limited has agreed to provide the company with its products in footwear, apparel, accessories at a gross margin of 40% for footwear and 42% for apparel and accessories. Margins offered to Bata were subject to change in event of changes in the tax structure and business scenario. Payments were required to be made with a maximum of 60 days credit facility. Further, delivery costs were borne by Bata according to freight bills produced by Adidas.

M&B Footwear Private Limited M&B footwear provided the company basic stocks of its brands "Lee Cooper" and "ID" at a margin of 40% of the retail price. M&B Footwear would advertise and promote Bata as its business partner. The term of this arrangement would extend for three year starting April 30, 2003. M&B Footwear tied up with Bata India Ltd to retail Lee Cooper shoes at Bata Stores. It was the sole licensee for Lee Cooper shoes in the country. Bata shoes would also sell M&B's indigenous shoe brand, ID, under the tie-up. Lee Cooper and ID shoes would be sold at 30 Bata flagship stores and 50 city showrooms in India. However, the tie-up did not cover Bata family stores. Thirty styles from Lee Cooper range and 20 from ID were displayed initially at the stores. The shoes priced in the Rs 885-1,685 and Rs 985- 2,085 range. It was the first tie-up that Bata entered into in the casual/semi-formal shoes segment. Lee Cooper was sold through 600 multi-brand outlets in India. It was also sold through franchise stores set up in alliance with Indus Clothing Company Ltd. (Financial Express, 2003).

Sierra Industrial Enterprise Private Limited Sierra Industrial Enterprise Private Limited agreed to supply the company their products "Lotto", which launched in almost 50 flagship stores of Bata by mid-February 2005 and was expected to reach 250 stores by mid-August 2005. Bata purchased the products at an agreed gross margin of 42% of the retail price. Payments were required to be made with a maximum of 60 days credit facility with recourse to Bata India account. Further, delivery costs were borne by Sierra.

Planet Sports Private Limited The company entered into a Consignment Agreement dated February 29, 2004 for a period of three year extending till February 29, 2007 with Planet Sports Private Limited for supply of footwear, apparel and accessories by the brand name "PUMA" at the maximum retail price or at a discounted price as provided by Planet Sports Private Limited and Bata was entitled to a commission of 35% on the sales net of taxes.

Financial The company had a financial collaboration with Bata BV, Holland The Netherlands for all types of footwear and footwear components.

Technical The company had technical collaboration with Adidas Sports Schuhfabriken, Germany and Leader AG, Switzerland for special application sports footwear and sports goods. The company entered into a Know-how and Footwear Manufacturing Licence Agreement dated November 24, 2000 and a Trademark Licence Agreement dated December 28, 1995, both with Wolverine World Wide, Inc., State of Delaware, United States of America. By these agreements, Wolverine World Wide granted BIL an exclusive, non-transferable license to manufacture the footwear for men, women, and children in accordance with the technical know-how granted by it. Bata was also granted exclusive right to sell the footwear so manufactured bearing

the trademark "Hush Puppies", "Dog Likeness", "Bounce & Design", "Comfort Curve" and "Body Shoe". In consideration of the supply of technical know-how and trademark licence, the company paid to Wolverine World Wide, net of taxes, royalties of (a) in the case of products purchased from third party manufacturers for resale in India, 5% of the ex-factory cost (b) in the case of products manufactured by the company, 5% of the company's ex-Factory cost; and (c) a lump sum fee of US$ 630,000. Wolverine World Wide, Inc. was a leading designer, manufacturer, and marketer of a broad line of quality casual shoes, rugged outdoor and work footwear, and constructed slippers and moccasins. The company's global portfolio of owned and licensed brands included: Bates, Hush Puppies, Sebago, and Wolverine. Wolverine was the parent company for Hush Puppies whose footwear was traditionally soft suede casuals sold in more than 65 countries all over the world (Financial Express, 1993). The company also operated a retail division to showcase its brands and branded footwear from other manufacturers, a tannery that produced Wolverine Performance Leathers™ and an apparel and accessory licensing division to extend its owned brands into product categories beyond footwear. Wolverine World Wide Inc. had its corporate headquarters in Rockford (Michigan, USA). The company had consolidated revenues of US$ 888.92 million for fiscal 2003. The company's share capital consisted of common stock of US$ 46.66 million (Source: 2003 Annual Report of Wolverine World Wide Inc.). The Agreement was valid until March 26, 2005. However, the company negotiated the terms, including royalty and lump sum fee, with Wolverine World Wide, Inc., and it agreed to enter into a fresh Know-how and Footwear Manufacturing License Agreement from March 27, 2005 until March 26, 2010.

The company entered into a Memorandum of Agreement dated May 14, 1997 with Scholl Plc, England, for supply of technical know-how and use of the 'Scholl' Trademark. Scholl granted Bata a licence to sell footwear utilising the technical know-how and/or inventions owned and/or created by Scholl in compliance with the standards of Scholl. The company, in consideration of receiving the technical know-how and other rights granted under the agreement, paid royalty to Scholl at the rate of 5% of the net sales (calculated in the manner provided therein) of the actual marketable pairs. The Agreement specifically stipulated that Bata would sell the Scholl range of products only through its retail outlets.

The company entered into a Technical Collaboration Agreement dated December 29, 2000 with Bata Limited, Canada for ten years to provide (i) engineering services; (ii) construction and architectural services; (iii) research and development services; (iv) testing and quality control services; (v) footwear technology and general technical services; (vi) environmental, health and safety services; and (vii) brand development services on request by the company. In consideration of Bata Limited, Canada providing the above mentioned services to the Company paid royalty net of taxes amounting to i) Royalty of 1.5% of the gross turnover of the Company on domestic sales; and ii) Royalty of 1.5% of the gross turnover of the company on export sales.

Joint Venture

Riverbank was a joint venture company between the Company and Calcutta Metropolitan Group Limited ("CMGL") pursuant an Agreement dated January 14, 2005. CMGL, a public company, was incorporated on June 9, 1999 at Kolkata to acquire land and property and construct houses, buildings or works or pull down, rebuild, enlarge, alter and improve existing houses, buildings for roads, streets, squares, gardens and other conveniences, and framing and execution of infrastructure development schemes.

Riverbank was incorporated on February 18, 2005 for the purpose of implementing the project of developing an integrated modern township on a part of the surplus land situated at the Batanagar premises of the company. The main objective of Riverbank was construction and development of an integrated modern township in Batanagar. The Project was to be completed in three stages namely (1) planning and obtaining permissions (2) Construction of new employee housing and rehabilitation of affected employees of BIL and (3) redevelopment of the remaining land forming part of the premises of BIL.

Strategy of the Company

Bata was planning to focus on innovation and creation of products to cater to the requirements of a varied class of consumers. It wanted close co-ordination between merchandising, product development, planning, manufacturing, and distribution in its new business plan. It was re-orienting itself to emerge as a marketing company, rather than a manufacturing company, to improve on its 11% share of the organised footwear market to achieve a volume growth of 25% from the current 60 million pairs of shoes. It was replacing cash-drain stores with large format stores (Rubber India, 2003).

Bata India made top level changes, through which the Managing Director (MD) Stephen John Davies relinquished charge and in his place Marcello Villagran Bravo, who was the head of the Group's operations in Chile, was appointed. Shaibal Sinha was inducted as the company's new finance director. N. Shankar, Chairman of the Sanmar Group and Dr Amit Mitra, Secretary-General of the Federation of Indian Chambers of Commerce and Industry (FICCI) were inducted as independent directors in Bata India (Economic Times, 2005-a).

The company was focused on margin improvement and cost effectiveness. The company initiated control on costs in purchases and outsourcing and started global sourcing for raw materials to improve the net realisation. Old merchandise was disposed through discount sales, write-offs, etc. to enable it to focus on improving sales. To optimise utilisation of production facilities, a new logistics team focused on obtaining specific orders from the market for best selling designs and sizes and ensured that all raw materials were available in the factories well in time so that the company could produce and place in shops the products that consumers wanted. Thus focus on consumers and market demand reduced inventories and improved sales-to-stock turnover. Bata initiated cost control measures such as rationalisation of overhead costs and shutting down unviable stores during 2003- 2004 to regain profitability. It replaced nine cash-drain stores with new large format stores (Financial Express, 2003); and closed five depots and converted them into C&F (carrying and forwarding) agents. It renegotiated *cost of transporting* products to sales outlets to make them more competitive.

Bata India replaced high-cost short-term loans from proceeds of a rights issue. Loans were restructured to cut interest cost by 2 percent (The Telegraph, 2005). As part of the margin improvement program, outsourcing of manufacturing was conducted from contract manufacturers based in Himachal Pradesh and Uttaranchal, which were offering concessions in excise, sales tax, and corporate tax. The company was exploring third party manufacturing facilities in two other tax-free states of Assam and Jammu and Kashmir (Economic Times, 2005-b). The company also planned to outsource shoes from China to reduce cost (Business Line, 2002).

As part of the rationalisation of work practices, processes, and modernisation the company offered *Voluntary Retirement Scheme* (VRS) to 1520 employees (The New Indian Express, 2004). The company *modernised* 17 stores, opened 20 new stores, and closed down 60 unviable stores. The company collected old outstanding amounts from wholesalers thus *reducing working capital*. The company also adopted a dual policy to collect the old outstanding. On the one hand, the company negotiated settlement with the wholesalers and offered discounts to those willing to pay the reduced amount and on the other, it filed legal cases against those who were not willing to settle and pay.

The company reorganised its front line sales force and promoted its best performing shop managers as district managers. It started intensive *training programme* for its shop assistants and managers to ensure excellence in service to the customers. The company focused on rural marketing thrust where the market was growing faster than the urban markets. Young managers with fresh ideas were brought in and inspired and empowered with the requisite skills.

Bata India kept its retail outlets open 365 days and for longer hours. Further, the company was restructuring its operations to make each of its manufacturing facility specialise in a single line of footwear. Batanagar facility, near Kolkata, focused on shoe uppers and closed shoes of leather and leather-like synthetic, and

stopped making canvas shoes and hawai chappals, while the Batagunge facility, specialised in chappals (*Financial Express*, 2005).

Initiatives such as opening new stores, renovating existing ones, and launching innovative product lines, while focusing on customer service were aimed at improving the retail business. On the operations front, Bata closed down 60 unviable stores and started outsourcing manufacturing from tax holiday states such as Himachal Pradesh and Uttaranchal and exploring the possibility of third party manufacturing units in other tax-free states such as Assam and Jammu & Kashmir. With such changes, the management was hoping that Bata would be able to reposition itself as an affordable market-driven, fashion-conscious lifestyle brand.

Exhibit 1—Key Milestones

Year	Event
1894	Bata Shoe Organisation founded by Tomas J.Bata, a ninth generation shoe maker
1931	Bata Incorporated in India
1933	The production of footwear commenced in a rented premises at Konnagar, near Kolkata, where for the first time rubber and canvas shoed were manufactured in India
1934	Land was procured at Batanagar, Kolkata and factory shifted from Konnagar
1936	Factory produced leather footwear for the first time in India
1937	Batanagar Tannery became operational
1939	Batanagar township became self sufficient, with acquisition of more land and construction of schools, places of worship, hospitals, entertainment and recreational centres
1942	Footwear manufacture plant and machinery department set up at Batanagar, which produced India's first man-made major shoe machine. Another factory set up at Bataganj, Bihar
1950	Hawai was launched
1951	Rubber / Canvas factory set up at Faridabad, Haryana
1952	One of Asia's largest tanneries set up at Mokemehghat, Bihar
1988	Bata Factory set up at Peenya, Bangalore
1993	Batanagar factory became the first Indian shoe-manufacturing unit to receive IS 9001 certification
1994	Factory at Hosur, Tamil Nadu became operational as an export oriented unit but later catered to domestic market

Exhibit 2—Installed Capacity and Capacity Utilisation

		2002	2003	2004
Rubber & Canvas Footwear (Pairs)	Installed Capacity (000's)	42500	42500	42500
	Licensed Capacity (000's)	42500	42500	42500
	Actual Production (000's)	24922	21726	20943
	Capacity Utilisation (% of lic. Cap)	59	51	49
Leather Footwear (Pairs)	Installed Capacity (000's)	20256	20256	20256

(*Contd*)

(*Contd*)

		2002	2003	2004
Finished Leather from Hides (Pieces)	Licensed Capacity (000's)	15637	15637	15637
	Actual Production (000's)	11796	10797	9564
	Capacity Utilisation (% of lic. Cap)	75	69	61
	Installed Capacity (000's)	1596	1596	1596
	Licensed Capacity (000's)	1147	1147	1147
	Actual Production (000's)	761	635	528
	Capacity Utilisation (% of lic. Cap)	66	55	46

Exhibit 3—Brief Details of Board of Directors

Mr. P. M. Sinha was the former CEO of Pepsi Cola International South Asia and was the Chairman of Pepsico India Holdings and President of Pepsi Foods Limited. He was also serving on the Boards of ICICI Bank Limited, Wipro Limited, and Indian Oil Corporation Limited.

Mr. Marcelo Villagran had more than 34 years of experience with the Bata Group. Before joining the company as a Managing Director, he was working with one of the most successful companies in the Bata group, i.e. Bata – Chile. He had wide operating and sales experience. He was a commercial engineer with a degree in Bachelor of Business Administration.

Mr. Pradip Kumar Nag graduated in Commerce from Calcutta University and was a member of All India Management Association. He had experience in multifarious areas of Accounting, Financial Management, Taxation, Costing Principles & Methods, and Administrative functions. He held the position of Sr. VP, Finance in the company for 5 years. Mr. Nag was trained at Toronto, Chicago, Ottawa, and Philadelphia in areas of Retailing, Financial Accounting, and Management Reporting for 'SAP' Project for North American BSO Companies. He was appointed by Bata Limited, Toronto, Canada (Headquarters of Bata Shoe Organisation) as Director 'Enterprise Controlling' for Integrated Business Systems and was associated with implementation 'SAP' Integrated Business Systems in Retail Canada and User Support Programme.

Mr. Jaswant Singh started his career with the company in 1971, and became Managing Director, Bata Shoe Co. Uganda Limited in the year 2000, where he served until his transfer to Bata India Limited in 2004. He had experience in Retail, Wholesale, Brand Management, Production, Merchandising, and General Management. He attended courses such as MARKETCO, Monssey, France, 1983, ADVANCO, Chicago, Toronto, 1990, EMP (Executive Management Programme) NYC, Toronto, 1998, Company Managers Programme Toronto, 2000 and represented the Company at several Shoecons, namely Milan, Padova, Prague and Chicago. He was awarded an Achievement Award by Mr. T.G. Bata in 1990 for North Star.

Mr. A. K. Thakur, B.Com from Calcutta University and a Chartered Accountant, was the former Executive Director of Unit Trust of India. He worked in all the key areas of Unit Trust of India and participated in formulating various corporate policies, procedures, and strategic decisions.

Mr. V. Narayanan began his career in 1959 in Hindustan Lever Limited. In his ten years with HL, he specialised in Sales and Marketing, both in India and in the UK. He joined Chesebrough Pond's Inc in 1968 as its Marketing Director and became Chairman and CEO of Pond's in 1978. After his retirement from Pond's, Mr. Narayanan was on the Board of several leading companies.

Mr. Constantin Salameh worked for 19 years with Hewlett Packard, since 1984, in sales, marketing, and financial services in Europe and Asia Pacific and rose to the level of Vice-President and Managing Director of Financial Services in Asia Pacific (1996-1999). A product of King's College, England

(B.Sc. Engg.), M.I.T. (MSc. Engg.) and MBA from Stanford University. Mr. Salameh addressed external audiences – including the Management Centre Europe, Euromoney, International Technology Management, Asia International, and World Bank Conferences on operational aspects of captive finance entities, business planning, and financial management practices from a global perspective.

Dr. Amit Mitra, Masters in Economics from Delhi School of Economics Doctorate Degree in Economics from Duke University, USA. Later he taught in major Universities in the United States over a decade and received the prestigious Sears-Roebuck Foundation Award for Distinguished Teaching, 1990. He had Post Doctoral Research experience as senior consultant. He was also on the Board of Directors of SAIL, GAIL, Principal PNB Asset Management and a Member on the Advisory Board of The India Fund of UTI, Member of the Central Advisory Committee, Central Electricity Regulatory Commission, Life Insurance Council, "India-China Eminent Persons Group", Central Listing Authority constituted by SEBI, Advisory Committee to Union Commerce Minister of India on International Trade (WTO), and "Indo - EU Roundtable" from the Indian side (initiated by Government of India and the European Union (EU)).

Mr. N. Sankar had a Masters Degree in Chemical Engineering from the Illinois Institute of Technology, Chicago, USA. He was the Chairman of The Sanmar Group, which operated in diverse areas such as Chlorochemicals, Speciality Chemicals, Shipping, Engineering, Insurance, and Cement. Mr. Sankar held office in several public bodies representing trade and industry, such as the President of Assocham and the Chairman of the Indo-US Joint Business Council.

Exhibit 4—Revenues of Bata India Ltd.

(%)

	2004	2003	2002	2001	2000	1999
Turnover						
Domestic	98.59	98.29	97.74	97.51	97.21	96.97
Export	1.38	1.69	2.24	2.46	2.77	3.00
Export						
BSO	6.84	32.96	33.37	34.84	33.93	58.23
Non BSO	93.16	67.04	66.63	65.16	66.07	41.77

Exhibit 5—Income Statement of Bata India Ltd.

(Rs in Crore)

Income Statement	2004	2003	2002	2001	2000	1999	1998	1997	1996
Income	699.21	679.6	664.12	737.49	720.36	732.55	744.77	672.41	593.41
Net sales	694.05	674.1	649.73	720.73	719.22	731.57	743.17	670.64	590.5
Other income	4.44	5.3	10.6	13.73	1.14	0.98	1.6	1.77	2.91
Non-recurring income	0.72	0.2	3.79	3.03					
Expenditure	741.01	679.75	650.13	709.43	672.1	664.04	697.65	630.02	559.79
Consumption of raw materials	389.89	339.49	308.35	365.37	349.49	356.37			
Change in stock	13.73	–40.57	–39.52	25.89	–37.07	–12.04			

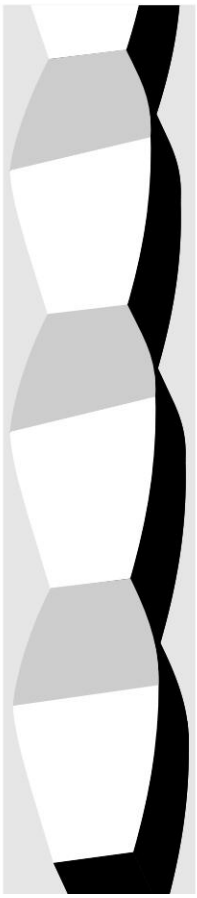
(*Contd*)

(*Contd*)

Income Statement	2004	2003	2002	2001	2000	1999	1998	1997	1996
Personnel cost	187.21	192.43	182.64	180.26	178.77	170.08			
Other expenses	163.91	147.83	159.14	163.8	143.84	137.59			
Non-recurring expenses									
PBDIT	–41.8	–0.15	13.99	28.06	48.26	68.51	47.12	42.39	33.62
Interest	8.53	7.86	8.32	9.09	8.91	6.84	7.79	14.43	19.3
PBDT	–50.33	–8.01	5.67	18.97	39.35	61.67	39.33	27.96	14.32
Depreciation	12.42	13.12	13.08	13.48	14.05	13.58	12.36	10.4	10.17
PBT	–62.75	–21.13	–7.41	5.49	25.3	48.09	26.97	17.56	4.15
Tax		4.92		1.74	9.7	17.63	2.72	0.92	
Deferred tax		4.92							
PAT	–62.75	–26.05	–7.41	3.75	15.6	30.46	24.25	16.64	4.15

REFERENCES

Annual reports of Bata India Ltd.
Business India, April 10-23, 1995; pg 89-91, Down in the Dumps
Business India, April 7-20, 1997; pg 76-78, Best Foot Forward
Business India, March 25- April 7, 1996; pg 21, On the wrong foot
Business India, September 25- October 8, 1995-b; pg 25, Foot-weary
Business India. Aug 23, 1998; pg 78, Old Brogues Pinch
Business Line. Jul 27, 2000; pg 6, Bata to Redesign Outlets as Lifestyle Showrooms
Business Line. Sep 15, 2002; pg 8, Bata: On the Restructuring Path
Business Standard. May 18, 1996; pg 5, Bata to Cut Production Lines, Focus on Logistics
Business Standard. Mar 6, 2002; pg 5, Bata to Launch New Range Every Week
Economic Times. Jul 20, 1996; pg 7, Playing Footsie with Luck-Footwear
Economic Times. Feb 3, 2005-a; pg 10, Musical Chairs: Bata Rejigs Top-Level Management Again
Economic Times. Aug 15, 2005-b, Getting 'Real'istic
Financial Express. Sep 19, 1993; pg 4, Bata to Launch Hush Puppies
Financial Express. Apr 22, 1997; pg 4,
Financial Express. Aug 24, 2001; pg 5, Bata Announces Agreement to Market Reebok Footwear
Financial Express. Jun 28, 2003; pg 4, Bata India to Cut Overheads, Shut Unviable Outlets
Financial Express. Mar 10, 2004; pg 10, Bata Polishing Image for New-Age Race
Financial Express. Nov 3, 2005; pg 13, Recast At Bata India; Shops to Open 365 Days
http://www.bataindia.com/brandmain.php Accessed on 10.04.06
http://www.bataindia.com/export.htm Accessed on 10.04.06
http://www.bataindia.com/retail.htm Accessed on 10.04.06
http://www.bataindia.com/technology.htm Accessed on 10.04.06
http://www.bataindia.com/wholesale.htm Accessed on 10.04.06
http://www.indiainfoline.com/comp/bata/mr01.html Accessed on 10.04.06
http://www.indiantelevision.com/mam/headlines/y2k4/apr/aprmam68.htm Accessed on 24.11.06
Rubber India. Sep, 2002; pg 84, Bata Launched 'Wind'
Rubber India. Aug 31, 2003; pg 58, Bata to Bet on Innovation and Creation
The Asian Age. Jul 20, 2002; pg 15, Bata to Launch 150 New Models
The New Indian Express. Apr 1, 2004; pg 13, Bata Introduces Golden Handshake
The Telegraph. Jul 20, 2002; pg 19, Bata Unveils 4—Pronged Strategy to Move Ahead
The Telegraph. Jun 28, 2005; pg 15, Bata Bets On Rural Market, Hopes to Prune Costs



The McGraw-Hill Companies

Case 10

United Breweries Limited

Now we are big enough in India and it does not make sense to acquire companies here. So, the next step obviously is to look for global acquisitions and expansion to give us an international platform and portfolio.

Dr. Vijay Mallya,
CEO, UB Group, 2005

United Breweries had become the second largest global beer producer in volume after a series of acquisitions. The company sold 60 million cases per year, while the global leader Diageo sold 91 million cases. Mallya was targeting to get the number one position within the next three to five years.

BEER INDUSTRY

The beer market comprised regional markets – North America, Europe, Asia, Africa, Latin America, Australia—each with its own dynamics and cultural preferences. As a result, there was no dominant global brewer—rather, there were a number of international brewers with strong regional positions.

The breweries industry in India producing 112 million cases of beer (8 million hectolitres) was a concentrated industry with a CAGR of 10%. UBL accounted for nearly 39% of the total sales (Annual Report 2003). The Company controlled 21 of the country's 57 breweries. United Breweries and Shaw Wallace shared approximately 66% of the beer market. The per capita consumption was low at 0.6 ltr. per annum, compared to the world average of 25 litres while China consumed 20 litres and several European countries exceeded 100 litres. The Beer industry formed a small portion of the entire market at about 17%, compared to Indian Made Foreign Liquor at 25% and Country Liquor at 58%. Almost 70% of the population in India, (i.e. over 700 million people) being below the age of 34, indicated the potential for increase in the demand for beer in future. The growth of job and income generating activities for the young educated population particularly in the service industry was resulting in increased demand for beer. Change in life style, higher disposable income, shift in expenditure pattern towards personal consumption items such as food, drinks, and entertainment and exposure to global trends were favouring growth.

In India, beer was categorised into mild beer (<5% alcohol), strong beer (5-8%) and draught beer, as fresh keg beer. During the 21st century, the strong beer market was growing with a CAGR of 13% and accounted for 63% of the beer market, while that of lager beer had a CAGR of 2%. This prompted the launch of many new brands in the strong-beer segment. Draught beer was popular mostly in cities such as Bangalore and Mumbai. However, with a limited shelf life, draught beer volumes were limited, and proximity to a large market was essential. In western countries, beer was treated as a beverage because of its low alcohol content and mild beer was preferred to strong beer. However, in India, regular drinkers wanted "value-for-money" purchases in the form of stronger beer.

Consumer's habits and regular purchases determined volumes. If a consumer was attracted to a certain brand, the volumes would be regular. The industry was seasonal in nature with the summer season being the busiest (30% volumes sold in April to June). The second and third quarters constituted traditional low season and together accounted for 40% of annual volumes. The consumption of beer was unevenly spread across the country with a geographic distribution of North 20%, East 8%, West 26%, and South 46%.

The full potential of the industry was held back because of a variety of regulatory constraints. Most significantly, the regulation and taxation of beer with lower alcohol content was being clubbed with that of spirits. Universally beers and wines were treated on a different footing, both in regard to the taxation, as well as in respect of availability, where it crossed line with soft drinks. The high tax rates hampered the growth of Beer Industry in India. Excessive taxation led to increased prices, which encouraged growth of cheap and illicit liquor. Tax on alcoholic beverages was high and most of the State Governments were averse to any change. Dr. Vijay Mallya, who was also a Member of Parliament, raised this issue in the parliament requesting the Government of India to segregate beer and wine from spirits and position it along with soft drinks, because status of beer as spirits affected the volumes of the manufacturers due to consumer decision in favour of hard liquor (Financial Express, 2001). Subsequently, Government regulations were moving towards differentiation in the treatment of wines and beer from other categories of alcoholic beverages. This process was making beer more accessible both from the perspective of retail availability as well as retail price.

Harmonisation of tax structure across states would help in improving the position of The Beer Industry in India. On account of government regulations, policies and other legal formalities, a brewery in India, despite having a potential to expand capacity, was not able to do so. In terms of total production capacities, India was far behind other beer producing nations. 57 breweries operating in India had a total production capacity of about 12.6 million hectolitres. On the other hand, in South Africa, SAB Miller operated just seven breweries with a total production capacity of 31.7 million hectolitres. Low capacity and even low capacity utilisation made most of the breweries economically unviable.

Maharashtra, Andhra Pradesh, and Tamil Nadu, were major beer consumers, consuming 40.5 million cases out of a total market of 84 million cases (48% of the market). From the point of view of costs, logistics

was the key factor. One of the main problems faced by manufacturers of both breweries and distilleries was their ability to reach the consumer. To overcome these restrictions, the leading players were trying to set up manufacturing units in a number of states. The brewery industry required licencing from the State Government. In addition, certain states prohibited the transfer of products to other states. With the entry of multinationals, domestic majors formed alliances to bring in well-known foreign players who would otherwise find the cost of duplicating the marketing network and production facilities an entry barrier. Various states had their own restrictions as a result of which foreign majors were operating only in selected markets. Most companies could not produce in one state and sell in another because they were considered different markets, unless requisite export and import fees were paid. This meant a definite price disadvantage for such brands. Companies had to manage their capacities well considering the situation of overcapacity. Competition in the beer industry was heating up with many international players likely to set up shop in India. However, subsequent to the removal of quantitative restrictions (QRs) as per the World Trade Organisation norms, there was no major shift towards increased sale of imported brands. This was probably due to central excise and special duties levied on imports.

UNITED BREWERIES

The company with a turnover of Rs. 673 crore was in the business of manufacture, marketing, and distribution of beer. Beer was a popular beverage made from natural ingredients like barley malt, cane sugar, water, and aromatic flowers (hops). Special preservatives helped this natural process – even the alcohol in beer evolved naturally from the starch and sugars in the raw ingredients. The Company's brand portfolio included "Kingfisher Lager", "Kingfisher Strong", "Kalyani Black Label Lager", "UB Premium Ice", "Charger Extra Strong" etc.

The UB group was founded by a Scottish gentleman, Thomas Leishmanin in 1915. The Group took its initial lessons in manufacturing beer from South Indian based British breweries, elected its first Indian director in the year 1947, and survived through two World Wars and occasional jolts of prohibition, and emerged as one of the top global beverage brands before growing and diversifying into a multi-faceted conglomerate. Twenty two year old Vittal Mallya, became the first Indian Director 13 days after India gained freedom. A year later, he became the Chairman.

United Breweries made its initial impact by manufacturing bulk beer for the British troops, which was transported in huge barrels or "Hogsheads". Kingfisher, the Group's most visible and profitable brand, made a modest entry in the sixties. The major competitors of UBL in the beer industry were Shaw Wallace and Mohan Meakins. The company then diversified into industries as diverse as Alcoholic Beverages, Pharmaceuticals, Agrochemicals, Fertilizers, Engineering, Infrastructure Development, Media, and International Trading.

The 1950s to 60s was time for rapid expansions and acquisitions. First was the addition of McDowell as one of the Group subsidiaries, a move that helped United Breweries to extend its portfolio to wines and spirits business. Strategically, the Group moved into agro-based industries and medicines when Mallya acquired Kissan Products and formed a long-term relationship with Hoechst AG of Germany to promote Aventis Pharma. The acquisition run continued unabated especially during the prohibition days of the late 70s under the premiership of Morarji Desai. Following his father's death, Vijay assumed the Group's mantle, at the age of 28, in 1983.

Dr. Vijay Mallya shaped the Group as a global conglomerate, with the aid of diverse businesses. He initiated the process of defining a corporate structure with performance accountability, inducting professional management, and consolidating the company into individual operating divisions. In 1988, Dr. Vijay Mallya became a non-resident Indian to pursue global opportunities and to transform the UB Group into India's first multinational. While, in the initial stages, overseas representative offices were commissioned, the real break came in 1988 when Dr. Mallya acquired the global Berger Paints Group with operating companies across four

continents in a leveraged buyout. The paints business was profitably divested for significant value in 1996 through five Initial Public Offerings on the London, Singapore (Main Boards), Nairobi, Jamaica, and Abidjan Stock Exchanges.

Human Resources

The company recruited trainees from premier Management Institutes in the country every year with a view to developing young talent. The attrition rate in the Company was minimal. Employee profile is given in **Exhibit 1**. The Company focused on building competencies, commitment, and culture in the organisation to enhance performance and retain its leadership position. The Balanced Scorecard performance management system was introduced across the organisation to align the objectives of each and every individual with the Company objectives. Competency mapping was conducted for the senior management team to identify a development plan to face the future challenges. Employees were motivated to bring out their best so that talent could become a key differentiator between United Breweries and it competitors. Performance was recognised with an appropriate compensation package. A profit incentive plan was announced to ensure that *a* part of the incremental profit was shared with the employees.

Research & Development

Central Technical Cell (CTC) was involved in New Product Development. As a part of the new product development, concepts were worked upon, various processes and analytical data obtained, the product was subjected to taste testing and required changes were made. The product was also subjected to market research before scale up operations. Research initiatives were on for the development of two-row malting variety of barley. The company also introduced a new "Winey Beer" as a result of in-house R&D for the first time anywhere in the World. Latest technology for Beer Filling Machine was adopted in the fillers installed at Hyderabad and Ludhiana units, replacing the mechanical filling valves by electroneumatic filling valves, resulting in reduced wastages and higher productivity on the line. United Breweries developed a new strain of malt under its malt research programme. It developed a new variety of barley known as Vijay M 130, which could be grown in the plains of India and released it for commercial cultivation. It offered higher yield and higher starch content (Economic and Political Weekly,1999).

Procurement

Major raw material was barley malt. Barley was an agricultural product, procured by the suppliers of malt in season and supplied all through the year. Malt being the major raw material, the source of supply was concentrated with 3 major suppliers. The company was continuously identifying cost effective contract malting arrangement, which ensured continuous supplies. The major suppliers were Barmalt (India) Private Limited and The Malt Company (India) Limited. In order to meet the requirements of large quantities of malt for the purpose of brewing, the company entered into a Lease Agreement with Maltex Malsters Limited on April 1, 1998 (revised on January 29, 2003) for a period of 10 years.

United Breweries started contract farming of barley in collaboration with Punjab Agro Industries Corporation for the first time in India. The barley was used to produce malt, which in turn was used for brewing beer and distilling malt whisky by the Patiala plant and also as a food additive. The VJM-315 barley seed developed by UB to produce better malt became popular with farmers in Punjab. These varieties yielded 20-22 quintals per acre, required less water, and could be sown even in December, matching with late harvesting of basmati. Its early harvest allowed farmers to have alternative fodder crops or pulses ahead of the monsoon crop. UBL and PAICL planned to utilise the resources of Punjab Agricultural University and the skills of farmers to multiply

the two-row malting barley,'VJM 315', which was different from the traditional six-row barley. The new variety had bigger and heavier grain with 9.5—11% protein content. It was resistant to several diseases and could perform well even in cold conditions. Plans included extending the new variety across 2.5 lac acres by 2005 (Indian Food And Industry, 2003). UB provided the seeds and complete production technology to farmers in Patiala and Sangrur districts with a buyback agreement at a fixed price (Economic Times, 2003).

Other major raw materials were hops, sugar, and maize flakes. While hops were imported, other materials were available locally and were being procured by the breweries wherever they were located, at competitive prices (**Exhibit 2**). The consolidation of the glass container industry resulted in a sharp escalation of input costs in the area of packaging. To counter the escalation in glass containers, UB introduced the concept of bottle returns. The scheme was launched in Mumbai where people could return an empty bottle of London Pilsner and obtain a refund of Rs 3 (Ambrosia, 2004–a).

Quality

Quality leadership was vital to the long-term success of the UB Group in the competitive marketplace. Building quality into the workplace, products, and service was essential for providing value to customers, employees, suppliers, communities, and shareholders. The Central Technical Cell (CTC) of the Company was involved in Quality Assurance activities. It monitored the quality of the finished products, its processes and in general, Quality Assurance functions of the individual units spread across the country. Raw materials received (such as malt, rice flakes, maize flakes, broken rice, hops, sugar, processed chemicals, processed additives, sugar, etc) at the brewing units were collected randomly and sent to CTC for analysis for confirming that they matched with the specifications.

As a part of percolating quality awareness to the units, CTC was training the Quality Assurance personnel including chemists, microbiologists, quality assurance managers, and brewers. The training module included hands-on training in the various international methods of analysis of beer, raw materials, water, process additives, packaging materials, microbiology, and problems related to process parameters in the areas of fermentation, filtration, and bottling.

Control

The company developed a process of control on monthly basis, and the units submitted reports that enabled monitoring the process followed at the units.

Product Audit Report This highlighted the grist for the various brands, brew length, brew-house yields, processing methods, temperature regime, and monitoring of gravity in fermentation, lagering regime, filtration, process additives used along with the dosage rates as well as the quality of the final product.

Product Quality Monitoring Graph – (monthly report) The unit analysed each batch of beer being bottled and the values obtained were plotted in a graphical form. This provided key information on the trends of the quality of the product during a particular month.

Quality Index Reports – (monthly report) CTC monitored the quality of beer through a system of Quality Index taking into consideration both the specification range as well as the target range of specifications of the product. The Quality Index was monitored at the units for the products as well as at the CTC for the samples received from the units.

Raw Material and Packaging Materials Report – (monthly report) The acceptance and rejection status of the raw and packaging materials based on the quality of the material received at the units was

compiled on a monthly basis and reported to CTC as a part of the corrective action taken by the units in ensuring quality.

QCMR Reports – (monthly report) This was done to monitor and improve the quality assurance levels in the bottling hall. Data was obtained from the bottling line and warehouse on the dirty, scuffed, bottles with foreign particles, poor designing labels, etc. The daily reports were compiled at the unit and reported to CTC. Corrective actions were suggested by CTC.

Manufacturing Process

Brewing involved production of beer from malted barley, hops, yeast, and water, with or without the addition of other carbohydrate materials. There were six broad steps in the production of beer. It started with the preparation of a hot liquid extract or wort from barley malt. This was referred to as mashing. This extract was then boiled with hops to impart the characteristic bitter flavour and then fermented with yeast. The fermented wort was then matured and filtered to produce a clear beer, which was filled into bottles, cans, or kegs (**Exhibit 3**).

The company had a production capacity of 21,73,180 HL. United Breweries owned 7 breweries at Taloja, District Raigad, Maharashtra (600,000 HL); Vernad, Cherthala, Kerala (63,180 HL); Kanjikode West, Palakkad, Kerala (400,000 HL), Nacharam, Hyderabad, Andhra Pradesh (295,000 HL); Bethora, Ponda, Goa (165,000 HL); Kalyani, West Bengal (250,000 HL) and Ludhiana, Punjab (400,000 HL). While the company brewed its own beer, it also entered into contracts with regional breweries for manufacture of beer (**Exhibit 4**). Details of contract brewing are given in **Exhibit 5**.

Marketing

The focus of marketing was on building brands that would ensure a high growth in volume, a steady increase in market share as well as be strong enough to take on competition, both international and local.

The portfolio of UBL's beer business had Kingfisher as its flagship brand. The Company launched the new look Kingfisher with the "flying bird" across various markets. The launch was backed by various marketing inputs in the form of promotional materials, merchandise, and innovations like branded elevators all sporting the "Its flying" theme. "Kingfisher" led the industry with a sales volume of over 31.3 Million Cases with Kingfisher Premium Lager representing 18.2 million cases and Kingfisher Strong representing 13.1 million cases. Kingfisher Strong achieved a growth of around 31%. During the same period, the strong beer segment of the Industry grew by 11% only. Almost one of every 3 beers consumed in the country was a Kingfisher, Innovative launches of Kingfisher Pint in Pondicherry and Kingfisher Strong 330 ml in M.P. gave a boost in volumes and consumer base (Economic Times, 2000). Kingfisher launched Kingfisher 5L Keg, a compact container of five litres of freshly-brewed draught beer. The Micron Filtration technology used beer offered the advantage of a pub at home to customers (The Asian Age, 2003). Further, UB Export Lager supported by its brand Ambassador Upendra delivered superior value equation to the consumer.

Kingfisher Lager was the leader in the low-alcohol beer segment, whilst Kingfisher Strong was the second largest player in the high-alcohol beer segment. Kingfisher was positioned as a young, exciting, and fun beer, epitomised by its powerful statement —"The King of Good Times". All communication on the brand was consistent with its positioning. Kingfisher was associated with sports—cricket, football, motor racing, and horse racing – to add a dimension of speed and style to the brand image. The Kingfisher brand name was assigned to a local pub in the northern region as part of a brand promotion exercise. The pub was not an exclusive Kingfisher beer outlet, but more than 80% of the beers served were of UB (Business Line, 2005 (b).

Ice Beer, a niche, premium, youth brand was launched in the metros of Hyderabad and Delhi. London No. 1

strong was used as a fighter strong beer brand and was very successful in the markets of Kerala and Karnataka and was expected to widen its geographical base in the coming years. The portfolio was large and varied and efforts were on to ensure occupying all segments and to be leader in each segment. The Company had a market share of 39% in the beer market and nurturing and strengthening the brands would ensure consolidation of leadership. The Company entered into a Licensing and Distribution Agreement on May 24, 2004 with Independent Liquor (NZ) Limited. The company also planned to enter into alcohol retail, as good bargains were available (The City Journal, 2005).

The spirit of innovation "JAGUAR", after years of experimentation, resulted in creation of a totally new product with "Winey" character, which, in a short span of time captured the minds and palates of customers. Initially, launched in Karnataka and Kolkata, the product captured a market share of almost 10% in the strong beer segment in the markets (Ambrosia, 2004 (b)). Kingfisher Strong established a 21% market share of the fast growing strong beer market within two years. Kingfisher Packaged Drinking Water had a national presence with a volume of 4.5 million cases, with 21 contract units having Bureau of Indian Standards certification, manufacturing the same within 5 years of its launch. These initiatives emphasised delivering value for the products, which enhanced the perception of brands in the consumers mind. United Breweries planned to introduce Kronenbourg Blanc and Kronenbourg 1664, two fruit-flavoured beers from Scottish & Newcastle, in India in mid-2007 targeted at women drinkers (Business Line, 2005 (a)). The Kronenbourg Blanc was a white citrus flavoured beer popular in the European market (Food & Beverage News, 2006). Launch of McDowell's No 1 Diet Mate, a new diet whisky product, targeted at young and mature consumers was also planned. This product contains an ayurvedic ingredient Garcinia, which has the ability to burn excess fat and control cholesterol levels in the human body (Daily News & Analysis, 2005). United Breweries Limited launched Kingfisher Strong on the Internet in Bangalore aimed at the premium segment (Financial Express, 2000).

This ability born of intimate knowledge of the Indian consumer, and commitment to quality and value ensured growth. To cater to growth, the company purchased one million hectoliter Karnataka Breweries and Distilleries Ltd. outside Bangalore and planned the establishment of Greenfield Breweries in Rajasthan and Orissa, both of which were important markets for them. They leveraged existing equipment and know-how to establish capacities at the lowest cost.

The company spent about 20% of net sales on Advertisement and Promotion, which was focused on introduction of new brands and increasing volume. The Company was de-emphasising the extent of seasonality and encouraging consumption of beer during the monsoons through promotional and awareness campaigns. Innovative methods ensured the 'recall' of brands with target customers at high levels. The flagship brand Kingfisher Premium Lager Beer was associated with several lifestyle platforms. The efforts were further strengthened through association with India Fashion Week and Kingfisher Fashion Awards. Kingfisher also initiated its foray into sports merchandise with the launch of Reebok Kingfisher East Bengal Jersey. Kingfisher was truly the King of Good times at the Mumbai Marathon, which was becoming a major sporting event in India. Kingfisher was the official water partner at the 42 Km Marathon, which drew 26,000 participants from various parts of the world. The company also sponsored events like Kingfisher Derby, Corporate Football, Hockey, Cricket, and Fashion Shows. Kingfisher Swimsuit Calendar, a showcase for the Indian fashion industry, was a rare combination of photography, fashion, sun, surf, and sand — symbolising life, fun, and beauty. The third edition of Calendar bagged the prestigious FAB Award at the 7th International Food & Beverages Creative Excellence Awards 2005 held in London. It also won a number of awards at the Big Bang Awards at Bangalore and AAA of I Awards at Mumbai. London Pilsner 230 ml was re-launched in Mumbai with a new positioning platform with an attractive price and tagline. The re-launch campaign consisted of a high impact visibility drive. The Company associated with Baichung Bhutia and Karun Chandok for Kingfisher, Vinod Kambli for London Pilsner, Prosenjit for Kalyani Black Label, and Upendra for UB Export Lager.

The company did not depend on a single or few customers. However, around 60% of the distribution of the product was through Government distribution set up. 50% of the market was in south and the company dealt with only 4 Government owned distributors. Based on the involvement of the government in the distribution and pricing of beer in each state the market was classified into three types - Government Market, Auction Market, and Open Market (**Exhibit 6**).

Government Market

In a government market, the respective state government was the wholesale distributor of beer and acquired beer directly from manufacturers based on an annual tender system, via its own agencies. The government controlled the price at which beer was procured from the manufacturer. This beer was then retailed through private vends (e.g., Tamil Nadu, Andhra Pradesh) or a combination of government and private vends (e.g., Kerala, Delhi).

Auction Market

In auction markets, the state was bifurcated into smaller areas. The government, at regular intervals auctioned the right to distribute and retail beer and liquor in these areas during a specified period, to private parties. This auction was based on the minimum guaranteed tariff payment to the government over the specified period. Wholesale operations and retail outlets were owned/operated only by those parties that won the auction for that particular area. These private parties then negotiated with beer manufacturers to acquire beer at competitive prices. Typically, all auction winners entered into inter-se arrangements to procure beer at most competitive prices, and retail the same at relatively higher prices to recover minimum guarantees committed by them to the government during the auction process.

Open Market

In this market, there was little or no government intervention in the pricing and distribution of beer. The manufacturers sold beer to the wholesaler/distributor who in turn sold it to the retail outlets. Pricing was free and determined by market forces. The government issued wholesale/retail licenses for a fee. However, in certain markets, new licenses were not freely available.

Exports

The company's products were exported indirectly through UB Global Corporation Limited a subsidiary of UBHL. The Company had a tie-up with S&N, which had a long established track record of distribution of third party brands, for the international distribution of 'KINGFISHER'. The company also entered into an exclusive Licensing and Distribution Agreement on May 24, 2004 with Independent Liquor Limited (ILL) to manufacture, package, market, distribute, and sell the products of the company in Australia and New Zealand for five years. They worked closely with Scottish & Newcastle to extend the reach of products, particularly, Kingfisher to more global markets. Kingfisher was a well-established brand in many countries and leveraging Scottish & Newcastle's distribution strengths would increase the franchise of the brand.

United Breweries forayed into the world markets with Celebration and Old Cask rum. Initially the two rum brands were sold in the United States and the United Kingdom. UB planned to introduce Royal Indian Rum designed specially for overseas consumers. During the first year of operation, UB targeted sale of one lac cases in the two markets. In the US, the total rum market, including white rum and rum-based ready-to-drink

beverages, amounted to 16.5 million cases in 2000-2001, while in the UK the annual sales was 2.37 million cases of rum. The annual sale of the two rum brands in India was five million cases.

Strategic Alliances & Acquisitions

Dr. Mallya initiated several ventures for the promotion and globalisation of UB brands, and, in particular, Kingfisher and McDowell. In 1990, following the Government of India's liberalised economic policies, Dr. Vijay Mallya decided that the UB Group would only retain interests in businesses that were globally competitive and which did not depend on fiscal tariff protection. He decided to focus on areas of core competence and transformed the vastly diversified UB conglomerate into a handful of key operating businesses.

Upon entering the new millennium, the UB Group became more focused on becoming the second largest marketer of Spirits products in the world. With the acquisition of Shaw Wallace & Company Limited, this Division owned twelve millionaire brands. The market share of the Spirits Division in India was 50%, and exports to the Middle East, Africa, and Asian countries were growing rapidly. Through a process of aggressive acquisition and market penetration, The UB Group controlled 60% of the total manufacturing capacity for Beer in India. The flagship brand, Kingfisher, was sold in 52 countries worldwide. UB also acquired an equity stake and management control of United National Breweries in South Africa to further promote its globalisation initiatives.

To build upon its leadership position, UBL entered a multi-faceted strategic alliance with Scottish & Newcastle Plc. (S&N). While allowing UBL to market S&N's international brands in India, it would leverage S&N's global network while further globalising the Kingfisher brands, which was the only Indian brand available on international flights.

Consolidation of the industry was accelerated by the entry of South African Breweries who initially acquired Narang Breweries in Uttar Pradesh followed by Mysore Breweries in Karnataka and later took a 50% shareholding as well as management control of Shaw Wallace Breweries. Responding to these changes, it was felt appropriate to broaden the level of engagement between United Breweries and Scottish & Newcastle. It was also decided to integrate the business of Millennium Alcobev, the erstwhile joint venture company with that of UB. S&N was inducted as a strategic partner for technology, marketing, global distribution, and financial inputs from a major international brewer. In order to facilitate the entry of such an international brewer, a corporate restructuring programme for de-merger of the Beer and non-Beer business had to be initiated. The need for such a strategic alliance was primarily driven by the objective to leverage United Breweries Limited from its huge and costly debt burden by using the expected inflow of funds from the strategic partner. Detailed discussions with many of the world's leading brewing companies resulted in taking tentative first steps with Scottish & Newcastle - a British Brewer for whom this was an important step outside their traditional markets in Europe. The intervening years saw UB, together with Millennium Alcobev (the Joint Venture with Scottish & Newcastle), adding significantly to its market share across the country. Technical inputs from Scottish & Newcastle helped rapid upgrading of several manufacturing plants as well as the induction of international systems of logistics and business planning.

S&N was incorporated on January 14, 1931 at Edinburgh and was one of Europe's leading brewers and in the top 10 by sales volume in the world listed on the London Stock Exchange. S&N's primary business interest was international brewing, offering leading brands in a number of European markets and beyond. S&N was one of Britain's leading pub, bar and restaurant operators. On October 6, 2003, S&N informed the London Stock Exchange about the sale of their managed pubs, restaurants, and lodges business. S&N operated through directly-owned subsidiaries in the UK, France, Belgium, Finland, and Portugal. S&N also owned 50% of a joint venture with Carlsberg Breweries covering Russia, Ukraine and the Baltic countries of Estonia,

Latvia, Lithuania, and Kazakhstan. Across all these businesses, its international brand exports business and its own group functions, S&N employed 50,000 people. In new, high-growth emerging markets, S&N also started creating partnerships with local companies, by either taking strategic stakes or participating in joint ventures.

S&N's beer business consisted of Scottish Courage Limited (off-trade beer); Waverley (wines and spirits); Beamish & Crawford (Eire); Brasseries Kronenbourg—in Strasbourg, France including Elidis Boissons Services, nationwide beverages distribution business; Alken-Maes in Belgium; Sociedade Central de Cervejas in Portugal; Hartwall in Helsinki, Finland; BBH—joint venture, 50 per cent owned by S&N, in Helsinki, Finland/Bromma, Sweden; S&N International in Edinburgh, UK; and Partnerships in India and Greece. Thus, S&N had a leading position in 14 countries in Europe and Asia: UK, Ireland, France, Belgium, Portugal, Finland, Greece, Russia, Estonia, Latvia, Lithuania, Ukraine, Kazakhstan, and India. S&N was number 1 in three of the top six European beer markets: UK, France, and Russia; and had 3 of the top 10 European beer brands: Foster's, Kronenbourg, and Baltika. S&N expected to expand into a market-leading position in Western Europe through focused brand building and pursuit of cost efficiency. It was also planning to use this as a platform for selective developments into high growth emerging markets with experienced partners holding strong market positions.

S&N, through its Indian company, Scottish & Newcastle India Private Limited ("S&N India"), made investments of Rs.17,740 lac in a joint venture with the UB Group and Accra Investments Private Limited ("Accra"). In addition, S&N agreed to invest up to Rs 20,000 lac in UBL by way of subscription to ROCPS through this rights issue and disbursed Rs.5,000 lac by way of ECB. Various steps were taken towards implementation of the above association between S&N and the UB Group in India. For the purposes of S&N investment in the joint venture, MABL which was earlier a 100% subsidiary of the Company, became a joint venture company between UBL, S&N India, and Accra. UBL and S&N India held 40% each in MABL while Accra had 20%. Subsequently, MABL entered into licensing agreements with UBL for "Kalyani Black Label Strong" brand and acquired the "Bullet" brand from UBL.

United Breweries Ltd entered into a manufacturing and distribution alliance with Independent Liquor of New Zealand to launch its flagship Kingfisher Premium Lager beer in the Australian market. Independent Liquor would manufacture and distribute the beer while marketing remained with the UB Group. The UB Group's entry into the Australian market received a boost with the listing of Kingfisher beer in Woolworths Ltd, Australia's largest grocer and a leading liquor retailer. The beer brand would be launched in the retail markets in New Zealand and Australia in Oct 2004.

Acquisitions

UB Group initiated steps to consolidate its leadership position by acquiring Triumph Distillers & Vintners (TDV) (December 2002). In order to upscale leadership in the brewing industry through a number of strategic acquisitions of capacity and brands, in quick succession UB acquired controlling stakes in Inertia Industries (with breweries in Haryana and Maharashtra), Associated Breweries and Distilleries Ltd. (with a brewery in Thane), GMR Breweries in Andhra Pradesh, and Empee Breweries with operations in Tamil Nadu and Kerala. These acquisitions combined with UB's market leadership pulled them ahead of the pack and established their pre-eminence (Beverage & Food World, 2005). Increasing the holdings in Herbertsons Ltd. (February 2005), and acquiring Shaw Wallace and Company Ltd., the second largest player in Indian Spirits market (June 2005) led to an increase in market share from 24% to 52% and the only drinks company in the world with 12 millionaire brands. The combined spirits business became the third largest in the world with annual

sale of 65 million cases behind Diageo, the international leader with 91 million cases and Pernod Ricard, the second largest player with annual sale of 80 million cases (Times of India, Kolkata 2005-b).

The beer manufacturing business of Shaw Wallace was carried through an unlisted company namely SKOL Breweries Limited. Shaw Wallace challenged United Breweries in 2001. On 26th November 2001, an MOU between Shaw Wallace and Scotland based Whisky major Kyndal was announced at a press conference. This MOU would enable Shaw Wallace to market Kyndal's brands such as Mackay scotch, Vladivar Vodka, and Glavya liqueurs and Shaw Wallace brands would be marketed in Europe and US by Kyndal. CEO of Shaw Wallace, Manu Chhabria, who had returned to India after 5 years, gave a statement that he would be India's *numero uno* beer manufacturer within a year, once the six breweries that were being set up in various parts of the country became operational. Shaw Wallace claimed to be following close on heels of United Breweries, selling 22 million cases compared to 25 million of United Breweries. Mallya retaliated immediately with a projection of selling 32 cases of beer for the year ending March 2002, which was possible given that the company had a capacity of 48 million cases including 10 million through contract manufacturing arrangements. This verbal battle was sparked at a time when Mallya was talking to the world's largest manufacturers of beer such as SAB (South African Breweries) and Interbrew, for a strategic tie-up with the offer of 26% stake. In May 2003, Shaw Wallace entered into a joint venture with SAB Miller Group for the beer business.

Vijay continued his efforts at acquiring a stake in Shaw Wallace for historical reason, apart from business interest. In 1980's his father, Vittal Mallya had tried to buy a stake in Shaw Wallace, but the deal went to Manu Chabbria (The Financial Express, 2005-a). On 22nd Feb 2005, the UB Group had bid a 25% equity stake in Shaw Wallace, which was described as hostile one by Shaw Wallace. Two other bidders were Ramesh Vangal (ex-Seagram) backed by NewBridge Capital and Manu's second daughter, Komal Chhabria Wazir, backed by Kyndal. In March 2005, after the death of Manu Chhabria, his wife Vidya, who was looking for an exit out of many businesses, including spirits, agreed to sell 54.54% of Shaw Wallace to Vijay Mallya for $300 million (The Financial Express, Bangalore Ed., 2005-b).

As per the deal, UB Group would buy 43% of SWC held by Palmer, a Chhabria company registered in British Virgin Island. In the second stage, 11% stake held by another Chhabria company, Harshi Finance would be purchased by UB. Third, UB would get full control over Primo, a domestic Shaw Wallace company engaged in distribution of Spirits and country liquor. Lastly, UB would get Mont Rosa, a SWC overseas entity registered in Panama, which was SWC's international alcohol distribution arm. After the deal, Vijay expressed his views on the deal

> *"It's not an emotional chase. SWC is not a toy I wanted. . . The combination of SWC and UB makes us the world's second largest spirits company (in terms of volume). . . an Indian company with a global scale, a powerhouse and wealth creator for shareholders."*

Restructuring

The UB Group had 75 distilleries after the acquisition of Shaw Wallace Company (SWC). It planned to dispose off a few of them, as it did not require so many units. The group planned streamlining its other operations, including its workforce. Post-acquisition the group had 130 brands in its portfolio. The UB Group had nine millionaire brands (brands that sold over one million cases annually) and SWC had six millionaire brands. There were a few brands that sold less than 20,000 cases and the company planned to take them off the market (Times Of India, Bangalore, 2005-a).

Shaw Wallace Distilleries Ltd, Phipson Distillery Ltd, United Spirits Ltd, Herbertsons Ltd, Triumph Dis-tillers & Vintners Pvt. Ltd., McDowell International Brands Ltd, Baramati Grape Industries Ltd., and United Distillers India Ltd were merged with McDowell & Company and renamed United Spirits Ltd.

with effect from 1st July 2005. UB Holdings Ltd (UHL) had 42.3 percent stake in United Spirits Ltd (USL). The investment business of McDowell & Company was de-merged into McDowell India Spirits Ltd (MISL). This resulted in reducing the number of manufacturing facilities and offices, greater efficiency in the distribution chain, consolidation of brands, and price segmentation (Indian Food And Industry, 2005).

Mallya had good reason to look to the future with optimism. The entry of Scottish Newcastle and the consequent induction of additional capital in UB together with technological and logistical inputs from them would enable the company to meet these opportunities resulting from the relaxed regulatory environment coupled with the emerging young Indian consumer with access to higher levels of disposable income and a modernist attitude towards consumption (http://www.theubgroup.com/chairmanstatement.html viewed on 21.04.06). The next step would naturally be to make a spirited bid to eye the number one slot. However, critics viewed the situation differently:

"The first peg in a spirited journey is the best and most exciting one,
but as the number of pegs increase, there is possibility of a hangover."

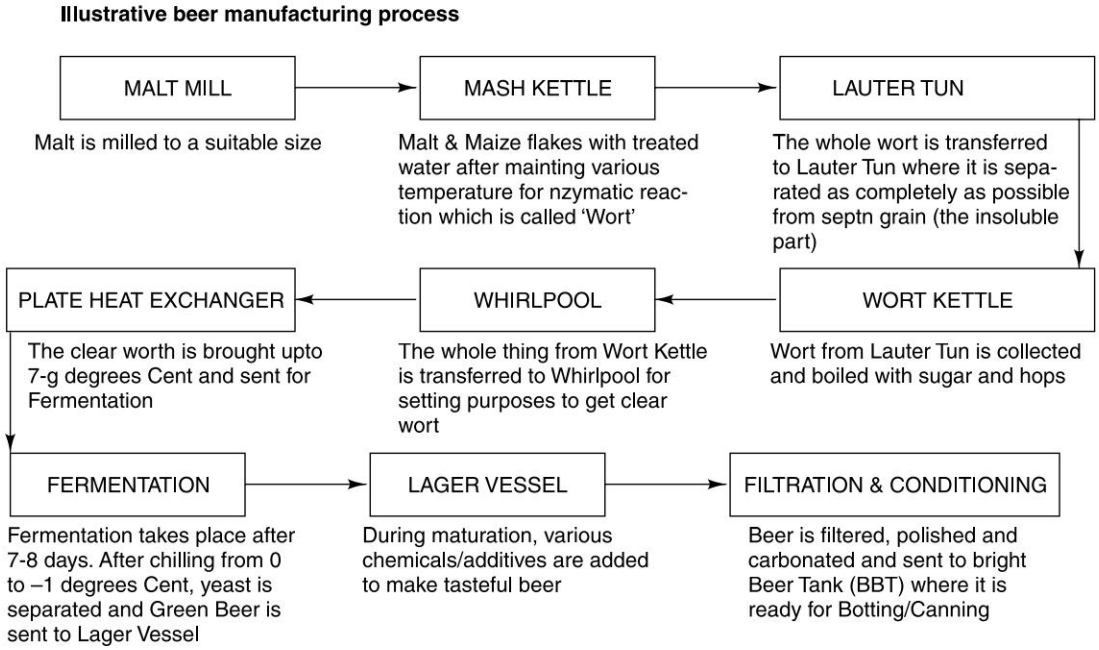
Exhibit 1—Employees' Profile of United Breweries

Department	Executives	Junior Managers	Staff	Workmen	Contract Workers	Total
Manufacturing	65	48	16	372	410	911
Technical	52	32	4	341	109	538
Sales/Marketing	83	70	0	0	0	153
Finance	31	17	3	1	0	52
HR	13	12	8	7	39	79
Total	244	179	31	721	558	1733

Exhibit 2—Sources of Inputs

Input	Source
Malt	India
Hops	Germany, Czech Republic
Maize Flakes / Rice Flakes	India
Sugar	India
Enzymes , Chemicals	India
Filter Aids/ Filter Sheets	India
Packaging Material – Labels, Bottles, Cartons	India
Packaging Material – Labels, Cans, Foils	Germany, Thailand, Dubai

Exhibit 3—Beer Manufacturing Process



Mashing The basic raw material of conventional brewing is malted barley, lightly roasted sprouted barley. This malt is first milled into a fine powder referred to as grist and fed into a large vessel called the mash tun where it is mixed with hot water at around 65 degree Celsius to form slurry or mash during which the slurry is stirred with a set of paddles provided in the vessel. At the end of this time, the saccharified mash is transferred into another vessel called the *lauter* tun (lauter in German means to clarify), which is equipped with a perforated base. This retains the spent mash and allows the clear extract (wort) to filter through — this wort is then collected in another vessel referred to as the wort kettle. The mash tun — wort lauter tun and wort kettle are housed adjacent to each other in a section of the brewery known as brewhouse.

Boiling Along with hops, the bittering ingredient in a beer recipe, the extract or wort in the kettle is boiled. At the end of this, the hops are separated from the wort through a strainer or a hop back. They can also be separated in a whirlpool separator. The hops pile up in the centre of the vortex and the wort is then decanted off.

Fermentation The hopped wort is cooled to fermentation temperatures at 7-15 degree Celsius depending on the type of beer to be produced. It is aerated with compressed air to provide oxygen for fermentation, pitched or mixed with the chosen yeast and then transferred into large fermentation tanks for the yeast to act. Lagers are fermented between 7-9 degree Celsius and ales between 10-15 degree Celsius. The process of fermentation takes 6-10 days during which the yeast multiplies and vigorously ferments the wort sugars to produce ethyl alcohol and carbon dioxide. At the end of fermentation, the yeast rises to the top in the case of ales, or settles to the bottom as in the case of lager beers. The yeast is then separated either by skimming off or by drawing off from the bottom and the fermented wort (beer) is transferred into a maturation tank.

Maturation At this step, ales and lagers are differentiated. Ales are conditioned in wooden casks, but lager in stainless steel tanks where the residual yeast is induced to carry out secondary fermentation by priming the beer with sugar. This secondary fermentation is carried out at 15 degree Celsius for a period of 7-10 days by which time it generates more carbonation after which it is sent for filtration. In the case of lagers, the fermented beer is chilled to 0 degree Celsius and transferred to lager tanks where it matures under chilled conditions for three to four weeks. During this time, a number of biochemical transformations take place to impart stable flavour characteristics to the beer and remove many of the undesirable flavours that developed during fermentation.

Filtration At the end of conditioning or maturation, the beer is subjected to a process of filtration to produce clear amber liquid. This is carried out in two steps: a coarse filtration to remove the suspended yeast cells, and a fine filtration to remove all particulate matter. Typically, brewers use diatomaceous earth or Kieselgurh as the filtration medium. This is a special porous earth composed of siliceous marine fossils largely found on the South African shoreline. The filtration equipment used for the purpose varies from plate and frame filters to leaf or candle filters. Many breweries also use an intermediary centrifuging step for yeast removal to augment the filtration process. Modern brewing technology uses membrane filters and synthetic yeast clarifiers.

Packaging The finished or filtered beer is ready for packaging in either bottles, cans or kegs. Most beers packaged in bottles and cans are heated to 60 degree Celsius, a process called pasteurisation in order to kill all surviving micro-organisms. Kegged or draught beers are generally unpasteurised if consumed locally but bulk pasteurised if a few days' transportation and handling are involved.

Exhibit 4—Production Break-up of UB

Details in Hecto Litres

	UB Owned Breweries	Contract Breweries	Total	UB Owned %
2000-01	14,84,163	5,09,146	19,93,309	74.6
2001-02	9,85,059	6,72,344	16,57,403	59.4
2002-03	12,62,025	10,50,493	23,12,518	53.3
2003-04	13,06,636	13,39,650	26,46,286	49.4

Exhibit 5—Details of Contract Brewing

Details in Hecto Litres

Name of Contract Brewery	Capacity	2001	2002	2003	2004
Karnataka Breweries	3,12,000	2,58,617	2,95,456	4,71,826	4,59,342
Mangalore Breweries	1,50,000		82,286	1,08,646	1,35,642
Blossom Industries	70,200	35,055	67,733	1,02,702	1,22,070
Vinedale Distilleries	9,360	23,755	19,306		
Associated Breweries	1,63,800		63,341	96,218	1,11,696

(*Contd*)

(*Contd*)

Name of Contract Brewery	Capacity	2001	2002	2003	2004
33,228 Superior Industries	1,02,960	4,347	43,228	78,026	68,640
Mohan Goldwater Breweries	39,000	30,777	36,684	33,869	39,624
Inertia Industries	1,01,400		2,608	13,570	42,042
Rainbow Breweries	46,800		1,148	11,365	19,266
GMR Beverages	46,800		1,951	81,320	91,260
Tripti Alcobrew	46,800			6,509	10,374
Som Distilleries	46,800			3,609	16,926
Empee Distilleries	62,400			39,959	48,438
Empee Breweries	32,760			2,876	7,410
Narang Breweries		22,541			
Rajasthan Breweries		15,933			
Rochees Breweries		87,113		57,602	31,044
Impala Breweries		21,008			
Balaji Distilleries					1,32,366
Winsome Breweries	1,63,800				3,510
Total	**13,94,880**	**5,09,146**	**6,72,344**	**10,50,493**	**13,39,650**

Exhibit 6—State wise Market Structure

State	Market	Wholesaler/ Distributor	Retailer
Karnataka	Government	Wholesale license freely available. Distribution through Govt. only	Private license issued annually
Kerala	Government	Government	Retail by Govt. only Govt./ Pvt. Bars
T.N. & A.P.	Government	Government	Private Retail, Annual License
Andaman	Government	Government	Government
Pondicherry	Open	Licensed	Private Retail, Annual License
Maharashtra & Goa	Open	Licensed, Freely Available	Existing license transferable Annual License
Daman & Diu	Open	Licensed, Freely Available	Private Retail, Annual License
MP & Chattisgarh	Auction	Distribution by Government	Retails auctioned annually

(*Contd*)

(*Contd*)

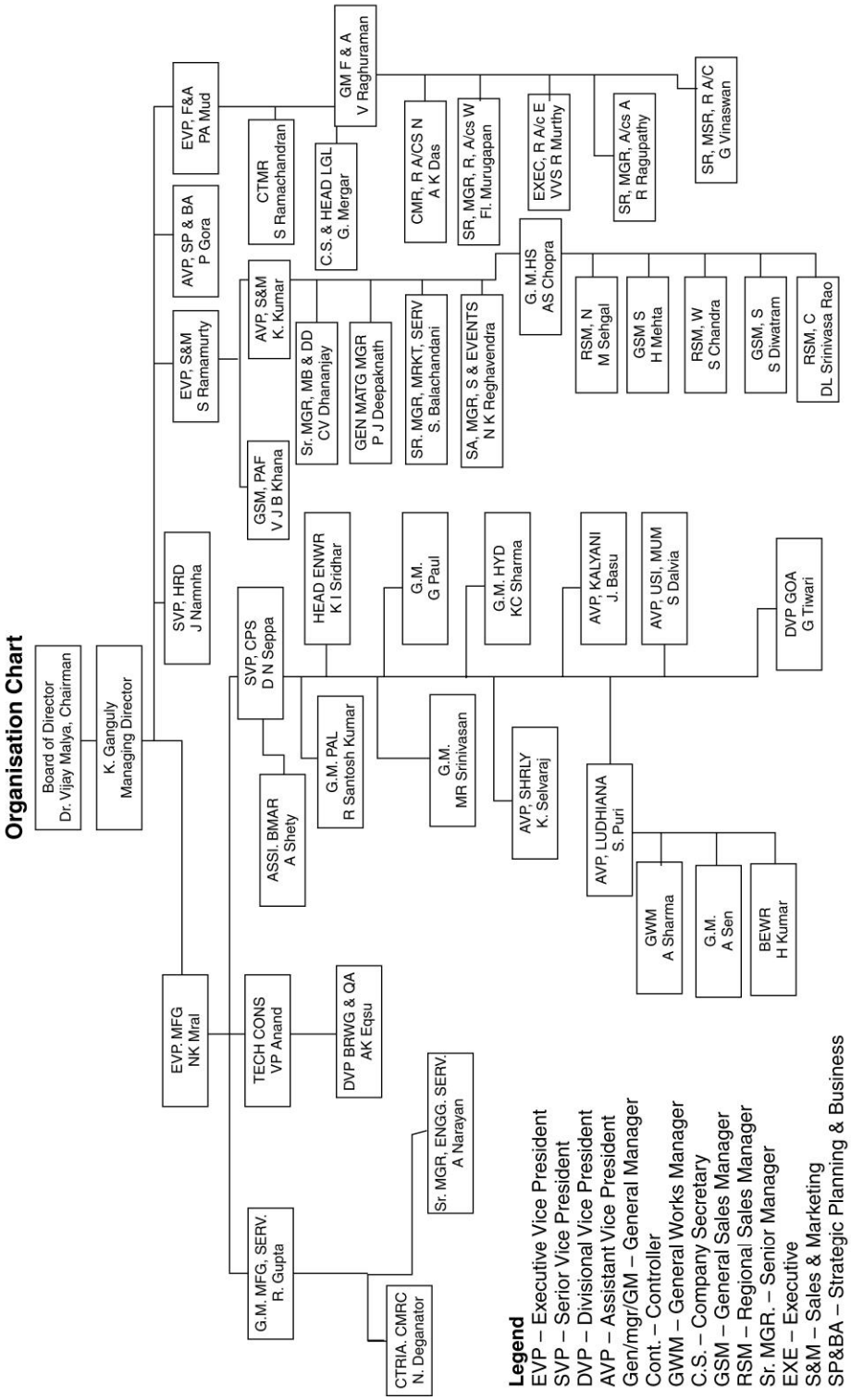
State	Market	Wholesaler/ Distributor	Retailer
Gujarat	Prohibition		Permitted at Star Hotels
Delhi	Government	Company Depot to Govt. & Pvt. Retail outlets	Govt./private retail and private bars
Rajasthan, Punjab & Haryana	Auction	Wholesale by auction	Retail clubbed with wholesale for auction
U.P. and J&K	Open	Licensed, Freely Available	Existing license transferable
Uttaranchal	Government	Distribution by Govt	Retail license on annual fee. Allotment by lottery
H.P.	Auction	Wholesale by license	Retail Auctioned
West Bengal & NE	Open	Licensed, Freely Available	Existing license transferable
Bihar & Jharkhand	Auction	Wholesale licensed annually	Retail by annual auction
Orissa	Government	Government	Retail Auctioned Annually

Exhibit 7—Corporate Mission

We constitute a large, global group based in India.
We associate with world leaders in order to adopt technologies and processes that will enable a leadership position in a large spectrum of activities.
We are focused on assuming leadership in all our target markets.
We seek to be the most preferred employer wherever we operate.
We recognise that our organisation is built around people who are our most valuable asset.
We will always be the partner of choice for customers, suppliers and other creators of innovative concepts.
We will continually increase the long-term value of our Group for the benefit of our shareholders.
We will operate as a decentralised organisation and allow each business to develop within our stated values.
We will be a major contributor to our National Economy and take full advantage of our strong resource base.
We commit ourselves to the ongoing mission of achieving Scientific Excellence.

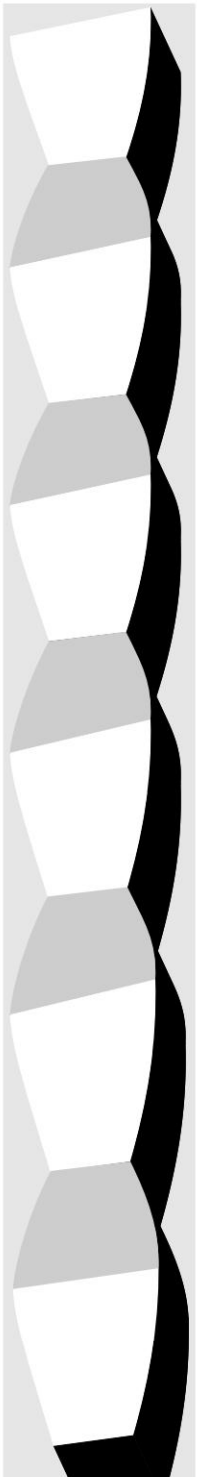
Exhibit 8—CSR Initiatives

United Breweries set up a 150-bed super specialty hospital—Mallya Hospital at Bangalore in June 1991, in a multi-storied complex with excellent medical equipment and best medical consultants. Gradually it grew into a 450-bed hospital with 50 beds for critical care and subsidised health care to the under privileged class of society in a general ward reserved for them. The 24 hour Casualty and Trauma Care services were geared to handle all kinds of emergencies, supported by state-of-the-art, imported high-tech ambulances equipped with para-medical staff. In the field of education, the Group assisted in the setting up of the Mallya Aditi International School where a certain number of seats were reserved for the economically backward strata of society whose education was subsidised by the UB Group.


Organisation Chart
Board of Director
Dr. Vijay Malya, Chairman
K. Ganguly
Managing Director
EVP, F&A
PA Mud
GM F & A
V Raghuraman
AVP, SP & BA
P Gora
CTMR
S Ramachandran
C.S. & HEAD LGL
G. Mergar
CMR, R A/CS N
A K Das
SR, MGR, R, A/cs W
Fl. Murugapan
EXEC, R A/c E
VVS R Murthy
SR, MGR, A/cs A
R Ragupathy
SR, MSR, R A/C
G Vinaswan
EVP, S&M
S Ramamurty
AVP, S&M
K. Kumar
G. M.HS
AS Chopra
RSM, N
M Sehgal
GSM S
H Mehta
RSM, W
S Chandra
GSM, S
S Diwatram
RSM, C
DL Srinivasa Rao
Sr. MGR, MB & DD
CV Dhananjay
GEN MATG MGR
P J Deepaknath
SR. MGR, MRKT, SERV
S. Balachandani
SA, MGR, S & EVENTS
N K Reghavendra
GSM, PAF
V J B Khana
SVP, HRD
J Namnha
HEAD ENWR
K I Sridhar
G.M.
G Paul
G.M. HYD
KC Sharma
AVP, KALYANI
J. Basu
AVP, USI, MUM
S Dalvia
DVP GOA
G Tiwari
SVP, CPS
D N Seppa
ASSI. BMAR
A Shety
G.M. PAL
R Santosh Kumar
G.M.
MR Srinivasan
AVP, SHRLY
K. Selvaraj
AVP, LUDHIANA
S. Puri
GWM
A Sharma
G.M.
A Sen
BEWR
H Kumar
EVP, MFG
NK Mral
TECH CONS
VP Anand
DVP BRWG & QA
AK Eqsu
Sr. MGR, ENGG. SERV.
A Narayan
G.M. MFG, SERV.
R. Gupta
CTRIA. CMRC
N. Deganator
Legend
EVP – Executive Vice President
SVP – Serior Vice President
DVP – Divisional Vice President
AVP – Assistant Vice President
Gen/mgr/GM – General Manager
Cont. – Controller
GWM – General Works Manager
C.S. – Company Secretary
GSM – General Sales Manager
RSM – Regional Sales Manager
Sr. MGR. – Senior Manager
EXE – Executive
S&M – Sales & Marketing
SP&BA – Strategic Planning & Business Analysis

REFERENCES

Ambrosia, Jan 31, 2004 (a); pg 38, London Pilsner Pint for Rs16.
Ambrosia, Nov 30, 2004 (b); pg 33, JAGUAR – It's a Wine, It's a Beer
Annual Reports of United Breweries
Beverage & Food World. Aug 31, 2005; pg 89 – United Breweries – It is Venturing into the Country Liquor Market
Business India, Dec 10-23, 2001, pg 76-77, The Battle of the Beers
Business India, Dec 20, 2004-Jan 2, 2005, pg 132-333, Consolidation Wave
Business India, Mar 28 – April 10, 2005, King of IMFL
Business Line, Dec 6, 2005 (a); pg 5, UB to Bring in Kronenbourg Brands
Business Line, Dec 23, 2005 (b); pg 8, Kingfisher Brand Name for Pub
Business Line, Sep 24, 2004; pg 2, Kingfisher Takes Kiwi Route to Go Down Under
Business Standard, Nov 24, 2005, UB to Invest in Contract Brewer; Increases Sourcing
Daily News & Analysis Dec 19, 2005, New Mate is High in Spirits, but Low in Cals
Economic and Political Weekly, Feb 19, 1999; pg 376, United Breweries: Success in Malt Research
Economic Times, Jul 29, 2000; pg 9, UB Launches New Strong Beer
Economic Times, Jan 11, 2003; pg 13, UB Group Ploughs into Barley Contract Farming in Punjab.
Financial Express, Apr 21, 2000; Kingfisher Strong to be Sold On the Net
Financial Express, Jan 13, 2001; pg 5, Delink Beer, Wine from Spirits, Says Mallya
Financial Express, Bangalore Ed., Feb, 23, 2005-a
Financial Express, Bangalore Ed., Mar, 27, 2005-b
Food & Beverage News, Jan 7, 2006; pg 21, UB to Lure Women with Fruity White Beer
Indian Food and Industry, Dec 31, 2005; pg 47, United Breweries — Restructuring and Rationalising.
Indian Food and Industry, Oct 31, 2003; pg 28, UBL Signs Contract Farming Agreement For Barley in Punjab
The Asian Age, Sep 20, 2003; pg 20, Kingfisher Launches Kingfisher 5l keg
The Free Press Journal, Nov 29, 2005, Mallya Indicates UB Interest to Venture into Alcohol Retail.
Times of India (Bangalore), Mar 25, 2005(a); pg 15, UB to Distil Distilleries
Times of India (Kolkata), Sep 22, 2005 (b); Mallya Uncorks Global acquisition Plans
http://www.scottish-newcastle.com
http://www.theubgroup.com/media2005_22-sept-1.htm Accessed on 14.02.06
http://www.theubgroup.com/chairmanstatement.html Accessed on 21.04.06.
http://www.theubgroup.com/corporatecitizen.html Accessed on 30.04.07
http://www.theubgroup.com/media2005_27-Oct.htm Accessed on 14.02.06
http://www.sebi.gov.in/Index.jsp?contentDisp=Section&sec_id=5 Accessed on 09.02.06



Case 11

ONGC — Towards A Brighter Tomorrow

We are about courage, knowledge and technology.
We are about exploring, exceeding and excelling.
We are making tomorrow brighter.
The quest began in 1956. In 45 years we have found 6 billion tons of oil and gas in India. In the next 20 years, we aim to find another 6 billion tons.

Subir Raha
Chairman cum Managing Director

Oil & Natural Gas Corporation (ONGC) was India's largest oil and gas company as measured by total proved reserves and production. In terms of revenue and assets, it ranked sixth and tenth, respectively, in the world for oil and gas exploration and production companies in 2002. The main business of the company was exploration, development, and production of crude oil and natural gas in India, both onshore and offshore. Mr. Subir Raha met with his Senior Management Team to discuss the implementation process for achieving the target of six billion tons in the next 20 years. He was quite optimistic as ONGC

had doubled its turnover from US$ 5 billion to US$10 billion (from Rs 23,238 Crore to Rs 48,368 Crore) in three-years (2001–2004); and it aimed to go to US$ 50 billion in the next five years. This implied a CAGR of 40-50% and if achieved, it would be an outstanding achievement, by any standards.

HISTORY OF FORMATION AND DEVELOPMENT OF ONGC

The Indian oil and gas industry traced its beginning to the discovery of crude oil in the first half of the nineteenth century in Assam in the far northeast of India. The industry saw modest growth in exploration, development, and production activity for a century, and on the eve of independence in 1947 two domestic oil producers were operating, the Assam Oil Company in the northeast and the Attock Oil Company in the northwest (presently Pakistan). After independence, the Government realised the importance of oil and gas for rapid industrial development and its strategic role in defence. Consequently, while framing the Industrial Policy Statement of 1948, the development of petroleum industry in the country was considered to be of utmost necessity. In the 1950s, the Government entered the oil and gas sector by establishing an exploration and development entity, the Oil and Natural Gas Directorate (the predecessor to ONGC) in 1955. They also created state-owned refinery companies (Indian Refineries Limited in 1958 and Indian Oil Company Limited in 1959, which merged to form the Indian Oil Corporation in 1964), and formed exploration and development joint ventures with existing domestic and foreign oil and gas companies (establishing Oil India Limited with the Burma Oil Company and the Assam Oil Company and Indo-Stanvac Petroleum Company Limited, a joint venture between Government of India and Standard Vacuum Oil Company).

Until 1955, private oil companies mainly carried out exploration of hydrocarbon resources of India. In Assam, the Assam Oil Company was producing oil at Digboi, which was discovered in 1889, and the Oil India Ltd. was engaged in developing two new large fields Naharkatiya and Moran in Assam. In West Bengal, the Indo-Stanvac Petroleum project was engaged in exploration work. The vast sedimentary tract in other parts of India and adjoining offshore remained largely unexplored.

In 1955, the Government of India decided to develop the oil and natural gas resources. Natural Gas Directorate was set up towards the end of 1955, as a subordinate office under the then Ministry of Natural Resources and Scientific Research. The department was constituted with a nucleus of geoscientists from the Geological survey of India.

In April 1956, the Government of India adopted the Industrial Policy Resolution, which placed mineral oil industry among the schedule 'A' industries, the future development of which was to be the sole and exclusive responsibility of the state. Soon, after the formation of the Oil and Natural Gas Directorate, it became apparent that it would not be possible for the Directorate with its limited financial and administrative powers as subordinate office of the Government, to function efficiently. So in August 1956, the Directorate was raised to the status of a commission with enhanced powers, although it continued to be under the government. In October 1959, the Commission was converted into a statutory body by an act of the Indian Parliament, which enhanced powers of the commission further. The main functions of the Oil and Natural Gas Commission under the provisions of the Act were "to plan, promote, organise, and implement programmes for development of Petroleum Resources and the production and sale of petroleum and petroleum products produced by it, and to perform such other functions as the Central Government may, from time to time, assign to it". The act further outlined the activities and steps to be taken by ONGC in fulfilling its mandate

During the 1960s, exploration, development, production and refining continued to grow and the sector became increasingly dominated by state-owned companies and joint ventures between the Government and private oil and gas companies. When ONGC discovered the large Mumbai High offshore oil field in 1974, the domestic oil and gas industry began large-scale expansion. In the 1970s the Indian oil and gas industry was largely nationalised, as the Government took over the operations of IBP, Esso, Caltex and Burma-Shell. Following nationalisation, only state-owned enterprises were allowed to participate in the oil and gas industry

(other than Castrol, which was permitted to remain in the niche lubricant segment). Virtually all aspects of the oil and gas industry were highly regulated, including investment, exploration, production, distribution and pricing of all petroleum products sold in the market.

Since its inception, ONGC was instrumental in transforming the country's limited upstream sector into a large viable playing field, with its activities spread throughout India and significantly in overseas territories. In the inland areas, ONGC not only found new resources in Assam but also established new oil province in Cambay basin (Gujarat), while adding new petroliferous areas in the Assam-Arakan Fold Belt and East coast basins. ONGC went offshore in early 70s and discovered a giant oil field in the form of Bombay High. The discovery, along with subsequent discoveries of huge oil and gas fields in Western offshore changed the oil scenario of the country. Subsequently, over five-billion tonnes of hydrocarbons were discovered.

In the early 1990s, as India's reliance on oil imports increased, the government embarked on a series of reforms aimed at partially deregulating the oil and gas sector, with a goal of rationalising the industry, improving efficiency, reducing the cost of government subsidies, and encouraging private sector investment. The reforms included opening the refining segment to private investment, permitting the sale of limited amounts of LPG and kerosene by private entities outside of the state-owned distribution channels, and allowing foreign oil companies to enter the domestic lubricant market. The liberalised economic policy, adopted by the Government of India in July 1991, sought to deregulate and de-license the core sectors (including petroleum sector) with partial disinvestments of government equity in Public Sector Undertakings. Consequently, ONGC was re-organised as a limited company in February 1994. In the transformation from commission to corporation, the company inherited 46,000 employees, 103 onland rigs, 27 offshore rigs, 190 onland wells in production, 150 offshore wells in production, 7,600 kms. of onland oil and gas pipeline, 2,800 kms. of underwater pipeline, and a 70 mmcmd..capacity gas processing complex at Hazira. It had a net worth of Rs. 12,746 crore. ONGC decided to focus on integrated growth and concentrate on core areas (Business India, 1995).

In the late 1990s, the government adopted a phased lifting of price controls on the entire range of petroleum products, which was fully implemented by April 2002, except in case of natural gas, LPG, and kerosene. While deregulation and other government initiatives increased the level of private sector participation in the domestic production sector, the industry remained dominated by two government-owned entities, ONGC and OIL. Even after a decade of private sector participation, ONGC and OIL accounted for 83.9 percent and 7.3 percent of the domestic oil and gas production, respectively. The most important contribution of ONGC, however, was its self-reliance and development of core competence in E&P activities at a globally competitive level.

The historical success and future prospects were directly related to a combination of several factors. The firm had the highest proved reserves in India of any oil and gas company, which provide a stable, long-term production base relative to major competitors. The ratios of proved developed reserves to production for domestic crude oil and natural gas were approximately 16.0 years and 14.1 years, respectively. The firm also had reserves of crude oil and natural gas in foreign countries. All crude oil reserves comprised sweet crude, with a significant majority in the form of light sweet crude that yielded a higher proportion of higher-value light and middle distillates. The majority of the natural gas reserves consisted of gas with a high calorific content.

As of April 1, 2003, the domestic proved crude oil reserves of approximately 3,306 million barrels and the domestic proved natural gas reserves of approximately 366.0 billion cubic meters represented 83.1 percent and 79.0 percent of the total proved crude oil and natural gas reserves, respectively. The domestic production amounted to approximately 206.8 million barrels of oil and approximately 26.0 billion cubic meters of natural gas, representing an average production of approximately 566,586 barrels of oil and 71.2 million cubic metres of natural gas per day. The domestic production amounted to approximately 83.6 percent and 84.1 percent of India's total production of crude oil and natural gas, respectively, for this period. ONGC also engaged in the

exploration, development, and production of crude oil and natural gas in eight foreign countries through the wholly owned subsidiary, ONGC Videsh Limited. The estimated international proved reserves as of April 1, 2003 were about 673.0 million barrels of crude oil and 97.0 billion cubic meters of natural gas. Exploration, development, and production activities were carried out through independent operations as well as, to a lesser extent, through joint ventures and production-sharing contracts with other domestic oil companies and foreign partners such as Exxon Mobil, British Petroleum, China National Petroleum Company, Petronas, Cairn Energy, and British Gas. A portion of the crude oil and natural gas output was processed into petroleum products such as LPG, naphtha, kerosene, ethane-propane and diesel.

The company had accumulated an extensive collection of raw and proprietary geological data on offshore and onshore regions in India, and this knowledge and database represented an advantage over other foreign and domestic oil and gas companies seeking to compete in India for exploration licenses, in production and in other areas. In addition, this advantage made the company more attractive to prospective joint ventures and production-sharing partners, which further improved their ability to pursue domestic exploration, development, and production opportunities, and obtain access to advanced technologies and techniques. The company had a skilled workforce and a senior management team with extensive industry experience. ONGC had been a technology leader in the domestic market. They were a pioneer in introducing natural gas processing and fractionation technology to India. Significant resources were devoted to in-house research and development to improve knowledge and database, industry expertise and use of advanced technology, and in particular to develop enhanced recovery and other exploration and development techniques and to improve the efficiency of production operations.

Their independent domestic exploration licenses covered a total area of approximately 680,800 square kilometres, representing a majority of the total area licensed for exploration in India. In addition, being members of production sharing consortia with exploration contracts covering 75,000 square kilometres in foreign countries gave it added advantage. Since the establishment of the New Exploration Licensing Policy, or NELP, by the Indian Government in 1999, ONGC was awarded approximately 50% of the total number of blocks granted under that program. They also had an extensive amount of proved undeveloped oil and natural gas reserves and a considerable area of under explored sedimentary basins. With the significant financial resources afforded by good performance from operations and low debt levels, ONGC was well positioned financially to exploit these exploration opportunities.

ONGC had an extensive installed infrastructure of drilling and workover rigs, onshore and offshore production facilities, well stimulation services, sub sea and land pipelines, gas processing and fractionation facilities, refineries, exploration and transport vessels, storage facilities and other infrastructure located throughout the main oil- and gas-producing regions of India. In addition, this installed base provided competitive advantages in leveraging the existing operations into retail and other downstream sectors of the Indian petroleum markets.

The average finding costs and all-in production costs benefited from low labour costs, lack of net interest expense, relatively high use of in-house services in place of more expensive third-party contractors, utilisation of depreciated infrastructure and equipment, adoption of cost-saving technology in exploration and production operations, and effective use of large store of geological data and expertise. ONGC had access to advanced technologies and expertise. Ongoing upgrades of existing technology and developing and adopting new and improved technology in exploration, development, production, refining, and other areas of business were required to overcome the challenges of operating in a diverse range of environmental and geographical conditions and in highly competitive markets. R&D formed an integral part of the business and was instrumental in providing much of the technological and analytical support and scientific, engineering, and technical expertise that were critical to success. Likewise, the affiliated training institutes provided educational services and skills training crucial to effectively developing human resources and maintaining competitive edge.

On 31st March 2002, the Government ended the Administered Pricing Mechanism on crude and petroleum products and ONGC became entitled to Market Determined Prices for crude and value-added products like LPG, SKO, and HSD. ONGC was granted Marketing Rights, which provided opportunity to boost profitability through value addition in consumer and retail marketing.

THE REJUVENATION OF ONGC

By 2001, ONGC had reached a stage where it could not afford to stagnate; it had either to grow or fall by the wayside. The managers and workers had to find efficient ways of operating in an increasingly competitive environment. Mr. Subir Raha began by identifying three core objectives that could put the company in the same league as giants like Exxon and British Petroleum. The Corporate Strategic Goals of the company, resolved in 2001 called for sustained effort over two decades of 2001-2020 to achieve doubling of in-place reserves to 12 Btoe (billion tonnes of oil and oil equivalent); improving average recovery factor from 26% to 40%; and sourcing 20 MMToe (million metric tonnes of oil and oil equivalent) from overseas. While the three objectives were one part of the change program, restructuring was the other (Business Today, 2003-b). Proactively responding to the policy changes, ONGC launched Corporate Rejuvenation Campaign in August 2001 for restructuring the organisation and reorientation of the mindset (Annual Report 2002 pg. 79). From a slow-moving, rule-bound organisation, ONGC had to become more goals oriented, accountable, and responsive. Down the line empowerment of managers was initiated with increased accountability. The company engaged in intensive and innovative HRD processes such as Unnati Prayas, Super Unnati Prayas, Sangshaptak, ONGC Academy, School of Maintenance Practice, Career Progression, and ARCUBE.

Unnati Prayas (Endeavour to Progress) was a unique initiative where serving employees were chosen for a full-time customised mid-career engineering degree programme entirely at the cost to the company.

Super Unnati Prayas: 20 executives were engaged in a customised, exclusive MBA programme of the Indian Institute of Foreign Trade (IIFT), New Delhi. Another 20 executives were participating in a specialised MBA programme at the Management Development Institute, Gurgaon.

Sangshaptak: This was a unique, innovative, and exclusive orientation programme for below-the-Board executives conducted at the Indian School of Business (ISB), Hyderabad to prepare senior executives for the Board. It was a multi-module interactive process for selected fast track executives.

ONGC Academy: 5,466 executives attended 227 programmes at the academy, excluding 199 Graduate Trainees on their induction course. The academy organised 17 high-intensity programmes on Technology Gaps with invited faculty from India and overseas. The Regional Training Institutes conducted 336 training programmes for 5,590 Non-executives.

School of Maintenance Practice (SMP): Set up on 23rd November 2003, the SMP conducted 59 courses with OEM support as required, for officers and workers.

Career Progression: The career progression policy (Modified Recruitment &. Promotion Regulations-1980) was upgraded to synergise with evolving organisational requirement. A MoU on this was signed with the Collectives in August 2004, and approved by the Board.

ARCUBE: Was a comprehensive study to redefine the organisation. The three R's represented

R—Roster viz. manpower requirement for each activity.

R—Roles viz. the relationships between adjacent positions on the Roster.

R—Responsibilities viz. the deliverables in line with Service Level Agreements.

This study was a sequel to the structural and process-related changes under Corporate Rejuvenation Campaign. Consequential benefits from this study were role definition aligned to global best practices; transparency and Credibility in Performance Appraisal; and competency-based manpower planning.

The firm also started accounting of Human Resources as they felt that though they were not in the knowledge business, their business is knowledge (**Exhibit 1**). Hence they made an attempt to measure the potential

ability of all employees across the ranks, to arrive at a summation of their knowledge and skills by using the "Lev and Schwartz" model, taking the anticipated future earnings as the surrogate value of the employees. The model was used with the assumptions that the employee continues at the same position until superannuation, all direct and indirect employee costs were considered with escalations limited to corporate compensation practice and general economic conditions and a discounting factor of 8%. Based on these assumptions, the Human Resource was valued at Rs.247,782 million as on 31st march 2004.

As a result of the restructuring, focused measures for extensive internal communication were taken and frontline executives were empowered. Corporate credibility was improved with thrust on ethics through transparency and accountability. Delays and defaults were countered through ongoing rationalisation of systems and procedures. On 5th April 2002, ONGC organised its first ever vendor meet to share its strategic goals with all leading vendors in the oil field business. It was a significant departure from traditional practices, where the company informed the vendors that in the future they would be looking for cutting edge technology, best in class equipments, services, and supplies for all their operational requirements. They would also be expected to offer best of services, adhere to schedules, measurements, and specifications to fulfil the promises given by them while signing contracts. In turn unnecessary and unreasonable clauses in the tender contracts would be removed. A vendor rating system was started wherein the vendors were assessed on their performance. A dedicated website was introduced for tender advertisements to ensure wider reach and fair practices (http://www.ongcindia.com/press_release1.asp?fold=press&file=press2.txt accessed on 04.12.06).

Several sub-committees were constituted on 27th July 2001 for review of policies, proposals, and performance. The *audit committee* coordinated the work of Internal Audit, Statutory Audit, and Government Audit, reviewed and approved internal Audit Department's Annual Plan and acted on observations by Auditors and reviewed implementation. The *Finance Management committee* reviewed budgets, capital structure, financial policies, accounting standards, processes, systems and controls covering accounting policies, funds, treasury management, taxation, foreign currency loans, risk management, and insurance of producing assets. The *remuneration committee* considered various aspects of remuneration payable to executive and non-executive directors. The *Investors' Grievance Committee* specifically looked into redressal of investor complaints like transfer of shares, non-receipt of declared dividend etc. such that no grievance would remain pending beyond 30 days. The *Human Resource management Committee* considered HR policies and issues and included proposals for promotion. The *Project appraisal Committee* examined and made recommendations for Project / Capital investments exceeding Rs. 150 crore. The *Share Transfer Committee* approved requests received for share transfer/transmission/ transposition, issue of duplicates, sub-division, consolidation, dematerialisation, re-materialisation, change of status etc. and communicated to investors such that no case would remain pending beyond 30 days. The *Safety, Health, Environment and Business Development Committee* considered new areas of business, proposals for collaborations, joint-ventures, mergers & acquisitions, commercial matters including marketing as well as all aspects of occupational health, safety, and environment protection. It also periodically reviewed the performance of ONGC Videsh Ltd. The *Policy and Planning Committee* was constituted on 18th February 2002 by reallocating the Business Development Function from the Safety, Health, Environment, and Business Development Committee to consider matters relating to new areas of business, proposals for collaborations, joint ventures, mergers & acquisitions, and commercial matters including marketing.

The company started a practice of periodic retreats where all members of the board and officials of the Ministry of Petroleum and Natural Gas discussed issues of Corporate Strategy and Policy. To benefit from the cumulative knowledge and experience of the elders of the ONGC family, an assembly of present and past members was organised every year. Apart from this, the key executives in charge of assets, basins, services, and institutes met periodically with the executive committee of the CEO to review the performance and formulate plans. Action was taken for acquisition of state-of-art technology and equipment; modernisation

and refurbishing of existing equipment and facilities; and focus on controllable costs to improve cost effectiveness. Procedures for purchase of materials and contracting for projects and services were reviewed to reduce time and cost.

ONGC suffered from lack of availability of real time information. Monthly reports generated were not enough to take forward-looking managerial decisions (*Business Today*, 2004-a). Mr. Raha realised the value of IT in business:

> "*The differentials in quality of information, and in speed of access to such quality information, make or break your future in business*"

Management Information System was reorganised to integrate all functions under one umbrella. "One data, one system" was the motto. Project ICE (Information Consolidation for Efficiency, one of the world's biggest ERP packages) was launched on 1st January 2005 across the 400 locations of ONGC at an investment of Rs. 100 crore. This investment was perceived to be reasonable by Mr. A. Kaviraj, Chief, Project ICE because:

> "*Rs 1000 crore is our total budget. If we don't get timely information, even 1% slippage can cost us Rs 100 crore*"

The project was very challenging in terms of complexity as it was spread across 10,000 end users spread across ONGC. This exercise enabled ONGC to use the collective intellectual capability by seamlessly integrating business activities to convert knowledge to wealth more effectively (http://www.ongcindia.com/press_release1.asp?fold=press&file=press91.txt accessedon 4.12.06).

SAP R/3 based projects KUBER and SHRAMIK, financial and HR packages respectively, were initiated in late nineties. These were integrated in Project ICE. Project IMPETUS, the maintenance management initiative, was rolled-out in offshore assets, and deployment in the onshore assets was in progress. This was also integrated in Project ICE. Project PROMISE designed to integrate modernised control and communication systems to eliminate redundancies was implemented. Project EPINET, the exclusive system for Exploration Directorate, was also initiated. The material code list was reduced by 80% from 1.40 million items by eliminating redundancies and duplications. Project SCADA was an initiative to optimise operations from well-head to custody transfer with the motto "One-Organisation-One Date-One Process". This was implemented on a turnkey basis building total commitment in vendor relationship. The IT projects eliminated redundant data, standardised business processes, offered better managerial control, eliminated manual interfaces, made the IT systems adaptable to future need, and afforded a single point data entry with visibility across the organisation (Business Today, 2004-a).

An organisational campaign was launched to de-bottleneck and overhaul existing facilities to check operational losses. Custody transfer systems were upgraded to achieve international standards of accuracy in quality and quantity measurement. Collection of outstanding sales revenues and resolution of pending disputes were expedited for better working capital management. Several measures were taken to minimise the number of non-flowing wells and to reduce gas flaring to the level of minimum technical requirement.

In exploration, state-of-the-art technology, hardware & software, tools and equipment were inducted for data acquisition, processing, and interpretation (API), and in Logging and Drilling services. Ten offshore survey vessels and 32 onland Filed Parties were deployed. A hundred and one drilling rigs were in operation for exploration and development — 29 offshore including 3 for deep waters drilling under Project *Sagar sammriddhi* ('Prosperity from the Oceans'), and 72 rigs onland. The exploratory effort focused on new discoveries as well as additional reserves in producing fields.

In Production, state-of-the-art inputs were deployed to improve production and reduce costs. Redevelopment of Mumbai High field yielded net Oil gain of 50,000 barrels per day (2.5 million tones per year). Ageing and obsolescence of production facilities and equipment were major concerns hence, projects were taken up to replace/revamp /upgrade these facilities and equipment to secure safety, reliability, and efficiency. Development

of 3 new fields was undertaken, including one in deep waters. Another major initiative was to monetise the idle marginal fields through Service Contracts, retaining ownership of the field as well as the output. Such contracts were awarded for 6 onshore and 19 offshore fields.

With accelerated induction of technology, tools and skills, more high-technology wells were drilled offshore, yielding significant upsides in production. Equally important, by-passed oil was accessed, resulting in higher recovery factor. Rig utilisation improved due to intensified monitoring and control, and better logistics. Import of modern onshore work-over rigs started, and a modular rig was brought in, for the first time, for offshore workovers. Advance drilling techniques were introduced in onshore operations.

Two Virtual Reality Centres —"Third Eye Centres"—were commissioned providing a quantum jump in the capability of Exploration, Drilling, Construction, and Production. There were just a handful of oil companies in the world that used virtual reality to simulate drilling. Drilling cost of a rig ranged from Rs. 15 Lac to Rs. 20 lac per day and just a two-hour delay in drilling could mean a loss of Rs. 4 lac. By simulating real time drilling, besides beaming in pictures, Third Eye Centres permitted senior executives to take decisions from their corporate offices, resulting in a stronger bottom-line (Business Today, 2004-b).

ONGC's Cost Management approach was based on leveraging advantages in Research & Development and Technology. A series of actions were initiated by ONGC to improve energy utilisation, which included minimising gas flaring, improved maintenance practices, real-time monitoring and control of operations, use of wind energy, and Fuel & Loss audit. State-of-the-art technology, tools and equipment were inducted for Data-Acquisition, Processing and Interpretation (API). In Logging and Drilling Services, latest Work-over rigs as well as Well-Stimulation equipment were deployed to improve production and reduce costs. Intensified monitoring and control improved efficiency.

A number of projects were taken up by ONGC to replace and upgrade production facilities and equipment to secure safety, reliability, and efficiency. Steps were taken to monetise idle Gas and to maximise utilisation of installed generating capacity. Energy conservation measures like use of Waste Heat Recovery Equipment, Vapour Absorption Chilling harnessing solar energy, and inter fuel substitution, resulted in significant reduction in fuel consumption. In Research & Development, feasibility of using Expandable Casing, Alternate Mud System for ultra-deep water wells, optimising technologies for Gas Hydrate Coring in deep waters, and a host of other such measures were taken. Enterprise Resource Package (ERP) SAP R/3 System which enabled integration of financial accounting with budgeting and costing were used. The system ensured data integrity and provided on-line accounting information through one-time data capture. This resulted in more informed and better management decisions. Cost Accounting Records (Petroleum Industry) Rules (CARR) was implemented in ONGC in 2003-04 in true spirit and the Cost Management Process was further streamlined and strengthened. This helped ONGC in better decision-making in areas of Product-Mix, Outsourcing, Inventory Management, and Capacity Utilisation, resulting in overall Cost reduction and Cost control. ONGC became the first organisation in the world to achieve zero flaring of Gas, which reduced cost (http://www.ongcindia.com/press_release1.asp?fold=press&file=press112.txt accessed on 05.12.06).

In pursuit of their strategic objectives, the company launched a four-pronged strategy:

Increasing domestic exploration and development efforts The company targetted this through expansion of deep-water exploration activities, with the goal of increasing hydrocarbon reserves. ONGC embarked on a major initiative, the Deep-Water Campaign, or "Sagar Sammriddhi", in which Rs. 44,862 million (US$ 986.0 million) would be spent through fiscal 2007 to explore and develop the deepwater acreage granted under the NELP. The Deep-Water Campaign involved the deployment of three advanced deepwater drilling ships and international consultants for geological and geophysical studies, and deep-water drilling, technology, testing, and completion services. Efforts to explore existing shallow-water offshore basins as well as explored and unexplored onshore basins were also strengthened.

ONGC budgeted for total 47 Deep Water exploratory Wells on both East and West coasts of India. This project, named "Sagar Samriddhi" was the biggest-ever deep waters exploration effort, by a single operator,

anywhere. ONGC initiated simultaneous actions in several areas; multi-disciplinary teams (MDTs) were set up for Geological & Geophysical (G&G) Studies, Deep waters Drilling, and Deep Waters Production technologies. ONGC's knowledge acquisition over two decades of survey and drilling in India's deep waters facilitated a head start. Significant leads and discoveries were made in the Eighties and the Nineties. This database, coupled with the continuing advances in all facets of deep waters technology, created the confidence for Project Sagar Samriddhi, which was inherently a high-risk venture (http://www.ongcindia.com/press release1.asp?fold=press&file=press30.txt accessed on 04.12.06). Sagar Samriddhi was a mega campaign to discover oil and gas below the ocean bed (Business India, 2003). Deep waters operations involved severe challenges to the operator's capability in science & technology, skills and resources. The water temperature dropped to 4 degree Celsius below 600 meters. Equipment metallurgy had to withstand extreme pressures – more than one tonne per square inch. Waves could reach heights of seven-storied buildings. Winds and currents could change suddenly and sharply causing risk of equipment drifting away or drill string breaking apart. Equipment could also sink in the soft seabed. Remains of marine species around oil and gas seepages were rock-hard. There were underwater hills and valleys, rockslides, and obstructions (http:// www.ongcindia.com/press_release1.asp?fold=press&file=press30.txt accessed on 04.12.06). On 14th November 2003, Belford Dolphin, a 5th generation ultra deepwater drill ship rig equipped with state of the art drilling system arrived. The rig was dynamically positioned (DP3 class rating) and was capable of drilling in up to 3000M water depths (http://www.ongcindia.com/press_release1.asp?fold=press&file=press37.txt accessed on 04.12.06). The company was targeting to add 4 billion tons of reserves from the deep-sea exploration. The gamble was that even if they could produce 25% of the reserves, they would have 1 billion tons of oil and OEG over a period of 25-30 years, which at a modest estimate of $20 a barrel would yield revenue of Rs. 64,000 crore (Business India, 2003).

In December 2004, ONGC Videsh Limited (OVL) and Gazprom, the largest gas company of the world, entered into a MoU for cooperation in the upstream oil and gas sector in Russia, India, and other countries. Gazprom was the largest gas company in the world with production of 545.1 bcm. in 2004. It accounted for 16% of the world's proven gas resources and nearly 60% of the Russian gas reserves. It exported more than 140 bcm. of gas to Western Europe and more than 52 bcm to the former Soviet Union countries. The MoU enabled OVL to broaden its presence in the Russian oil and gas sector, while Gazprom registered its presence in the growing gas market of India along with ONGC. The two sides also intended to cooperate in a few strategic hydrocarbon provinces of the world (http://www.ongcindia.com/press_release1.asp?fold=press& file=press85.txt accessed on 05.12.06).

Both firms decided to cooperate for capacity creation for deep processing of natural gas, petroleum, and other hydrocarbons in Russia, India, and third countries. This included the following:

(a) organisation of deliveries of produced petroleum and petrochemical products to the markets of Asia-Pacific and South Asia countries, first of all to India
(b) design, construction, and operation of trunk pipelines and systems of underground storage of gas (USG) in India and third countries
(c) development of scientific and technical cooperation in the main areas of gas industry, namely exploration and development of gas and gas condensate fields, gas hydrate fields, coal bed methane, underground gasification of lignite/coal fields, creation and operation of systems of gas storages (including UGS) and liquid hydrocarbons, deep processing of natural gas and other hydrocarbons, and protection of environment
(d) training, improvement of professional skill, and retraining of the staff. The first meeting of the Joint Working Group was held in the headquarters of JSC on 18th and 19th of April 2006. The firms also agreed to form subgroups on upstream activities; on oil and gas supplies to India and downstream activities; on scientific and technical cooperation including human resources and exchange of specialists (http://www.ongcindia.com/press_release1.asp?fold=press&file=press173.txt accessed on 05.12.06 24).

Improving oil and gas recovery and gas utilisation levels The company set up plans to implement a number of advanced recovery technologies to redevelop maturing fields and improve recovery of crude oil reserves, with a goal of increasing average recovery rates. These measures included greater use of extended-reach horizontal drilling, side tracks, infill drilling, water injection and other advanced techniques, as well as technologies using chemical and thermal methods to enhance oil recovery. A budget of approximately Rs. 95,710 million (US$2,103.5 million) was set aside for oil field redevelopment programs and improved and enhanced oil recovery projects through fiscal 2007. Rs. 78.8 billion (US$1.7 billion) was kept for redevelopment of Mumbai High, the largest producing oilfield. Utilisation of natural gas was improved by reducing gas flaring, with the goal of eliminating gas flaring at independent production facilities by the end of fiscal 2005, principally through the implementation of advanced technology and techniques, and upgrading and expansion of the distribution network.

Marginal fields have low oil and gas reserves, which are economically viable when produced with low capital cost and overheads. This is best possible when outsourced to smaller companies. ONGC discovered several marginal fields both onshore and offshore. The marginal fields through out the world contribute around 40% of total oil produced. With the changing world oil price scenario, innovative technologies and liberal government regulations and taxes, the development of marginal fields became quite profitable. In September 2002, ONGC decided to outsource the development of onshore marginal fields in phases. In the first phase 18 fields were offered out of the 96 that constituted about 13% of the total oil and gas in fields operated by ONGC. ONGC retained full ownership of these fields as well as all the production of oil and gas from these fields. Monetising these fields was achieved through minimum overhead cost, clustering with producing fields, use of innovative technology, service alliances, and close monitoring (http://www.ongcindia.com/press_release1.asp?fold=press&file=press54.txt accessed on 04.12.06).

To gain preferential access to the latest technology for applications in oil-fields, ONGC entered into a long-term alliance with 'Improved Petroleum Recovery' (IPR), a US-based integrated service provider in petroleum industry in April 2004. IPR International Limited is a part of the IPR Group of Companies, with its origin in USA. The Company had a diverse business portfolio, ranging from Exploration & Production to consultancy services in EOR evaluation. The Company had bases throughout the world, with operations in USA, Australia, Mexico, Syria, Egypt, Pakistan, Nigeria, Bangladesh, China, and India. The MoU was for cooperation of the two parties in the E&P areas of:

- recovery and production optimisation, reservoir management, and marginal field development
- exploration in frontier basins (Fold/Mountain Belt, Proterozoic Basins & Deep Water Basins)
- joint study centre for innovation and proprietary solutions.

The activities, to be covered by the broad understanding reached under this MoU, ranged in different dimensions starting from data collection, processing, and interpretation, consultancy, engineering operations, information technology solutions, data management efforts, project alliance, innovation and R&D, logistics, and associated communication and service protocols against which new models could be applied. This MoU was a value-enhancement alliance to promote technical management of ONGC's fields (http://www.ongcindia.com/press_release1.asp ?fold=press&file=press50.txt accessed on 04.12.06).

In the pursuit of technology absorption, collaboration, and support in the key areas of exploration, development, production, and services, ONGC took the preferred option of strategic alliance with internationally reputed companies/service providers for value addition and value creation. To migrate to this collaborative environment, ONGC and Schlumberger entered into a long-term alliance in May 2004 to gain preferential access to the latest Schlumberger's technology, operational practices, and expertise on oil field applications. This alliance had flexibility to accommodate several other features and business models to achieve broad-based value addition for ONGC and Schlumberger. The MoU created cooperation in the areas of improving recovery and reservoir management, marginal field development, exploration in Frontier Basins (Fold/Mountain

Belt, Proterozoic Basins &Deep Water Basins), deep water exploration and exploitation, information technology and data management solutions, logistic management, joint Technology Centre for innovation and proprietary solutions, integrated Project Management, and wire line logging/seismic/logistic and other engineering services. The activities under this MoU ranged from data collection, processing, and interpretation of G&G data, consultancy, engineering operations, information technology and data management solutions, project alliance, innovation and R&D, logistics, and other associated communication and service protocols. This was a value-enhancement alliance between ONGC and Schlumberger for long-term strategic interest to both the companies covering the above activities to access best in class technology at a preferred cost for effective integrated solutions (http://www.ongcindia.com/press_release1.asp ?fold=press&file=press57.txt accessed on 04.12.06).

In January 2005, ONGC signed a Corporate Strategic Alliance with Baker Hughes Singapore Pte for value addition and value creation for both parties. This would provide easy access to Baker Hughes' technology, experiences, expertise, management processes, and practices for application in ONGC fields and centres. It also had a built-in flexibility that could accommodate several other features and business models that could benefit ONGC. While ONGC could get the 'Most Favoured Client' status, Baker Hughes could be the 'Most Preferred Partner' in several activities including recovery and production optimisation and reservoir management, marginal field development, exploration in frontier basins, deepwater exploration and exploitation, logistics management, data and information management, joint study centre for innovation and proprietary solutions, logging services in offshore and onshore, and optimisation of ONGC reservoirs and production systems through integrated project management (http://www.ongcindia.com/press release1.asp?fold=press&file=press103.txt accessed on 05.12.06).

Increasing international production To meet this goal, the company planned to exploit existing overseas exploration and production acreages, pursue attractive opportunities to acquire or obtain participation interests in additional producing assets, and obtain exploration and development concessions in promising overseas locations. The company identified additional areas in foreign countries to pursue attractive exploration and production opportunities. In geographic areas where they had limited experience and expertise, they structured investments as joint ventures, alliances, or partnerships with entities possessing relevant experience and expertise.

In December 2002, ONGC Videsh piped out the first Gas from the Lay Tau and Lan Do fields in Vietnam, where it had a 45% stake. Apart from this, ONGC invested Rs. 8,330 crore into Russia's Sakhalin project, which had reserves of 307 million tons of crude and 485 billion cubic feet of gas. They also held a 49% stake in two exploration blocks in Libya and invested Rs. 3,430 crore into the Greater Nile Project in Sudan (Business Today, 2003-a).

In October 2004, ONGC Videsh and Ghana national Petroleum Corporation (GNPC) entered into a MoU for bilateral cooperation in E&P activities, including training GNPC staff in India (http://www.ongcindia.com/press_release1.asp?fold=press&file=press75.txt last accessed on 05.12.06).

Diversifying operations through downstream integration In an effort to insulate the business from the volatility in crude prices, ONGC planned to diversify into more profitable businesses of petroleum refining and marketing (*Business Today*, 2003-a). A vertical integration strategy was pursued in order to diversify sources of revenue, that were concentrated in oil and gas production, into downstream sectors such as refining, processing, distribution and retailing, and to improve profitability by extending operations into higher-margin segments of the product value chain. Over the course of 2003, ONGC acquired a 71.6% majority shareholding in MRPL, a major domestic refiner, and invested Rs. 383.4 million towards acquiring a 23.0% equity interest in Petronet MHB Limited, the owner and operator of the Mangalore-Hassan-Bangalore pipeline. They invested Rs. 1,000 million towards acquiring a 12.5% equity interest in Petronet LNG Ltd., a joint venture with three other domestic oil and gas companies to build and operate a major new liquefied natural gas, or LNG, import terminal at the port of Dahej in the state of Gujarat. Additional investments were planned in various natural gas value-extraction projects, including a planned ethane-propane recovery plant at Dahej.

In January 2005, ONGC signed an MoU with Shell Exploration Company, a subsidiary of the world's third largest petroleum group Royal Dutch Shell to examine significant opportunities for future co-operation in both India and overseas. The MoU covered wide areas of co-operation across the full range of upstream and downstream activities, including exploration and production, coal gasification, natural gas, oil products, refining and petrochemicals. On the upstream, it included investigation of increasing and enhancing production from existing fields in India; joint bidding in exploration acreage and farming into existing but undeveloped Indian exploration blocks; joint participation in international upstream ventures from Shell and ONGC's portfolios; and evaluation of a joint project for coal gasification facilities in India.

Downstream, it included investigating long-term oil products supply arrangements, evaluating supply chain options including joint oil product terminals and depots; setting up a joint venture bitumen business in India, and evaluating joint business opportunities in the area of marine fuels and lubricants; joint business opportunities in new refinery and petrochemical projects, including co-operation on product exports and potential Shell participation in new green-field refinery and petrochemical plants. In the area of Gas and renewables, it involved identification and evaluation of joint business opportunities in the area of coal bed methane applications in India; joint project for coal gasification facilities in India, cooperation in renewable energy sources such as wind energy for power generation, and energy management and consultancy services for selected plants and processes, including potential design and supply of catalysts for both revamping and new manufacturing processes in refining and petrochemicals (http://www.ongcindia.com/ press_release1.asp?fold=press&file=press155.txt accessed on 05.12.06).

Raha's logic for vertical integration was summed in his words (*Business Today*, 2003-b):

"*The whole point of integration is that you operate across a number of business cycles and because of that on an average you are assured of a healthy financial situation*"

While all these steps were gearing ONGC to meet its 20-year agenda, on 24th May 2006, the five-year tenure of Mr. Subir Raha as Chairman and Managing Director of ONGC ended and the mantle was taken over by Director (Finance) Mr. R.S. Sharma as additional charge. Mr. Sharma had been conferred with the "India CFO Award 2005 – Excellence in Finance in a PSU" by International Market Assessment (IMA), in association with BNP Paribas, Sun Micro Systems, and CNBC TV 18. While taking over additional charge Mr. Sharma reiterated that the legacy would continue to take the organisation further and make tomorrow brighter:

"The rich legacy of Mr. Subir Raha would continue and all efforts would be made to take the organisation to the great heights which Mr. Raha had envisioned. The transition would be smooth, maintaining the culture of performance, in cooperation with all stakeholders."

Exhibit 1—Human Resource Valuation at ONGC

Employees As on 31st march 2004

(Numbers)

Employee Group	**Age Distribution**				
	<31	31-40	41-50	51-60	Total
(A) Technical					
Executive	484	3,413	10,703	4,180	18,780
Non Executive	407	2,684	3,494	550	7,135
Total	891	6,097	14,197	4,730	25,915
(B) Non Technical					
Executive	232	470	2,442	1,382	4,526

(*Contd*)

(*Contd)*

Employee Group	Age Distribution				
Non Executive	399	1,743	3,519	1,931	7,592
Total	631	2,213	5,961	3,313	12,118
Grand Total	1522	8,310	20,158	8,043	38,033

Valuation of Employees

(Rs. In Million)

Employee Group	Age Distribution					
	<31	31-40	41-50	51-60	Total	Value per employee
(A) Technical						
Executive	5,912.6	36,826.7	85,787.4	14,621.1	1,43,147.8	7.6
Non Executive	2990.2	17,537.4	19,035.5	1301.8	40,864.9	5.7
Total	8,902.8	54,364.1	1,04,822.9	15922.9	1,84,012.7	7.1
(B) Non Technical						
Executive	2,755.5	49,67.3	17,712.7	4,689.9	30,125.4	6.7
Non Executive	2747.3	10,514.3	16,605.6	3,776.8	3,3644	4.4
Total	5,502.8	15,481.6	34,318.3	8,466.7	63,769.4	5.3
Grand Total	14,405.6	69,845.7	1,39,141.2	24,389.6	2,47,782.1	6.5

Source: ONGC Annual Report 2004 pg. 56

Exhibit 2—Glossary of Energy Terms

Recouped Costs: Depreciation, Depletion, and Amortisation charged in accounts.

Royalty: It is a levy imposed under The Petroleum and Natural Gas Rules, 1959 payable to the respective State or Central Government granting the lease (Central Government in case of offshore) on crude oil and natural gas obtained.

Cess: It is a levy imposed under the *Oil Industry (Development) Act, 1974* on crude oil produced and payable to the Central Government.

Exploration Costs: Costs incurred in exploring property. Exploration involves identifying areas that may warrant examination and examining specific areas, including drilling exploratory wells.

Development Costs: Costs incurred in preparing proved reserves for production i.e. costs incurred to obtain access to proved reserves and to provide facilities for extracting, treating, gathering, and storing oil and gas.

Production Costs: Costs incurred in lifting the oil and gas to the surface and in gathering, treating and storing oil and gas.

Development Well: A well drilled within the proved area of an Oil and Gas reservoir to the depth of a horizon known to be productive.

Exploratory Well: A well that is not a development well, a service well, or a stratigraphic test well i.e.

a well drilled in an unproved area for the purpose of finding and producing Oil or Gas.

Producing Property: The value assigned to crude oil or gas reserves, which can be produced from existing facilities.

Condensates: Liquid hydrocarbons produced with natural gas, separated by cooling and other means.

Development: Following discovery, drilling and related activities necessary to begin production of oil or natural gas.

Enhanced Recovery: Techniques used to increase or prolong production from oil and natural gas fields.

Exploration: Searching for oil and/or natural gas, including topographical surveys, geologic studies, geophysical surveys, seismic surveys, and drilling wells.

Integrated Petroleum Company: A company engaged in all aspects of the industry from exploration and production of crude oil and natural gas (upstream) to refining, marketing, and transporting products (downstream).

Liquefied Natural Gas (LNG): Gas that is liquefied under extremely cold temperatures and high pressure to facilitate storage or transportation in specially designed vessels.

Liquefied Petroleum Gas (LPG): Light gases, such as butane and propane that can be maintained as liquids while under pressure.

Natural Gas Liquids (NGL): Separated from natural gas, these include ethane, propane, butane, and natural gasoline.

Heavy Cut: These are heavier hydrocarbons obtained in fractionation unit of Kerosene Recovery Process, where NGL is processed to yield Aromatic Rich Naphtha and Superior Kerosene Oil.

Oil Equivalent Gas (OEG): The volume of natural gas that can be burned to give the same amount of heat as a barrel of oil (6,000 cubic feet of gas equals one barrel of oil).

Reserves: Oil and Natural Gas contained in underground rock formations called reservoirs.

Proved reserves are the estimated quantities that geologic and engineering data demonstrate can be produced with reasonable certainty from known reservoirs under existing economic and operating conditions. Reserve estimates change as additional information becomes available.

Recoverable reserves are those that can be produced using all known primary and enhanced recovery methods.

Exhibit 3—Summarised Income Statement of ONGC *(Rs in Crore)*

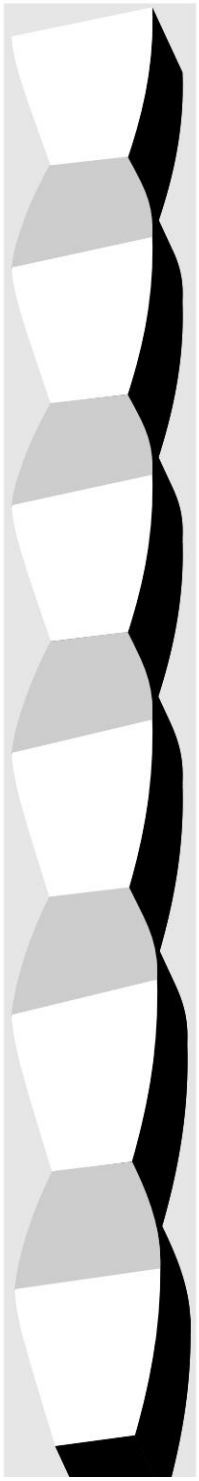
	Mar '06	Mar '05	Mar '04	Mar '03	Mar '02	Mar '01	Mar '00	Mar '99	Mar '98	Mar '97
Income										
Operating Income	47,989.75	46,159.40	31,649.62	34,361.94	23,019.63	23,454.14	19,992.03	14,951.47	15,168.99	13,167.73
Expenses										
Material Consumed	5,450.92	6,782.47	1,493.23	1.340.77	1.407.99	1.411.94	490.10	418.85	380.25	888.21
Raw Materials Consumed	597.50	303.42	29.74	167.59	191.45	246.71	304.61	216.56	221.86	0.00
Stores & other consumables consumed	1,631.21	1,407.59	1,252.34	1,194.31	1,216.77	1,209.94	200.69	202.47	162.89	900.70
Purchase of trading goods	3,433.80	5,101.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Decrease/(Increase) in inventory	–211.58	–29.86	11.15	–21.13	–0.23	–44.71	–15.21	–0.19	–4.51	–12.49
Manufacturing Expenses	11,500.55	10,504.06	8,696.41	6,533.60	6,054.10	6,155.22	4,425.83	5,238.02	5,564.95	5,632.08
Personnel Expenses	3,014.71	2,746.48	2,561.8	2,592.06	2,184.71	2,318.37	700.15	341.55	353.08	863.09
Wages & Salaries paid	2,569.93	2,277.78	2,177.66	2,209.86	1,830.46	1,855.43	630.74	267.20	275.63	723.06
Provident Fund/Gratuity expenses	151.40	136.56	133.77	128.54	124.54	143.78	0.00	0.00	0.00	42.34
Staff Welfare expenses	203.84	203.32	199.68	172.47	146.39	214.91	0.00	0.00	0.00	64.77
Selling Expenses	5,206.03	6,707.69	5,762.50	5,733.81	3,138.42	2,977.69	3,565.40	3,252.54	3,231.60	2,891.53
Cost of Sales	21,043.12	22,636.52	14,861.46	16,397.29	11,213.02	11,593.57	10,780.80	10,149.26	10,824.32	8,801.86
Operating Profit	26,946.62	23,522.8	16,788.17	17,964.65	11,806.61	1,860.57	9,211.23	4,802.21	4,344.67	4,365.88
Other Recurring Income	1,890.94	1,462.35	1,293.04	1,561.32	1,327.51	997.09	858.26	880.33	656.19	652.17
Adjusted PBDIT	28,837.56	24,985.22	18,081.21	19,525.97	13,134.12	12,857.66	10,069.49	5,682.54	5,000.85	5,018.05
Financial Expenses	3,718.44	3,548.399	2,753.03	1,538.95	1,181.85	1,354.92	600.32	830.40	717.83	1,253.89
Depreciation	3,852.76	1,824.2	1,768.02	1,953.78	1,970.79	2,175.31	3,032.27	695.49	775.16	835.92
Adjusted PBT	21,266.36	19,612.61	13,560.16	16,033.24	9,981.48	9,327.43	6,436.90	4,156.65	3,507.86	2,928.24
Tax Charges	7,321.43	6,685.95	4,958.77	5,772.79	3,657.35	3,917.85	2,330.40	820.15	631.00	470.60
Adjusted PAT	13,944.93	12,926.66	8,601.39	10,260.45	6,324.13	5,409.58	4,106.50	3,336.50	2,876.86	2,457.64
Non Recurring Items	608.73	–89.69	–39.53	19.66	–136.87	–196.99	–627.63	–650.25	–224.35	–408.18
Other Non Cash adjustments	–122.87	146.08	102.57	249.21	10.62	16.19	150.60	68.24	25.26	–15.58
Reported Net Profit	14,430.78	12,983.05	8,664.45	10,529.32	6,192.33	5,228.78	3,629.47	2,754.50	2,677.78	2,061.91
Earnigs Before Appropriation	14,430.79	12,983.08	8,664.45	10,529.33	6,197.8	5,28.78	3,629.48	2,754.50	2,677.78	2,033.89
Equity Dividend	6,416.70	5,703.74	3,422.24	4,277.80	1,996.31	1,568.53	926.86	784.26	356.48	285.19
Dividend Tax	899.94	776.33	438.48	237.51	0.00	159.99	141.17	86.27	35.65	28.52
Retained Earnings	7,114.14	6,503.01	4,803.73	6,014.02	4,201.57	3,500.27	2,561.46	1,88.97	2,285.65	1,720.18

Exhibit 4—Summarised Balance Sheet of ONGC *(Rs. in Crore)*

	Mar '06	Mar '05	Mar '04	Mar '03	Mar '02	Mar '01	Mar '00	Mar '99	Mar '98	Mar '97
SOURCES OF FUNDS										
Owner's Fund										
Equity Share Capital	1,425.93	1,425.93	1,425.93	1,425.93	1,425.93	1,425.93	1,425.93	1,425.93	1.425.93	1.425.92
Reserves & Surplus	52,533.74	45,419.49	39,117.17	34,313.03	28,296.25	28,885.36	25,384.32	22,822.87	20,938.86	18,653.18
Loan Funds										
Secured Loans	0.00	0.00	0.00	0.00	0.00	208.50	368.13	688.42	586.65	1,211.20
Unsecured Loans	12,722.61	9,916.22	11,407.79	800.23	3,510.84	4,271.24	6,727.14	7,461.72	8,686.75	9,458.98
Total	66,682.28	56,761.64	51,950.89	36,539.19	33,233.02	34,791.03	33,905.52	32,398.94	31,638.19	30,749.28
USES OF FUNDS										
Fixed Assets										
Cross Block	47,882.35	42,983.85	41,007.62	39,033.66	37,364.75	35,769.78	50,276.86	31,865.17	30,359.88	28,210.60
Less : Accumulated Depreciation	40,040.15	37,147.32	35,339.16	33,640.84	31.763.95	29,880.51	27,806.89	24,453.75	22,139.73	19,656.90
Net Block	7,842.20	5,836.53	5,668.46	5,392.83	5,600.79	5,889.28	2,469.97	7,411.42	8,220.15	8,553.70
Capital Work-in-progress	33,373.92	28,838.35	25,184.99	19,444.07	18.359.04	17,954.57	2,401.00	17,902.08	15,871.73	15,351.59
Investments	4,888.57	4,036.67	4,421.67	3,982.59	3,323.18	2,360.72	2,285.72	2,711.47	4,422.40	1,771.76
Net Current Assets										
Current Assets, Loans & Advances	67,849.42	55,340.09	30,652.83	22,424.95	18,411.59	13,971.51	11,891.91	9,618.52	7,534.26	7,688.07
Less : Current Liabilities & Provisions	47,638.17	37,821.16	14,517.73	14,836.01	12,671.92	5,548.57	5,216.50	5,322.20	4,452.36	2,660.09
Total Net Current Assets	20,211.25	17,518.93	16,135.09	7,588.94	5,739.67	8,422.94	6,675.41	4,296.33	3,081.89	5,027.98
Miscellaneous expenses not written	366.34	531.16	540.68	130.77	210.34	163.52	73.41	77.64	42.02	44.24
Total	66,682.28	56,761.64	51,950.89	36,539.20	33,233.02	34,791.03	33,905.51	32,398.94	31,638.19	30,749.27
Note :										
Book Value of Unquoted Investments	2,132.10	1,280.19	1,665.19	1,705.96	1,705.97	743.52	643.52	2,247.57	3.280.57	278.44
Market Value of Quoted Investments	13,365.52	11,876.20	13,137.61	2,698.67	1,730.98	1,411.72	1,616.63	464.54	1,112.13	1,412.89
Contingent liabilities	32,907.71	26,593.45	2,456.31	19,111.19	15,723.55	5,274.25	4,678.17	4,356.83	6,126.53	3,993.70
Number of Equity shares outstanding (in Lacs)	14,259.34	14,259.34	14,259.34	14,259.34	14,259.34	14,259.34	14,259.34	14,259.34	14,259.34	14,259.34

REFERENCES

Annual reports of ONGC
Business India, 1995, Feb 13-26, Learning to Cope pp. 54-60
Business India, 2003, Aug 18-31, ONGC to Scour Deep Seas, pp. 22
Business Today, 2003-a, Jan 19, Finding Black Gold Abroad pp 218
Business Today, 2003-b, Apr 13, Gushing Over, pp.58-62
Business Today, 2004-a, Mar 28, Integration Across the Organisation, pp.95-96
Business Today, 2004-b, May 23, ONGC's "Third Eye" pp.42
http://www.ongcindia.com/press release1.asp?fold=press&file=press103.txt Accessed on 05.12.06
http://www.ongcindia.com/press_release1.asp? fold=press&file=press91.txt Accessed on 04.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press2.txt Accessed on 04.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press112.txt Accessed on 05.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press30.txt Accessed on 04.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press37.txt Accessed on 04.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press85.txt Accessed on 05.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press173.txt Accessed on 05.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press54.txt Accessed on 04.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press50.txt Accessed on 04.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press57.txt Accessed on 04.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press75.txt last Accessed on 05.12.06
http://www.ongcindia.com/press_release1.asp?fold=press&file=press155.txt Accessed on 05.12.06



The McGraw-Hill Companies

Case 12

Whirlpool of India—
White Goods Splashed in Red

"Our core strength lies in the understanding of the Indian homemaker and innovating our products as per her needs and unmet desires. All the products are a result of the same exhaustive consumer insights process that we have used over the years to understand her better.... We are confident that our enhanced product portfolio... innovative marketing coupled with faster response to the market will be the key drivers in growing the brand to a leadership status in the Indian market,"

Mr. Arvind Uppal,
Managing Director,
3rd April 2006

It was 11 a.m. on 16th July 2004 and Garrick D'Silva, Chairman of Whirlpool India had just finished his speech at the 43rd Annual General Meeting of Whirlpool at Air force Auditorium in South Delhi's Subroto Park. The shareholders began screaming and shouting all at once. "Why the losses?" said one angrily. "When do we get our dividends?" questioned another. "You all

enjoy a fat remuneration, while all we get is a packet of snacks," shouted another. After much verbal exchange, the meeting ended and the directors relaxed – except one, Raj Jain. D'Silva announced the shifting of Raj Jain, the Managing Director of four years, to an assignment in China (*Business World*, 2004).

HISTORY

Whirlpool of India was incorporated as Kelvinator of India on July 19th, 1960 at Faridabad. It was promoted by Spencer & Company, Chennai, and Electronics Ltd. Delhi to manufacture refrigerators and related products. In August 1990, the company entered into a manufacturing and sales agreement with Kelvinator International Corporation, USA. It started manufacturing in January 1964. Since its inception, the company followed a philosophy of vertical integration and manufactured all components such as compressors, driers, thermostats, overload protectors, relays, and winding wires in-house, at facilities located at Faridabad and Ballabhgarh. In 1968, the company promoted Expo Machineries Limited, a 100% subsidiary for sales and marketing of refrigerators. In 1977, Kelbex International, another 100% subsidiary was promoted for deep-sea fishing operations, but closed down soon after as the business was not successful. In 1982, with a view to foray into the two-wheeler business, Aravali Swachalit Vahan Ltd., a sick unit at Alwar, Rajasthan was merged with the company and mopeds and scooters under the brand Avanti were launched.

In September 1989, the company raised Rs.10.25 crore through a rights issue of redeemable partly convertible debentures for undertaking modernisation, technology up gradation, renovation, replacement of old machinery, and installation of balancing equipment, after which the installed capacity of refrigeration increased by 20% to 600,000; deep freezer capacity by 100% to 12,000 and compressor capacity from 30,000 to 100,000. In 1991, the company also started commercial production of microwave ovens and hermetic grade dual coated winding wire. However, the expansion met with a roadblock in 1991-92, when there was a lockout for six-months due to labour unrest at the plants in Faridabad and Ballabhgarh accompanied by a recessionary trend in the consumer durable industry.

In November 1992, the company raised another Rs 37.80 crore through a rights issue of partly convertible debentures for further modernisation, expansion, and technology up-gradation. After expansion, the capacity of refrigerators increased to 70,000 and of compressors to 200,000. The company also raised Rs.1.88 crore through an equity issue to White Consolidated Industries Inc., USA for augmenting long-term working capital resources. However, the downtrend continued as the company had to face acute recession coupled with increased competition, credit squeeze, and high interest cost, which resulted in the company reporting a net loss in 1993.

In 1994, Whirlpool Corporation, USA was seriously considering establishing a direct presence in India. Once India moved towards opening up its market, Whirlpool Corporation's team in Singapore analysed the scope of the Asian market in alliance with Boston Consulting Group and identified Japan, China, and India as high potential markets. However, on further categorising the viability and return on investment parameters, it was found that Japan did not fit into their scheme of things. Hence, the focus of attention became China, followed by India (Business India, 2000). In 1994, Kelvinator of India entered into a strategic alliance with Whirlpool Corporation, USA to manufacture and market home appliances. Whirlpool acquired a majority stake (51%) in Kelvinator at an outlay of Rs300 crore at Rs 197.16 per share (Business Standard, 1996) by outbidding Electrolux, the Swedish White Goods manufacturer (Business India, 1997-a). It also decided to focus on its core business activity of White goods and discontinue all unrelated and non-core business lines. In February 1995, the company made a preferential issue of Rs 1.41 crore equity shares to Whirlpool Mauritius Limited, a wholly owned subsidiary of Whirlpool Corporation, USA. Whirlpool Mauritius acquired 20,86,796 shares from Whirlpool Consolidated Inc. and increased their equity stake to 51%, gaining majority stake. The management was reorganised with nominees of Whirlpool Corporation having majority presence on the Board of the company.

MERGER OF KELVINATOR AND WHIRLPOOL WASHING MACHINES

On April 1st, 1996, Whirlpool Corporation merged its two 51% owned arms in India – the Rs 95 crore Whirlpool Washing Machines (WWM) and the Rs.449.84 crore Kelvinator of India to create Whirlpool of India, thus bringing both its washing machines and its refrigerators businesses under one roof (Business Today, 1996). The washing machine segment had a two-step restructuring. It started off as a joint venture with the TVS group and was known as TVS Whirlpool. Whirlpool bought out the TVS stake before merging it with the parent. Whirlpool Washing Machines was a profitable company having a net profit of Rs 52 lac on sale of Rs 96 crore in 1996 (Business India, 1997-a).

Whirlpool Corporation followed a T4x2 strategy for its trans-national operations. It focused only on the top (T) four (4) business segments in any country. In India this was refrigerators, washing machines, air-conditioners, and microwave ovens. After its formation, Whirlpool of India drew up a T4 agenda to harness product synergies, to strengthen the distribution chain, to cut overheads and to rationalise finances (Business Today, 1996). The merger was rationalised by Whirlpool's executive Vice President (South Asia) Stanley Kinnitt:

> *"Washing machines and refrigerators are from the same product category. It simply isn't logical to manage them separately. ... Two sets of overheads are entirely avoidable"*

Merging the two organisations was a major challenge as WWM had a strong presence in the south and west because of the TVS association, while Kelvinator was a north Indian company, which was particularly strong in Delhi and also had presence in the east (Business India, 1997-a).

However, it was quite apparent that the synergies were not only in marketing. In financial year 1995, Kelvinator's inventory of Rs 8.69 crore and doubtful debts of Rs 2.36 crore were written off. Then its assets were revalued, resulting in shrinking of reserves by Rs 22.95 crore. On the other hand, WWM, which had accumulated losses of Rs 35.47 crore over a period of six years, reported a maiden cash profit of Rs 52 lac in FY 1995. Kelvinator's Rs 50.13 crore marketing arm, Expo Machinery Limited, which had accumulated losses of Rs 33.40 crore was also merged with Whirlpool of India on 1st April 1996. Though Whirlpool Washing Machines and Kelvinator carried forward losses of Rs 35.47 crore and Rs 36.73 crore, respectively, the merged entity carried forward only Rs 36.73 crore of losses as under section 72(A) of the Income Tax Act, a merging entity's losses could not be carried forward by the merged company unless the former was a BIFR case.

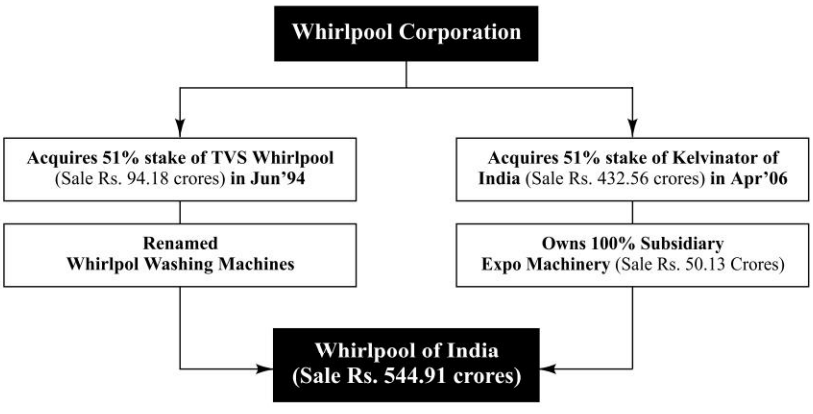


Fig. Merger Mechanism

Adopted from Business Today, 1996

While WWM's equity base was Rs 30 crore and Kelvinator's equity base was Rs 31.73 crore in 1994-95, Whirlpool of India's equity base became Rs.38.63 crore because 24 lac shares of WMM held by Kelvinator were cancelled by the merger and the rest of the shares were swapped for WOI's shares in the ratio 4:1. WOI would have reserves and surplus of Rs 233.55 crore due to the Rs 187 premium Whirlpool paid to acquire a 51% stake in Kevinator in 1995. The consolidation would shrink Kelvinator's reserves of Rs 297.66 crore as its Rs 66.86 crore exposure in WWM had to be set-off. Yet WOI would have a low Debt-to-equity ratio of 1.55:1, which could be leveraged to borrow an additional Rs.250 crore in future.

Merged Whirlpool of India

Rs In crore

	Whirlpool Washing Machines (WWM)*	Kelvinator of India (KOI)**	Whirlpool of India (WOI)
Sales	94.18	432.56	526.74
Net Profit / Loss	0.52	–36.24	–35.72
Carried Forward Losses	–35.47	–36.73	–36.73[a]
Equity Capital	30.00	31.73	38.63 [b]
Reserves & Surplus	2.75	297.66[c]	233.55[d]
Borrowings	39.28	44.21	59.69 [e]
Net Worth to Debt Ratio	0.83	7.69	4.54

* Year ended December 1995
** Year ended September 1995
[a] Losses of WWM will not be carried forward by WOI
[b] Equity of WOI after cancelling shares of WWM held by KOI and 4:1 swap of WWM:WOI
[c] Reserves of KOI after excluding revaluation reserves
[d] Reserves of WOI after deducting Rs 66.86 crore as KOI's exposure in WWM
[e] Borrowings of WOI after cancelling Rs.23.80 crore borrowed by WWM from KOI

(Adopted from Business Today, 1996)

Though costing $100 million, this double entry strategy allowed WOI to acquire a 33% share of the Rs.1,200 crore refrigerators market, a 14.3% share of the Rs.720 crore semi-automatic washing machines market and a 20% share of the Rs 180 crore fully automatic washing machine market. By clubbing together the two companies, WOI developed a vast network comprising 4,000 dealers of Kelvinator and 1,500 dealers of WWM all over the country, selling both refrigerators and washing machines.

DOWNSIZING

The firm's consultant, A.F. Ferguson recommended downsizing if WOI were to turn corners. A voluntary retirement scheme was undertaken towards overall business restructuring and rationalisation of the workforce under which 660 employees were paid Rs 838.32 lac and superannuated from the company (Annual report). In June 1995, Kelvinator introduced a Voluntary Retirement Scheme for the employees of Expo Machinery shedding off 339 employees at a cost of Rs.3.34 crore. Another 1,415 employees were given VRS in April 1996, which cost the company Rs.40.69 crore. In the second phase, 1,500 employees availed VRS which cost the company Rs 41.17 crore (Business India, 1997-a). Trimming the workforce at regular intervals continued. The company inherited 8,000 employees from the bought-out facilities when it entered India. It reduced

about 3,000 jobs within a year and followed it up by reducing workforce by another 1,600, which went along with the sale of its compressor unit to Tecumseh. Whirlpool offered a voluntary retirement scheme to about 250 people in 2000-2001 and spent almost Rs13 crore on it (Economic Times, 2001-a). In 2006, the company completed another phase of restructuring at its Faridabad plant, which resulted in separation of 511 blue collar employees in order to improve productivity (Annual Report 2006 pp. 9).

RESTRUCTURING CONTINUES

Soon after the reorganisation, the company acquired Steriware Pvt. Ltd., Steriplate Pvt. Ltd., and Steri Sheets Pvt. Ltd., which were the sole suppliers of plastic items and electroplated goods to integrate the operations of the company and ensure production of high quality sheets for door and main liners and the various plastic components. However, due to enforcement of quality, reduction of shifts, high fixed costs, and lower production levels, in 1995, the company again posted net loss. In November 1995, the company launched refrigerators under the Whirlpool brand and embarked upon a CFC Free No Frost refrigerator project at Ranjangaon, near Pune to manufacture 6,50,000 latest technology frost free refrigerators at a cost of Rs 356 crore.

The company also stopped manufacture of electronic cash registers and microwave ovens in 1996 and started focusing on advertising, publicity, sales promotion, and discounts and incentives (Annual report, 1997). It spent Rs 6.7 crore on introducing the Whirlpool brand name into the Indian market (Business India, 1997-a). However, for the third time in a row, the company posted net loss in 1996.

On 1st April 1997, Whirlpool Financial India Private Ltd., another group company of Whirlpool Corporation was merged with the company. As part of its restructuring, the automotive, compressor, and plastic divisions were disposed off in 1997. The compressor unit was sold to the US based Tecumseh Products Company for $ 15 million (Rs 52.5 crore), which initially continued with the Faridabad factory before shifting the plant to Ballabhgarh, in Haryana in 1998 (Business India, 1997-a). Tecumseh Products Company was the world's largest independent compressor company with a 10% market-share of the global 150 million units a year compressor market (Exhibit 1). In September 2001, Bright Brothers Ltd. acquired the plastic component manufacturing facility of Whirlpool at Faridabad in Haryana (Business Line, 2001). Bright Brothers manufactured a range of plastic products for home applications under the Brite brand at its manufacturing facilities at various locations in India. Bright Brothers was a leading supplier to original equipment manufacturers in the automotive, white goods, colour television and 2-wheeler segments (Economic Times, 2001-b). After acquisition, Bright Brothers became a vendor of plastic parts to Whirlpool (Business Standard, 2001).

A four pronged strategy was drawn up to improve performance, which included cost cutting measures, new products in the market, sprucing up the marketing and distribution network and exploring the possibility of exports (Business India, 1998). It planned to generate revenue of 10-15% of its total turnover through exports (Economic Times, 1997-b). Whirlpool introduced its own product range to replace the Kelvinator products. Though Whirlpool's strategy was to phase out the Kelvinator brand name (Business Line, 1996), it had to keep on producing Kelvinator to keep its factory of 7 lac refrigerator capacity fully occupied (Business India, 1997-a). In March 1998, the company transferred a loss of Rs 225.74 crore to the P&L Account (annual report, 1998). By December 1998, the share of the Indian promoters were also acquired by the company and the accumulated losses of the company stood at Rs 9.25 crore after setting off losses of Rs 286.48 crore against the share premium account. However, Kinnitt was unperturbed (Business India, 1997-a). In a media release he stated:

> "*These initial losses are part of our investments. Making it in India, in China is the core of our Asia strategy. We got in here first because we sensed a window of opportunity that might close because the market would get too crowded.*"

Internally, the company was being reorganised with a leaner structure. Instead of having 12 sections within the company – sales, services, marketing, exports, finance, human resources, TQM, information technology,

corporate affairs, refrigeration (Faridabad), refrigeration (Frost Free), and washing machines, the number reduced to six – sales and services, marketing, human resources, finance, refrigeration and washing machines (Business World, 1998).

By December 1999, the net loss declined to Rs 15 crore as against Rs 70 crore in December 1998 (Business India, 2000). However, due to fund crunch, Whirlpool of India Ltd put off royalty payments to parent company, Whirlpool Corporation, for three years as it was suffering losses (Economic Times, 2000). In 2003, it filed an application with Foreign Investment Promotion Board (FIPB) for extension of zero-royalty period for two more years, which was the third round of royalty waiver since 1997 (Business Standard, 2003). The company came out of red in 2000 and began making profits but the profits were not enough to adjust royalty payments of 5% on domestic sales and 8% on exports (Business Line, 1999). Under the new scheme, the parent would charge royalty for seven years from 2005-2010, by when the company's profits would have stabilised. After deferring royalty, the company had started showing signs of improvement through a slew of product launches and rise in market share. However, the optimism did not percolate down to the shareholders, who could see year after year passing by without any dividends. It was during such a phase that the Annual general Meeting became a violent affair with the managing director being moved out to China. While Garrick D'Silva remained non-committal, every move of the top management was being observed minutely by the stakeholders, whose fate rested on the future action of the Board.

Exhibit 1—Tecumseh Products Company's Acquisition Motive

Tecumseh Products Company the world's largest independent compressor company, had 29 manufacturing plants located across the world and its products were sold in 100 countries. Tecumseh Products Company simultaneously acquired SIEL's plant at Hyderabad within a span of 15 days (Economic Times, 1997-a). This was in line with their globalisation plan. Having acquired both the plants and merged them into Tecumseh Products (India) Ltd. with headquarters at Hyderabad, Tecumseh Products Company invested Rs 250 crore for technology infusion and capacity expansion at these plants to make it the country's largest merchant manufacturer of compressors catering to all three segments of air conditioners, domestic, and commercial refrigeration (Business India, 1997-b).

Exhibit 2—Economic Environment of the Indian Industry during 1990s

India undertook a cascading set of economic *reforms* beginning in June 1991. Industrial controls over most investments and over diversification and expansion were removed. Import controls (except for most consumer goods) were dismantled. Foreign investment restrictions came to an end in an effort to attract investment. Financial sector *reforms* were initiated with the objective of greater management efficiency. The government also sought better management by introducing competition to areas of public sector monopoly by allowing the entry of new private sector firms (Bhagwati, 1994). Structural *reforms* aimed at deregulating the economy and shifting from a path of relatively protected inward looking industrialisation to a new phase based on greater competition in the domestic markets, openness to trade and investment, and fuller integration with the global economy were also implemented (Ahluwalia, 1994).

Economic liberalisation was initiated to bring in a significant shift in the regulatory framework of the Government. These reforms were aimed at ending the era of central planning through measures towards deregulating the domestic markets, increasing their integration with global economy, reducing the role of Government, and promoting market mechanisms to regulate the economy (Ray, 2003). A borderless economy meant allowing free access to global players in various economic activities such as reduction

in tariff and other protectionist measures including modification of various Government policies (Kumar, 2001). This made it imperative for all firms, irrespective of geographic location to become globally competitive as they were forced to play on the wider global turf. While this was a healthy sign indicating a trend towards near perfect competition, it proved to be a source of much anxiety for firms in countries that always lived under the protectionist umbrella. These firms were not geared up in terms of financial muscle and orientation to compete globally.

The policy changes brought into force in India since July 1991 were in two broad categories, stabilisation policy and structural reforms policy. While the stabilisation policies were intended to correct the grim financial situation being faced by the economy in the short term, the structural reforms policy was intended to accelerate economic growth over the medium term (Rangarajan, 1993). Structural reforms were brought about in the areas of industrial licensing and regulation, foreign trade and investment, and the financial sector. In foreign trade policy, the aim was to liberalise the regime with respect to imports and bring about a closer link between exports and imports and also to reduce tariffs. A progressive reduction in import duty had become imperative to avoid a high cost economy. Financial sector reforms were also brought in to provide greater autonomy to financial institutions in terms of interest rate structures and operational matters particularly loan losses and losses on account of cross subsidisation in lending rates. As a result of these reforms, the veil of protection thrown around Indian Industry in terms of high import tariffs, licensing of industries etc. was gradually dismantled bringing in competition both within India and from outside. Competitiveness, technology up gradation, modernisation, economies of scale, and rationalisation of operations became the keys for survival (Podar, 1993).

Though there was a positive response from industry to gear itself to meet the new challenges, the manufacturing sector had a difficult time. It had to contend with adverse factors like severe import compression, reduced domestic demand because of slow GDP growth and decline in public sector investment outlays and also reduced overseas demand (Dhuldhoya, 1993). The last decade of the 20th century witnessed a large number of companies close shop or become targets for acquisition.

Exhibit 3—Summarised Income Statement of Whirlpool India

	Mar '06	Mar '05	Mar '04	Dec '02	Dec '01	Dec '00	Dec '99	Dec '98	Mar '98	Dec '96
Income :										
Operating Income	1,255.61	997.28	1,411.96	1,101.83	991.84	923.63	878.40	552.70	571.85	649.75
Sales Manufacture	1,318.02	1,041.75	1,490.45	1,176.37	1,032.66	992.23	949.28	614.31	648.90	761.10
Sales Trading	27.60	20.61	32.73	26.02	38.51	26.10	16.22	9.15	15.31	
Income from job works	0.00	0.00	0.00	0.00	0.03	0.94	1.13	1.50	2.10	
Miscellaneous Services Income	30.15	27.45	7.72	21.27	25.90	24.46	24.80	12.88	12.10	16.84
Fiscal Benefits received	3.40	5.23	10.10	7.28	5.06	4.28	3.30	0.38	0.00	0.00
Less Excise	123.55	97.76	129.05	129.11	110.31	124.37	116.33	85.53	106.57	128.20
Total Operating Income	1,255.62	997.28	1,411.95	1,101.83	991.85	923.64	878.40	552.69	571.84	649.74
Expenses										
Material Consumed	771.97	628.54	849.71	590.19	525.85	466.46	468.97	313.84	311.45	383.19
Raw Materials Consumed	680.80	525.75	607.49	523.55	434.27	419.56	431.80	292.59	321.32	320.07
Stores & other consumables consumed	2.33	2.21	24.90	17.28	24.06	23.24	24.31	13.11	24.40	29.74

(*Contd*)

(*Contd*)

	Mar '06	Mar '05	Mar '04	Dec '02	Dec '01	Dec '00	Dec '99	Dec '98	Mar '98	Dec '96
Purchase of trading goods	100.64	124.97	206.75	61.14	56.22	23.67	36.17	4.66	0.10	10.14
Decrease/(Increase) in inventory	–11.80	–24.39	10.57	–11.77	11.30	–0.01	–23.32	3.48	–34.37	23.24
Total Consumption	771.97	628.54	849.71	590.20	525.85	466.46	468.96	313.84	311.45	383.19
Manufacturing Expenses	16.32	12.91	16.13	15.31	18.21	18.08	17.25	12.35	19.47	44.82
Power & Fuel expenses	9.52	8.33	10.75	9.89	11.56	11.83	9.88	6.66	9.49	13.19
Miscellaneous manufacturing expense	6.80	4.58	5.39	5.43	6.65	6.24	7.37	5.70	9.98	31.63
Total Expenses	16.32	12.91	16.14	15.32	18.21	18.07	17.25	12.36	19.47	44.82
Personnel Expenses	88.96	79.06	92.64	80.61	75.02	75.14	77.61	47.90	76.61	66.60
Wages & Salaries paid	75.51	66.35	76.43	67.29	64.46	63.49	62.21	39.75	63.31	57.31
Provident Fund/Gratuity expenses	7.08	6.35	8.75	7.10	6.16	5.81	5.59	4.04	6.30	3.78
Staff Welfare expenses	6.37	6.36	7.46	6.22	4.40	5.84	9.81	4.11	7.00	5.51
Selling Expenses	235.77	218.66	300.18	229.68	185.34	176.76	154.13	102.63	114.72	121.93
Advertising Expenses	38.45	39.57	54.47	50.37	42.05	48.22	36.80	30.86	45.10	23.69
Sales Promotion Expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.00			14.58
Distribution expenses	42.26	43.22	55.78	41.96	38.33	35.08	31.54	22.59	22.66	18.79
Other Selling Expenses	155.06	135.88	189.93	137.36	104.96	93.47	85.79	49.18	46.95	64.87
Adminstrative Expenses	140.69	118.52	118.73	98.14	92.74	94.74	94.32	59.03	117.11	52.21
Rates & Taxes	5.28	3.88	4.19	3.57	4.03	5.67	4.46	3.34	5.34	6.33
Rent paid	11.01	12.32	16.92	15.32	16.87	13.93	10.55	7.03	14.73	4.24
Auditors Remuneartion	0.62	0.57	0.78	0.57	0.55	0.58	0.61	0.38	0.86	0.47
Printing & Stationery	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Insurance premium paid	1.96	1.84	2.31	1.70	2.22	2.10	2.24	1.91	2.26	3.47
Travelling expenses	15.93	12.43	12.73	10.42	10.34	10.92	11.96	7.77	13.54	5.95
Other Administration expenses	105.89	87.46	81.79	66.55	58.73	61.54	64.51	38.62	80.38	31.75
Cost of Sales	1,257.04	1,061.56	1,379.25	1,019.82	899.59	833.07	813.03	536.96	642.94	669.54
Operating Profit	–1.43	–64.28	32.72	82.01	92.26	90.56	65.37	15.74	–71.09	–19.80
Other Recurring Income	5.77	8.63	8.64	9.95	6.91	6.98	3.23	1.78	2.94	4.75
Interest income	0.23	0.65	0.77	3.97	0.78	2.34	1.45	0.27	0.60	1.89
Dividend Income	0.00	0.00	0.00	0.00	0.05	0.06	0.06	0.09	0.27	0.11
Miscellaneous Income	5.54	7.97	7.87	5.97	6.08	4.58	1.72	1.42	2.08	2.75
Adjusted PBDIT	4.34	-55.64	41.36	91.96	99.16	97.54	68.60	17.52	-68.15	-15.05
Financial Expenses	17.10	25.03	27.85	35.11	47.26	54.71	53.97	46.75	49.38	28.52
Interest charges	14.12	14.93	24.56	24.32	32.80	54.71	49.69	43.70	39.04	28.50
Lease rent/Hire charges	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Bank & financial charges	2.98	10.11	3.28	10.79	14.46	0.00	4.27	3.05	10.34	0.00
Depreciation	36.55	32.17	45.97	41.19	39.10	34.20	36.65	34.23	25.25	14.15
Other Write offs	13.66	12.33	15.35	6.34	4.54	1.30	0.00		14.95	0.68
Adjusted PBT	–62.97	–125.17	–47.81	9.32	8.26	7.34	–22.02	–63.46	–157.73	–58.40
Tax Charges	–15.23	0.41	–16.14	–2.02	5.07	0.00	0.01	0.03	0.08	0.03

(*Contd*)

(*Contd*)

	Mar '06	Mar '05	Mar '04	Dec '02	Dec '01	Dec '00	Dec '99	Dec '98	Mar '98	Dec '96
Adjusted PAT	–47.74	–125.58	–31.67	11.34	3.19	7.34	–22.03	–63.49	–157.81	–58.43
Non Recurring Items	–1.31	3.37	–10.09	–6.91	2.02	3.06	–0.25	–2.85	27.83	–71.65
Profit on sale/discard of assets	–0.42	–0.89	–2.92	–3.88	1.40	2.39	3.86	–2.46	0.78	0.76
Profit on sale/reval. of Investment	0.00	0.11	0.39	–0.08	–0.36	0.03	0.00	0.06	0.52	0.00
Insurance Claims received	0.00	4.09	0.82	0.84	1.46	3.59	1.00	1.35	0.22	
Gains/loss on exchange rate	–0.89	0.07	–8.38	–3.79	–0.48	–2.95	–4.51	–1.79	–0.25	
Employee retrenchment expenses	0.00	0.00	0.00	0.00	0.00	0.00	0.61			8.30
Extra ordinary income/(expenses)	0.00	0.00	0.00	0.00	0.00	0.00	0.00		26.56	–64.12
Other Non Cash adjustments	10.95	22.41	8.11	3.97	3.91	10.06	7.52	–3.65		1.66
Credit balances written back	0.53	0.29	0.00	0.00	2.55	8.39	8.44			1.11
Taxes previous year	0.00	0.00	0.04	0.00	0.00	0.61	–0.07	–-0.92		-0.05
Other prior period adj.	10.42	22.12	8.07	3.97	1.36	1.06	–0.85	–2.74	0.00	0.61
Reported Net Profit	–38.10	–99.80	–33.65	8.65	9.12	20.46	–14.68	–69.99	–129.98	–64.83
Earnigs Before Appropriation	–154.52	–116.42	–20.37	0.61	0.30	–3.55	–24.00	–295.73	–288.07	–165.15
Retained Earnings	–154.52	–116.42	–20.37	0.61	0.30	–3.55	–24.00	–295.73	–288.07	–165.15
Trans. to General reserve	0.00	0.00	0.00	0.00	0.00	0.00	0.00			–4.01
Trans. to Other Reserves	0.00	0.00	–3.75	–12.67	8.34	5.27	0.00	–286.48	–62.34	0.00
Net transfer to P & L Account	–154.52	–116.42	–16.62	13.28	–8.04	–8.82	–24.00	–9.25	–225.74	–161.14

Exhibit 4—Summarised Balance Sheet of Whirlpool India

	Mar '06	Mar '05	Mar '04	Dec '02	Dec '01	Dec '00	Dec '99	Dec '98	Mar '98	Dec '96
SOURCES OF FUNDS										
Owner's Fund										
Equity Share Capital	126.87	126.87	126.87	126.87	126.87	126.87	126.87	63.44	39.23	39.23
Share Application Money	0.00	0.00	0.00	0.00	0.00	0.00	0.00	56.26	80.46	
Preference Share Capital	152.34	0.00	0.00	0.00	0.00	0.00	0.00			
Reserves & Surplus	–85.19	–47.09	52.71	86.36	77.71	18.91	–1.54	0.53	70.52	148.25
Share premium Reserve	12.69	12.69	12.69	12.69	12.69	12.69	12.69		286.48	286.51
General Reserve	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Invest. Allow. util. reserves	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Profit & Loss Account surplus	–104.84	–66.74	33.06	62.96	41.64	–8.82	–24.00	–9.25	–225.74	–161.14
Capital Redemption reserve	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Debenture redemption reserve	6.50	6.50	6.50	10.25	22.92	14.58	9.31	9.31	9.31	9.31
Special Reserves	0.00	0.00	0.00	0.00	0.00	0.00	0.00			13.11
Loan Funds										
Secured Loans	99.09	174.62	193.38	179.06	227.34	337.15	377.71	430.74	404.00	103.34
Non Convertible Debentures	54.00	108.00	110.00	113.00	138.00	123.00	54.45	63.01	43.57	18.57
Term Loans	0.00	0.00	0.00	0.00	0.00	0.23	68.51	126.43	131.53	5.34
Foreign Currency Loans	0.00	0.00	0.00	14.39	57.83	108.35	169.43	173.53	130.72	1.77
Short Term Loans	45.09	66.62	83.38	51.67	31.50	105.57	22.49	67.77	98.18	77.63
Short Term Foreign Currency Loans	0.00	0.00	0.00	0.00	0.00	0.00	62.16	0.00	0.00	0.00
Deferred Payment Credit	0.00	0.00	0.00	0.00	0.00	0.00	0.67			0.04

(*Contd*)

(*Contd*)

	Mar '06	Mar '05	Mar '04	Dec '02	Dec '01	Dec '00	Dec '99	Dec '98	Mar '98	Dec '96
Unsecured Loans	145.46	236.56	217.36	148.89	45.87	83.63	115.42	51.64	55.31	14.80
Fixed Deposits	0.84	1.13	1.37	0.73	0.87	3.94	4.86	4.68	10.31	4.80
Other Long Term loans	135.89	234.05	188.85	98.16	0.00	0.00	0.00	25.24	25.00	0.00
Short Term Loans	8.72	1.38	27.14	50.00	45.00	79.69	110.56	21.71	20.00	10.00
Total	438.57	490.96	590.32	541.18	477.79	566.56	618.46	602.61	649.52	305.62
USES OF FUNDS										
Fixed Assets										
Gross Block	614.75	600.21	588.55	580.63	563.02	540.46	542.68	531.86	548.41	290.51
Land & Building	97.17	95.93	97.01	96.29	96.23	96.20	95.17	101.24	100.23	74.25
Plant & machinery	496.00	485.23	471.84	465.79	449.99	428.36	415.03	400.67	418.36	192.28
Other Assets	20.29	17.75	18.41	18.54	16.80	15.90	32.47	29.95	29.82	23.99
Intangible Assets	1.29	1.29	1.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Less : Revaluation Reserve	16.24	16.64	17.03	17.53	17.93	19.41	18.39	24.20	27.09	45.11
Less : Accumulated Depreciation	300.79	267.29	238.36	194.39	160.23	127.26	112.49	84.02	80.77	107.54
Net Block	297.72	316.28	333.16	368.71	384.86	393.78	411.79	423.63	440.54	137.86
Capital Work-in-progress	3.69	4.39	4.45	1.77	2.74	7.58	10.54	8.27	7.43	33.04
Investments	0.00	0.00	0.01	0.87	0.93	0.81	0.82	0.88	40.82	22.80
Book Value-Unqouted Investment	0.00	0.00	0.00	0.65	0.71	0.63	0.78	0.79	40.72	22.53
Market Value-Qouted Investment	0.00	0.00	0.11	0.16	0.22	0.24	0.35	0.24	0.24	0.34
Net Current Assets										
Current Assets, Loans & Advances	513.76	547.64	568.88	558.48	401.85	410.10	449.35	371.91	324.20	256.51
Cash & Bank Balances	15.16	24.61	54.08	27.59	19.70	75.73	74.58	68.45	43.10	12.47
Trade Receivables	109.11	131.95	212.47	234.33	119.09	103.28	154.46	125.99	118.72	119.34
Loans & Advances	191.72	177.29	152.36	137.16	124.32	74.49	58.75	56.85	58.74	41.15
Inventory-Raw Material	34.61	51.59	21.03	23.81	30.48	36.27	42.95	31.00	14.01	21.18
Inventory- Work In Process	2.04	3.30	4.10	3.19	4.49	6.55	7.63	4.98	3.14	8.44
Inventory- Finished Goods	129.01	124.59	95.83	105.82	84.37	93.61	92.53	71.85	77.17	34.59
Inventory- Other	32.12	34.30	29.00	26.58	19.40	20.16	18.44	12.78	9.31	19.34
Less : Current Liabilities & Provisions	428.80	403.07	354.23	442.82	333.86	262.31	256.27	202.10	163.47	192.14
Trade Payables	275.01	272.24	227.08	309.00	217.02	168.63	166.39	125.25	105.73	108.33
Other Current Liabilities	91.47	75.59	76.37	85.05	59.59	34.74	38.29	47.68	39.90	78.86
Total Provision	62.31	55.24	50.79	48.77	57.25	58.94	51.59	29.17	17.84	4.95
Total Net Current Assets	84.97	144.56	214.65	115.66	67.99	147.78	193.08	169.81	160.73	64.36
Miscellaneous expenses not written	52.20	25.73	38.05	54.18	21.27	16.61	2.23			47.56
Total	438.58	490.96	590.32	541.19	477.79	566.56	618.46	602.59	649.52	305.62
Note :										
Book Value of Unquoted Investments	0.00	0.00	0.00	0.65	0.71	0.63	0.78	0.79	40.72	22.53
Market Value of Quoted Investments	0.00	0.00	0.11	0.16	0.22	0.24	0.35	0.24	0.24	0.34
Contingent liabilities	94.77	42.85	45.90	63.80	52.22	39.55	45.31	37.92	38.77	29.91
Number of Equity shares outstanding (in Lacs)	1,268.72	1,268.72	1,268.72	1,268.72	1,268.72	1,268.72	1,268.72	634.36	392.34	392.34

REFERENCES

Annual Reports of Whirlpool of India
Business India (1997-a), Making an Impact, May 5-18, pp.82-83
Business India (1997-b), Cool Acquisitions, July 28 – August 10, pp.95
Business India (1998), Structural Changes, January 26 – February 8, pp.19
Business India (2000), Whirl of a Time, May 15-28, pp. 88-90
Business Line (1996), Whirlpool phasing out Kelvinator Fridges, Mar 26, pp. 4
Business Line (1999), Storm in the Making, May 9, pp.11
Business Line (2001) Bright Brothers acquires Whirlpool plastic Unit, Sep 21, pp. 4.
Business Standard (1996), Whirlpool Washing Machines to Merge with Kelvinator, March 13, pp.1
Business Standard (2001), Whirlpool sells off Faridabad Unit to Bright Brothers Sep 25, pp. 9
Business Standard (2003), Whirlpool seeks two year royalty waiver, Jul 7, pp.6
Business Today (1996), The making of a Whirlpool, April 22-May 6, pp. 66-68
Business World (1998), Whirlpool Swirls into Revamp Mode, February 7, pp.54-55
Business World (2004), In a pool of Mess, August 2, pp. 42-45
Economic Times, (1997-a), TPC acquires SIEL's compression unit, Jul 14, pp. 1
Economic Times, (1997-b), Whirlpool India charts out Four-point turnaround plan, Dec 19, pp. 9
Economic Times (2000), Fund Crunch Forces Whirlpool to Put off Royalty to Parent Co. Jan 12, pp. 13
Economic Times (2001-a), Whirlpool Staff Churning - Key To Improved Fortunes, February 10, pp.9
Economic Times (2001-b), Bright buys Whirlpool's Faridabad Unit, Sep 26, pp.11
http://www.whirlpoolindia.com/media.aspx?id=18# accessed on 26.12.06