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All correspondence pertaining to editorial and circulation matters may be addressed to:

The Editor, *NICE Journal of Business*
School of Business Studies, Shobhit University, Modipuram, Meerut - 250 110
Phone: 0121 326-4005, 2575091/92; Fax: 0121-257 5724
e-mail:*editornjb@gmail.com*, *dps.verma@yahoo.com*

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SHOBHIT UNIVERSITY, MEERUT

Shobhit University, Meerut, was envisaged and inspired by Babu Vijendra Kumar *ji*, a progressive agriculturist and well-known social worker from Gangoh (Saharanpur) in Uttar Pradesh. It was notified as an institution deemed to be a University, under Section 3 of the University Grants Commission Act, 1956, in 2006. The University offers under-graduate, post-graduate, and Ph.D. programmes in Computer Engineering and IT, Electronics Engineering, Electronics and Instrumentation, Pharmaceutical Sciences, Business Management, Bio-technology, Bio-medical Engineering, Bio-informatics, and Agri-informatics.

SCHOOL OF BUSINESS STUDIES

School of Business Studies (SBS) is an integral part of the Shobhit University, Meerut. It has inherited the academic legacy of the NICE Management College (established in 1995), and together with autonomy in curriculum-designing and flexibility for foreign collaborations, through academic exchange, and credit-transfer mechanism, and increased institution-industry interface. The SBS offers MBA programmes with several specialisations, including marketing, finance, human resource management, production and operations management, pharmaceuticals marketing, and insurance and risk management. It also offers M.Phil. and Ph.D. programmes in management.

NICE JOURNAL OF BUSINESS

NICE Journal of Business is a half-yearly journal, earlier published by NICE Management College, Meerut, and now brought out by the School of Business Studies, Shobhit University, Meerut. It provides a platform to research scholars, practising managers, and academicians in business management, commerce, economics, and allied fields, to present their research findings and share their views and experiences.

The Journal aims at disseminating research output and providing information about recent developments in the relevant fields, by way of research articles, book reviews, Ph.D. thesis abstracts, case studies, and bibliographies, on topics related to business and allied areas. It is listed in *Cabell's Management Directory* (USA) and included in the Database of EBSCO Publishing, Inc. (USA)

Original contributions received for publication in the Journal are subjected to a blind review, by experts in the relevant fields.

From the Editor's Desk

I feel privileged in placing before the readers the new issue (Volume 6, Number 2: July-December, 2011) of the *NICE Journal of Business*. The issue contains a panorama of research papers on topics of current interest in business. These include: strategic management; marketing, including consumer behaviour and advertising; finance, including banking and stock market operations; human resource management; organisational behaviour; and business environment.

In today's turbulent business environment, it is difficult to run a business successfully. Professor Pikay Richardson reflects on how running a business successfully is becoming an increasingly complex affair and a daunting task. He discusses how strategic leadership and strategic thinking can help corporate executives in achieving market leadership in the fast-changing global economy.

For any business organisation, a consumer is the most important person, as his satisfaction is a pre-requisite for its ultimate success. A dissatisfied consumer can voice his grievances to various forums. Through a survey of complaining consumers and company executives, Dr. Deepa Sharma identifies the nature of dissatisfaction and grievances of the life and non-life insurance policyholders, their grounds, and the various dimensions of their complaining behaviour. Her study has revealed interesting results.

Derivatives have recently become an important device of portfolio diversification, risk-hedging, and price discovery in the stock market. Dr. Kapil Choudhary and Mr. Sushil Bajaj investigate the impact of the introduction of derivatives on the volatility of the spot equity market of India, so as to examine the relationship between market information and volatility. They also measure the effect of the shocks emanating from the US stock market on the volatility of the stock market in India. They find that the volatility has decreased, but to a small extent, after the inception of the derivatives. Their study has supported the assumption that positive and negative news have diverse impact on the volatility of the daily stock returns.

Work-life stress hampers employees' capabilities and lowers their productivity, causing numerous problems in their personal as well as work life, which tend to lower their morale. Dr. Patiraj Kumari examines the level of organisational stress among the entry-level and middle-level officers of public- and private-sector banks in the State of Uttarakhand. She finds significant differences in the stress levels among the bank officers in the two sectors.

Banks use various performance measures to improve the quality of their services. Dr. Pankaj Kumar Gupta and Ms. Seema Garg explore the extent of competitiveness of commercial banks in India. By measuring their performance through the Data Envelopment Analysis, they compare the efficiency of all the 49 commercial banks and demonstrate significant variations in the technical as well as the scale efficiency of most of these banks.

With increasing competition, organisations have to look for new ways to maximise their profits and wealth. Outsourcing is one of them. Dr. Jeevan Jyoti and Ms. Himani Arora examine the phenomenon of outsourcing and its impact on employees' attitudes, consisting of five constructs. They discover that while outsourcing positively affects the employees' morale and job security and negatively affects their job satisfaction and intention to leave, it positively affects employees' commitment but to a insignificant extent .

Celebrity endorsement is one of the major tools in the hands of companies, which attempt to promote their products and services, using the celebrity's name and fame. Ms. Indrani Majumder examines the demographic aspects of some of India's popular celebrities and the effectiveness of celebrity-endorsed TV advertisements, through a survey conducted in the Nadia district of West Bengal. She proposes that advertisers should develop celebrity-endorsement strategies for TV advertisements, with a clear understanding of the demographics of target audience.

The South African region has been in the grip of a severe problem of HIV/AIDS, which adversely affects the investment in the industry. Dr. Lisbon Simeon Ketshabile investigates the impact of HIV/AIDS on investment in tourism industry and the economic development and diversification in Botswana. He argues that the policy-makers and investors should focus their strategies for a fight against the deadly disease and should not limit their reach to tourism development only.

The section on book reviews contains eight items, written by subject experts in the relevant fields. The books reviewed pertain to various subjects, such as production and operations management, team-building, customer relationship management, entrepreneurship and small business management, international financial management, *e*-business strategy, and marketing.

I express my gratitude to the eminent scholars and expert book-reviewers for their precious contribution to the journal.

Several experts devoted their time and expertise for assessing the articles received for publication and making critical comments and suggestions for improving their quality. They richly deserve my appreciation applause and sincere thanks.

The readers and authors shall be glad to know that the world-renowned research database company, EBSCO Publishing, Inc. (USA) has entered into a License Agreement with us for the marketing of our Journal. Thus, our journal shall now be available to libraries and end-users all over the world.

I owe a special word of thanks to Dr. Shobhit Kumar, Chancellor; Kunwar Shekhar Vijendra, Pro-Chancellor; and Professor Rajendra P. Agarwal, Vice-Chancellor of Shobhit University; for their valuable guidance and keen interest in this endeavour to promote, preserve, and spread business research.

D.P.S. VERMA
Editor

PERSPECTIVE

ACHIEVING MARKET LEADERSHIP IN A FAST-CHANGING GLOBAL ECONOMY
The Role of Strategic Thinking

Pikay Richardson*

INTRODUCTION

IT has never been more difficult to run a business successfully. In today's world, firms operate in a difficult and turbulent business environment, and it is not going to get any easier. This is very different from the situation in the first 25-30 years of the post-World War period. Those years constituted a jolly good time to run a business. The world steadily emerged from the ravages of a devastating World War. Most of the factories had been bombed out of existence and companies were beginning to be set up once again. The world economy steadily grew, spurred on by much macroeconomic stability. During that period, there was little real competition and whatever was produced, people would buy. One did not need to be a genius to run a business. It was a great time to run a business.

In that wonderful period, two things happened. First, competently-run companies co-existed with poorly-run ones. There were not many competitors, and only a few companies went out of business each year. Secondly, the gap in performance between the two groups of companies, in terms of return on capital employed, was narrow. In that relatively stable period, you could do today what you did yesterday, and the result would still come through. The pace of change was slow, and the only requirement for success was an incremental improvement in products and processes. 'Human resource management', as a discipline, was unknown. What existed was the personnel department with its much-feared personnel manager. In those days, if you were summoned to see the personnel manager, it was a frightening experience. Only the capital part of the business was seen as important; the labour part was considered less important and people were seen as easily dispensable.

Starting with the synchronisation of economic recessions in most of the advanced industrialised countries, which resulted from the quadrupling of the price of the crude oil by the Organisation of Petroleum Exporting Countries (OPEC), as a result of the 1973 Arab-Israel war, the world economy got ushered, gradually, into a period of turbulence and change. The stable business environment concomitant with the steady economic growth and rising demand of the earlier years changed into one of increasing uncertainty and change. The on-set of stagflation in the world economies opened inter-country cracks, and competition between both domestic and international companies began to intensify. Even when major world economies began to witness strong growth and high consumer demand from the mid-1980s, competition between companies continued to intensify due to new entry, rapid innovation, and

* **Dr. Pikay Richardson** is Visiting Senior Fellow in Manchester Business School, Manchester (UK); Earlier, he was Research Professor and Academic Director in the School of Management, New Jersey Institute of Technology, Newark, NJ (USA); e-mail: *prichardson@dom01.mbs.ac.uk*

increasing global integration, which gave birth to the term 'globalisation'. The world of business became increasingly characterised by fast change.

SOURCES OF CHANGE

There are many forces driving this increasing pace of change. The important among these forces are briefly described here:

De-regulation and Liberalisation: Since the early 1980s, many countries have either considered it necessary or have been pushed to abandon the continuing regulation of their markets. Many countries have adopted sweeping reforms, as well as carve polices to open their economies to foreign participation and trade. Tariff and non-tariff trade barriers have been reduced and new economic policies have been adopted, most of them being more than friendly to global integration.

Globalisation: Globalisation refers to an increasing integration of world economies in terms of trade, investment, travel, etc. From a level of just about $59 billion in 1982, foreign direct investment rose to an astounding $1271 billion by 2000, and currently stands at around $2000 billion. International trade in goods alone has crossed $12000 billion, from a level of just under $2000 billion in 1982.

Collapse of Communism in Eastern Europe and the erstwhile Soviet Union: The spectacular collapse of communism in these countries ushered in by 'perestroika' and 'glasnost', and the fall of the Berlin wall, have led to these countries now appealing to Western capitalist models. While most of these countries have now joined the European Common Market, the European Union (EU), other have gone even further and joined, or are desirous of joining, the single currency, the Euro.

Development of the TRIAD: Arising out of the remarkable growth of China and many Far-Eastern Asian countries, the Tigers, and in combination with Japan and other countries of the Pacific Rim, has been the creation of a tri-polar, rather than a bi-polar, economic world. Most of these countries have become formidable competitors to traditional advanced countries. The rules of business have, therefore, vastly changed, and the so-called 'West' no more calls the shots.

Technological Developments: If one likens technological development to a mountain which mankind has been trying to climb, it is so incredible to note how long he remained in the valley prior to the 1950s. Advances in the various areas of technology have created new products, processes, new markets and new competitors. Many businesses, such as insurance broking, can now be conducted over the telephone at very little cost. This is no wonder when one considers how fast the cost of telephony has declined! A three-minute call between London and New York costs a mere 15 cents today. In 1960, it cost $46! That is how far the IT revolution has gone.

Decreasing Entry Barriers: In the stable post-War period referred to above, more and more companies began to come on stream. It was not uncommon to find monopolies based on the ownership of proprietary knowledge or specific assets. Change was slow and companies enjoyed first-mover advantages for longer periods. In today's globalised knowledge economy, such advantages often do not last long. Whatever a company produces, it does not take long for competition to emerge. Business entry is rapid and this is expected to continue to be so.

Increasing Customer Sophistication and Demands: With more education and media advocacy, coupled with enhanced emancipation and civic rights, consumers have become more health-conscious, better aware of their rights and more eager to attain higher standards. The ever-expanding and vast media industry has made it possible for consumers around the world to come to know world-class products and services. Gone are the days when the consumer accepted whatever was offered to him. Today, consumers' needs and wants determine what the producer or supplier has to offer. Business success, therefore, has increasingly come to be dependent on meeting the consumer's needs and wants.

While the above list is not meant to be exhaustive, it shows that change has become a permanent feature of modern business and its environment. It has been aptly said that the only thing that is permanent in the world of business is change. Not unexpectedly, therefore, it has become difficult to run a business today, and in most cases succeeding in business has become synonymous with managing change. The need for managerial and leadership competence has become vital, as never before, to ensure business success. Business success is no longer a matter of chance, magic, or good luck!

CRITICAL SUCCESS FACTORS

Business and management academics and researchers have conducted studies to identify the factors that determine business success. By examining the operations of the successful companies (the 'good players') and the less successful ones (the 'bad players'), it has been possible to determine some of the critical success factors. The major critical factors are reviewed here:

Doing the Right Things: Good players obviously do the "right things" while the bad players do "things right". Although these are the same two English words, their meanings become poles part when the words are swapped round. A good player determines "what is the right thing to do" with regard to the market, and delivers exactly the same. On the contrary, a bad player continues to live on its past glory and continues to improve and push what it does best, even if there is no more market demand for it.

Being Customer-oriented: While a successful company does the "right things" and has customer-orientation, the less successful one tends to be product-oriented. The main tenet of the former's strategy is to meet customer needs, by aligning itself to market signals and trends. The latter, on the contrary, lives on an inordinate desire to turn out a perfect product. But who cares if the product considered perfect is not what the customer wants, or is unaffordable. The average customer looks for a great experience which derives from a bundle of product attributes, including quality, features, design, package, price, and convenience. Many engineering and scientifically-originated companies continue to have this product-orientation mentality, which has cost many of them dearly.

Having a Competitor-look: In a world of mega-competition, where the winner almost invariably wins all and the loser loses everything, business success also depends on a clear understanding of the competitive landscape where a company operates. One can never beat a competitor until one understands how the competitor operates. Successful companies have a competitor-look. Typical among such companies is GE, especially during the period when it was run by Jack Welch. These companies have their corporate radars always on, scanning the market place, not only to keep a watch on their current competitors, but also to look out for potential competitors, as well as anticipating possible changes that may be developing on the industrial and economic landscape.

Being Fast and Flexible: In the relatively stable post-war period, incremental improvements could just about ensure business success. This is no longer true. The fast pace of change in the globalising world economy demands that companies become fast and flexible enough to meet the challenge of change. It is amazing how much the graveyard of companies is littered with companies which failed or refused to change! Today, the ability to manage change has become one of the most important attributes of success. Linked to this is business agility. Intense competition means that being able to provide a quick response to market signals may win a company the day. In the 1980s, IBM's technical superiority could not deliver competitive success simply because it was so slow to market.

Fostering a Good Internal Communication Culture: There has been a lot of talk in recent days about the learning organisation. In a world economy, now driven by knowledge, the ability to create and disseminate knowledge throughout an organisation has become an important pre-requisite to success. This derives from a culture of good internal communication. In the past, managers often 'talked down' to subordinates, in what was referred to as a 'top down system. In today's world, such a system will stifle any attempt to create a learning organisation. What is required is a combination of both the 'top down' and 'bottom up' communication models. There is a need for a system where communication is easily facilitated throughout the organisation. Excellent CEOs realise this, and usually set aside time when any employee can have free access to them. They also create in their employees the confidence to approach them on any matter they deem relevant and helpful to the organisation.

Having a Strong and Visionary Leadership: In a period of stability, good management is all that is required to ensure successful business outcomes. The pace of change is slow and all that is required is small but continuous improvements over time. To the extent that leadership skills are important, they are less so in the periods of stability. However, as the business environment becomes more turbulent, characterised by fast change, the relative importance of 'management' and 'leadership' changes. Good management is no longer enough, and an increasing dose of leadership skills become essential for steering an organisation through change. There has been a long and intense debate over whether leaders are born or made. However, the overwhelming research evidence shows that leadership can be learnt. Highly successful firms are those led by CEOs who combine both managerial wand leadership skills. Leadership skills have become very important and those who aim to run companies successfully have no business in that position if they are not good leaders.

Thus, the running of a successful business, today, demands substantial knowledge, skill, and business acumen.

The Urgency of Strategic Leadership and Thinking

Market leadership is a goal for many a CEO. During my travels to countries around the world, I have never come across any CEO whose dream or vision for his organisation is to be merely average. They all enthuse the desire to be on the top of the pack, to be the pace or trend-setter, or at least to be among the best. Yet aiming high is only the necessary condition; it is not sufficient, the latter being the ability to translate the aim into achievement. And this is not contingent on chance, good luck or magic.

Sustainable market leadership derives strength from *strategic thinking*, which is a mark of strategic leaders. A short illustration would be appropriate at this stage. In the 1980s, IBM had clear dominance in the emerging computer and IT industry. It had clear market leadership, was a trend-setter and had a huge market share to match. Substantial changes took place during the first decade since the invention of the PC, in 1981, by IBM. IBM leaders' inability to manage these changes, as well as anticipate the evolving changes, meant that the company rapidly lost its shine, moving from the position of the 'most admired company' in 1984, to the 32nd place in 1990, and to an ultimate loss of $3 billion in 1992, the first in its 80-year history!

The missing ingredient in the company was the lack of strategic thinkers at the top of the organisation. So what is 'strategic thinking'? Defined concisely, it is the ability to think ahead, anticipate, and envision the future, and be able to navigate one's life, organisation, or country, through the challenges of a fast-changing globalised world. Strategic or visionary leaders are those able to envision a better future, develop strategies to match, and to align people behind them to achieve the vision.

What Strategic Thinking is not?

Even in the glare of the mammoth changes going on in virtually every area of human endeavour, especially in organisations and enterprises, many areas of activity are still led by those whose thinking is anything but strategic. There are those with the ostrich-like thinking, totally oblivious of the changes unfolding around them.

Since they cannot see the changes, they do not exist. Such attitude persists until the organisation eventually fails. The evidence is plenty. The graveyard of companies is littered with such examples. Then, there are those who still operate with 'rules of thumb'. Such leaders or managers somehow believe that the strategies that led their organisation to success in yesteryears should still work today. These are those who somehow believe that business success once achieved is permanent. A dangerous result of this is where the threat to survival does not seem real or imminent. Their justification is usually the typical British adage, "If it ain't broke, do not fix it". Yet still do we come across those managers who persist to live in the comfort zones, characterised by their inordinate obsession with the status quo and excessive risk aversion. Lacking in any form of creativity and current enlightenment, they continue to count what can be counted rather than what counts. They have emotionally attachment to products and processes even when such has ceased to be of any beneficial consequence.

What Strategic Thinking is all about?

Since all resources on the planet are scarce and limited, the route to progress in any area of human endeavour is to do the 'right things'. This ensures avoidance of resource mis-allocation and sub-optimality. But once the 'right things' have been determined, serious efforts are required to do them right (i.e., efficiently and effectively). Studies on great thinkers and pace-setters reveal their inordinate ability to think "out of the box" and challenge the status quo. Such abilities derive from a combination of knowledge, competence, and intuition, i.e., brain power. Concomitant to these abilities is self-confidence, which nurtures one's creativity and the capacity of idea generation and propagation.

Why Strategic Thinking Matters?

As technological advances have led to a world of major advances in global GDP growth, so have we seen an alarming growth in the number and extent of social problems, and the human race in need of transformation and hope. There is need for a thinking that generates solutions to the increasingly- complex social problems in an interwoven and intertwined world. Human progress today embodies many developments which were yesterday's impossibilities. There is, thus, a need for minds that are open to new ideas, new practices, and new solutions to society's problems. The increasing pressure for the least-cost pursuit of the goal requires risk-taking, competence, team-working, and some adventurism. For a world full of such challenges and desperate to be led, the need for strategic leaders, able to think strategically – to achieve new ways, new solutions, and new alignments – cannot be over-emphasised.

New Global Challenges for Business

In these modern times, change has been constant and unyielding in ferocity and form. More market choices enable consumers and customers to vote with their feet, rendering customer loyalty as secure as a mirage or a moving target. Moreover, customers are making unyielding demands for world-class quality products and services, whilst, at the same time, being only prepared to pay "village-low" prices. Past experiences are often inadequate for dealing with today's issues. Conventional tools have been rendered obsolete by new complexities and new requirements for business success. Creativity and strategic thinking are demanded increasingly and yet consistently. Speed of operation has become an increasingly important competitive weapon. The need for new thinking cannot be over-empahasized.

Strategic Thinkers' Hall of Fame

Both political and business arenas testify to the power of strategic thinking as expounded above. In many areas of business, great achievements have emanated from people who showed in-ordinate ability to envision a better future, develop strategies, align others behind them and lead the achievement of great business feats. A few examples will no doubt be appropriate here to buttress the point. Sir Ian Flanagan was charged with setting up Emirates Airlines in 1985, with only $10 million to go on. Most the industry participants would write this off as a paltry sum for such a large-scale, high fixed-cost industry. Yet, from 1985, the Emirates have grown to a fleet of 147 aircrafts, with flights to almost every part of the world. Its financial performance has been the envy of many an airline. Starting from the smallest State in the US, Sam Walton formulated a vision that most small State citizens would not dream about – a vision to build the world's biggest retailer. Starting small, in the smallest State, he built Wal Mart to become the world's biggest retail chain.

Jorma Ollila was appointed CEO of Nokia in 1992. At that time, Nokia was a conglomerate of tyres, chemicals, paper and pulp, TV, and a small electronics division. Mobile telephony was in its infancy at that time, and there was nothing to indicate that a small electronics division of a small company (by global standards) based in one of the world's smallest countries could become an international giant in the mobile telephony industry. Mr. Ollila was remarkably clairvoyant in determining that not only was mobile telephony going to grow by leaps and bounds to become a huge global industry in a decade, but also that Nokia's small electronics division could become the world leader in the industry. He divested most of the business segments and put all resources into mobile telephony research, development and production, and against all the odds, built Nokia the *numero uno* against formidable competitors in bigger and better-resourced countries.

In the hall of strategic thinkers, Steve Jobs of Apple occupies the pride of place, and will, for a long time to come, stand out as a strategic thinker par excellence. President Obama of America, on the passing away of Steve Jobs, in October 2011, said: "Steve was among the greatest of the American innovators - brave enough to think differently, bold enough to believe he could change the world, and talented enough to do it" (*http://www.yahoo.com*). Jobs' extraordinary vision and leadership saved Apple and guided it to its position as the world's most innovative and valuable technology company. He invented and masterfully marketed ever-sleeker gadgets that transformed everyday technology, from Personal Computers (PCs) to the iPod, iPhone, and iPad. Cultivating Apple's countercultural sensibility and a minimalist design ethic, he rolled out one sensational product after another, even in the face of the severe recession of the late 2008 and his own failing health. Jobs helped change computers from a 'hobbyist's obsession to a necessity of modern life at work and home', and, in the process, he upended not just the personal computer technology but also the cell phone and music industries.

Perhaps most significantly, he launched the iPod, in 2001, which offered "1,000 songs in your pocket." Over the next 10 years, its white earphones and thumb-dial control seemed to become as ubiquitous as the wrist watch! In 2007, he led the birth of the touch-screen iPhone, and later its miniature, "Apps," which made the phone a device not just for making calls but also for managing money, storing photographs, playing games, and browsing the Web. And as if that was not enough, in 2010, Jobs introduced the iPad, a tablet-sized, all-touch computer, that took off, even though market analysts said no one really needed it. Under Jobs, the company cloaked itself in secrecy to build frenzied anticipation for each of its new products. Jobs himself had a wizardly sense of what his customers wanted, and where demand did not exist, he leveraged a cult-like following to create it. *Newsweek* Magazine described Jobs as the one "who had proved himself the ultimate wilful leader, forging his singular vision through a combination of inspiration, unilateralism, and gut instinct".

In early October, 2011, Apple briefly surpassed Exxon Mobil as the most valuable company in America, with Apple stock in the open market worth more than any other company.

From Strategic Thinking to Strategic Achievement to Market Leadership

Market leadership does not come cheap or without any effort. A combination of 'strategic thinking', 'strategic learning', and 'strategic action' is absolutely essential for achieving market leadership. The major elements of these strategic strands are summarised below.

Strategic thinking implies: (a) looking behind the symptoms and ahead; (b) combining intuition and hard facts or data; (c) recognising the value of synergy and the power of collaboration; (d) living the life of the customer; and (e) balancing the short- and long-term interests of the firm.

Strategic learning consists of: (a) undertaking strategic control; (b) making experiments; (c) constantly referring to and examining the strategy; and (d) learning from one's mistakes.

Strategic action comprises: (a) making a choice of plan from intelligently formulated options; (b) taking calculated risks; (c) assessing the consequences every action; (d) getting the timing right; (e) leveraging speed as a strategic weapon; (f) acquiring the appropriate resources; and (g) implementing the plan.

Interviews with many company executives have revealed the difficulties and challenges that managing a business firm entails. Running firms successfully in today's world requires not only competence and skill, but also an understanding of the constantly-changing environment. That, in itself, is a demanding and daunting task. However, achieving market leadership is even more daunting, and only those who dare, win.

CONCLUSION

This paper is written essentially for the modern practising manager. It will also be a flavour for the academic and management consultants. The world's GGP today is seven times its level in 1950. No doubt, the cake has become much bigger, but even bigger has been the number and scope of suppliers. What is more, the pace of change in the world of business began to intensify with the beginning of the 1980s, and is expected to further intensify. This means that running a business successfully has become an increasingly complex and daunting task, and it is within this background that strategic leadership and strategic thinking have taken a pride of place. In essence, running a business successfully boils down to the ability, on the part of the managers, to anticipate and manage the change.

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Prof. Sanjay Mishra, School of Business, University of Kansas, U.S.A

Dr. Savita Hanspal, Associate Professor, Kamla Nehru College, Delhi; currently teaching at Medgar Evers College, Central University of New York, New York

Dr. Ved Pal, Associate Professor, Haryana School of Business, Guru Jambheshwar University, Hisar

DIMENSIONS OF CONSUMER DISSATISFACTION AND COMPLAINING BEHAVIOUR
The Insurance Policyholders' Context

Deepa Sharma*

Abstract

A consumer is the most important person for any business organisation, whether a goods-supplier or a service-provider. His expectations and company's promises pertaining to the product performance determine the extent of his satisfaction/dissatisfaction. While a satisfied consumer is probably the most valuable asset for a company, a dissatisfied consumer surely poses the gravest threat to it. A dissatisfied consumer can voice his grievance by approaching the company, the media, regulatory bodies, consumer forums, and/or civil courts. This paper seeks to identify the major grievances of life and non-life insurance policy-holders, their grounds, and complaining behaviour. Through a survey of complainant-consumers and insurance company executives, the study has revealed interesting results.

Key words: ***Consumer dissatisfaction/grievances, Insurance, Voicing of complaint, Grievance-redress, Despondent, India***

INTRODUCTION

IN the case of sale of products and providing of services, consumers often are dissatisfied with the quality, performance, price, or any other term of sale or supply. While consumer dissatisfaction can result from any business activity, there are certain business transactions which are more susceptible and sensitive to consumer satisfaction. Insurance contracts, being wholly, based on the information exchanged between two parties, belong to this category of business. The consumer of an insurance company is not only the person who buys the insurance policy, or submits his proposal (policy-holder or insured), but also the one who makes the claim for the insurance money after the occurrence of the event (the claimant Insurance is a matter of solicitation to cover the hardship caused by ill-health, accident, theft, retirement, or death, which no one can visualise. There is often resistance to purchase the policy. The prospect, often lured or convinced by the agent's promises, is converted into an insured (or claimant) without fully understanding the reliability and validity of the promises made to him. These promises may include the timely settlement of claim, fair assessment of loss, cashless healthcare, flexibility in the premium payment, and certain tax benefits. The customers (policy-holders) are

* **Dr. Deepa Sharma** is Assistant Professor of Commerce in Maharaja Agrasen College, University of Delhi, Delhi; e-mail: *drdeepasharma@hotmail.com*

often not well-versed or even aware of the basic principles of insurance on which the insurance contract is based. The administrative procedures, including the verification of documents relating to 'third parties' (surveyors, doctors, hospitals, and police) as per the stipulations of the insurer, result in delays or some doubt in the mind of the claimant who, at that time, is already in a state of grief and distress. The policy-holder is likely to ignore these conditions and warranties, since he may not be aware of the implications, affecting the validity of the contract and causing a dissatisfaction and grievance to him. The principle of 'utmost good faith' is reciprocal, binding both the consumer and the company. This is very much in tune with the principle of *caveat venditor* (i.e., 'the seller beware') which cautions the seller (company) about the consumer's interest.

VOICING OF CONSUMER DISSATISFACTION

A dissatisfied or aggrieved consumer can voice his dissatisfaction or grievance in various ways:

1. Withdrawing from the company and switching-over to another, which promises to offer a better product or service;
2. Cautioning others by narrating his own experience; and
3. Returning the product to the seller/service-provider.

Where the negative dis-confirmation of his expectation goes beyond the latitude of acceptance, strong feelings of dissatisfaction and consequent complaining behaviour would result (Day and Landon, 1977). According to Kotler and Armstrong (2011), consumers have not only the right but also the responsibility to protect them instead of leaving this function to someone else. It is in such a condition that the dissatisfied consumer would take public recourse, which includes the following:

1. Seeking redress from the company, giving it another chance to satisfy him and avoid any negative word-of-mouth;
2. Complaining to the industry or trade association concerned, such as the Federation of Indian Chambers of Commerce and Industry (FICCI), Confederation of Indian Industry (CII), Society of Indian Automobile Manufacturers (SIAM), and the National Association of Software Service Companies (NASSCOM);
3. Venting his dissatisfaction/grievance through the mass media, including newspapers and television;
4. Approaching the appropriate regulatory body, such as the Insurance Regulatory and Development Authority (IRDA), Telecom Regulatory Authority of India (TRAI), Delhi Electricity Regulatory Commission (DERC), and the Securities and Exchange Board of India (SEBI);
5. Filing a complaint before the relevant Ombudsman; and
6. Filing a complaint before any other redress agency, such as Consumer Court or Civil Court.

According to Landon (1979), the noted theorist on consumer complaining behaviour, the tendency to complain is influenced by the following factors:

1. The level of consumer dissatisfaction;
2. The extent of product-involvement (A high-involvement product is more likely to drive the buyer to make a complaint);
3. The extent of consumer awareness;
4. The costs and benefits of the proposed action (Expensive and time-consuming proceedings before a civil court may deter a complaint);
5. Personal characteristics of the complainant (Confidence, aggressiveness, awareness about the procedure and the redress agency); and
6. Attribution of the blame to others (Whether the blame can be conveniently attributed to any other party).

Hoyer and MacInnis (1999) added one more factor,: namely, the inequities existing in the exchange between the seller and the buyer. Jagdip Singh (1990) identified four categories of complainers: the 'passives', the 'voicers', the 'irates', and the 'activists'. These are described by Zeithaml, Bitner, Gremler, and Pandit (2011), thus:

> *The passives* are those consumers who often doubt the effectiveness of complaining, thinking that the consequences will not merit the time and effort involved. The v*oicers* are those who actively complain to the service-provider but are less likely to spread a negative word-of–mouth, to switch patronage, or to go to the third party. They tend to believe that complaining has social benefits and, therefore, do not hesitate to voice their opinion. The *irates* are more likely to engage in the negative word-of-mouth, with an average propensity to complain. Lastly, the *activists* are the consumers characterised by an above-average propensity to complain on all dimensions, who complain to all available parties.

Legal Framework for Protecting Insurance Consumers

In India, a number of legal measures have existed for protection and promotion of consumers' interest and for redress of their grievances. Certain legislations intend to provide further protection to insurance consumers (policy-holders). Most of these legislations have come up only during the recent years.

Exhibit

Major Laws for Protection of Insurance Consumers' Interest

A: Legal Measures available to all citizens and consumers, including insurance consumers
The Indian Contract Act, 1872
The Consumer Protection Act, 1986
The Competition Act, 2002
The Right to Information Act, 2005
B: Legal Measures specifically available to Insurance Consumers
The Redressal of Public Grievances Rules, 1998 (framed under the Insurance Act, 1938)
The Insurance Regulatory and Development Authority (Protection of Policy-holders' Interest) Rules, 2002 (framed under the Insurance Regulatory and Development Authority Act, 1999)

The major laws intended to empower insurance consumers and to redress their grievances are listed in the **Exhibit**.

Essentially, the public grievance-redress system for insurance consumers consists of three wings:

1. The Consumer Grievance Cell, set up at the Insurance Regulatory and Development Authority (IRDA);
2. The Office of Insurance Ombudsman, set up under the Redressal of Public Grievances Rules, 1998 (RPG Rules); and
3. The Consumer Courts, established under the Consumer Protection Act, 1986 (CPA).

The IRDA, set up by the Government of India under the IRDA Act, 1999, is intended to regulate, promote, and ensure orderly growth of the insurance business in the country. The IRDA notified the Insurance Regulatory and Development Authority (Protection of Policy-holders' Interests) Regulations, 2002, which apply to all insurers, insurance agents, intermediaries, and policy-holders. In 2003, the IRDA set up a Consumer Grievance Cell to facilitate resolution of policy-holders' complaints. The policy-holder having any complaint against an insurance company is advised to first approach the Customer Grievance Cell / Grievance Redress Officer of the respective company and, if he does not receive a response from the company within a reasonable time, or is dissatisfied with the response, he can approach the IRDA Grievance Cell. The Cell entertains the complaints sent directly by any policy-holder or any other claimant, and not through an advocate, agent, or any third party. Thus, the role of the Consumer Grievance Cell at the IRDA is merely of a facilitator and not of an adjudicative body or any empowered grievance-redress agency.

The scheme of Insurance Ombudsman is provided under the Redressal of Public Grievances Rules, 1998 ('RPG Rules'), framed by the Government of India under the Insurance Act, 1938. These Rules, which apply to all insurance companies - general as well as life insurance - provide for the mechanism for resolution of complaints relating to the settlement of claims on the part of insurance companies in a 'cost-effective, efficient and impartial manner' (Rule 2). Any person who has any grievance against an insurer, can either himself or through his legal heir, make a written complaint to the Insurance Ombudsman within whose jurisdiction the branch or head office of the insurer concerned is located. Five types of complaint, as specified in Rule 12, come within the purview of the Insurance Ombudsman: (a) any dispute regarding the premium paid, (b) legal construction or issue of the policy, (c) delay in claim settlement, and (d) repudiation of claim. The Ombudsman is expected to dispose of the complaint within three months.

In pursuance of the Consumer Protection Act (CPA), 1986, which seeks to protect and promote the consumers' interests in a unified and effective manner, three-tier consumer-grievance redress machinery has been set up at the District, State, and the National levels. These quasi-judicial bodies are intended to provide speedy and in-expensive redress of grievances of consumers of goods and services. 'Insurance' is specified under the Act as one of the services to which the Act applies [Section 2(1) (0) of the CPA]. The consumer courts deal with the resolution of consumer complaints involving matters relating to any unfair or restrictive trade practice indulged in by a trader or service-provider, supply of any defective goods, provision of any service having any deficiency, and charging of a price in excess of the specified price. [Section 2(1) (c) of the CPA].The major statutory provisions relating to the redress of consumer grievances are specified under sections 2(1) [clauses (b), (c), (d), (g), (nnn), (o), and (r)], and sections 13, 14, 15, 24A, 25, and 26 of the CPA. A consumer can file a complaint to the District Forum (for claims upto Rs.20 lakh), State Commission (for claims above Rs. 20 lakhs but upto Rs. 1 crore)[1] and the National Commission (for claims beyond Rs.1 crore).

Apart from the three agencies, consumers can also approach the civil courts, for redress of their grievances. However, these courts, functioning under the traditional judicial system, are resorted to sparingly, since the court proceedings are time-consuming as well as expensive.

Insurance Industry in India: An Overview

Insurance in India has evolved overtime, drawing heavily from other countries, particularly England. The insurance business in India is of four types: (1) Life Insurance, (2) Fire Insurance, (3) Marine Insurance, and (4) Miscellaneous Insurance. While the life insurers exclusively handle the life insurance business, general insurance companies deal with the rest. No composites are permitted under the law. The popular life insurance products include: the whole-life policy, endowment assurance policy, money-back policy, and the unit-linked insurance products (ULIP). In general insurance, the popular products include: the vehicle insurance, health insurance, jewelry block, and the travel insurance.

The Insurance Act, 1938, was the first legislation in India, providing state control over both the life and non-life insurance business. On April, 1, 2000, the insurance industry comprised mainly two players, both in the public sector: the Life Insurance Corporation of India (LIC) and the General Insurance Corporation of India (GIC). The GIC had four subsidiaries: The Oriental Insurance Company Ltd., The New India Assurance Company Ltd., National Insurance Company Ltd., and United India Insurance Company Ltd. In December, 2000, these subsidiaries were delinked from the parent company and were restructured as independent insurance companies; and the GIC was converted into a national re-insurer. Life insurance business in India was nationalised in 1956. About 154 Indian companies, 16 non-Indian companies, and 75 provident funds operated in India before nationalisation. Through an Act of Parliament, the LIC of India was set up with the objective of widely spreading the life insurance, particularly to the rural areas, providing them adequate financial cover at a reasonable cost. LIC continues to be the dominant life insurer even in the liberalised era. Its main business consists of: individual assurance, general annuities, pensions, unit-linked business, group insurance business, and social security schemes. The LIC has Customer Grievance Redress Officers at the branch, divisional, zonal, and the central offices to handle consumers' complaints. Since the opening up of the insurance sector in 1999, 47 private companies have been granted licenses by March 31, 2011, to conduct business in the life and general insurance. Of the 47 companies, 23 were in the life insurance and 24 in the general insurance business. The industry services the largest number of life insurance policies in the world. Out of the 24 general insurance companies, 6 are in the public sector and 18 in the private sector. Of the 18 private-sector companies, two are stand-alone health insurers. Of the public-sector companies, two are specialised insurance companies-- one for export credit insurance and the other for agriculture. Among the public-sector insurers, New India Assurance, and the ICICI Lombard; among the private insurers, held the largest market share *(IRDA Annual Report).*

REVIEW OF LITERATURE

Why do consumers complain? Why some consumers complain and others do not? This area has been an interesting area of study. In this section, we review the earlier relevant studies on the subject to provide a backdrop to the present study.

Studies on Consumer Complaining Behaviour

Herrman (1970) noted that product warranty was the most frequent subject of complaints received by the U.S. Consumer Affairs Department. It was followed by high prices, particularly for products that did not 'hold up'.

In a study on consumer complaints in England and Wales, Morris and Reeson (1978) found that durable products of technically-complex nature, having a higher price, and infrequently bought, attracted more complaints than non-durable products. They noted that the number of complaints varied with the amount of expenditure incurred on the consumer advisory service centres. Straver (1978) found that consumer dissatisfaction mainly arose from the problem of quality-price relationship, planned product obsolescence, product proliferation, and product safety and labelling. Varadrajan and Thirunarayana (1990) studied consumer attitudes towards various marketing practices in India. They found a high level of consumer scepticism towards the philosophy of business. While a massive majority (80 per cent) of the respondents were dissatisfied with the product quality, only a quarter of them felt that most of the product advertisements were believable. In another Indian study, Sharma (2002) found that an overwhelming majority (more than 80 per cent) of the cases decided by consumer forums in India at the three levels (District Forum, State Commission, and National Commission) pertained to grievances of 'deficiency in service'. The next category of consumer grievances which came a distant second (7 per cent) pertained to defect in goods. The cases of deficiency of services pertained to electricity supply, insurance, telephone, housing, medical service, banking, airlines, rail, and road transport.

A study conducted by the Customer Care Alliance of the US (2004) identified seven most common 'remedies' sought by customers when they countered any serious problem: getting the product repaired or the service repeated, refund of price/service charges, apology from the organisation, explanation for the wrong done, assurance of non-repetition of the problem, and an opportunity to vent his frustration which does not cost much to the firm. It was found that non-monetary remedies were positively related to customer satisfaction with the complaint-handling process, continued loyalty, and the positive word-of-mouth communication. Kangun, *et al.* (1975) identified the remedies preferred by consumers in four situations: (1) malfunctioning of colour tube of a television set, (2) delayed delivery of a branded refrigerator, (3) rising prices of meat, and (4) hazardous substance in a doll. They found that in cases (1), (2), and (4), a large majority of respondents preferred either a moderate action or no action at all. The major causes discovered by the authors for such a finding included: (1) consumer belief that most of their problems can be solved without resorting to any strong action which might be costly in terms of time and money; (2) lack of awareness among consumers about the legal remedies available to them for their problems; and (3) consumers' fatalistic outlook and belief that market excesses were difficult to alleviate. In an experiment which investigated consumer responses to three dimensions of perceived fairness of recovery efforts—redress, responsiveness, and empathy/courtesy, Hocutt, Bowers, and Donavan (2006) found that the interaction of employee responsiveness and courtesy would have a dramatic impact on consumer evaluations. The study also revealed that satisfaction was the highest, and the negative word-of-mouth intentions were the lowest under conditions of high responsiveness and courtesy. Gruber, Szmigin, and Voss (2009) found that the consumer was taken seriously in the complaint encounter and the company employees' listening skills and competence were particularly important in complaint- resolution.

The enlightened reaction to complaints must employ three steps: (a) avoiding complaints in the first place; (b) handling them well when they arise; and (c) feeding the information back to the company (Moss and Richardson, 1985). Homburg and Furst (2005) found that though both the mechanistic and the organic approaches significantly influence the complaining customers' assessment, the mechanistic approach had the stronger total impact. The authors found that the beneficial effects of the mechanistic approach were stronger in the B2C (business-to-consumer) settings than in the B2B (business-to-business) ones and for the service firms rather than for the manufacturing firms.

Studies on Consumer Protection and Grievance-redress

It is often observed that the consumers who needed legal protection most were, in fact those who were least likely to use that law. In order to examine the efficacy of the consumer protection law, especially the 'cooling-off' law, which had been adopted in about 30 States of the US, Tootelian (1975) conducted a study in the Central Arizona City, in the US. This law provided to the consumer, a 'cooling-off' period, during which he could reconsider, and even cancel, the purchase made from a door-to-door salesman of expensive products. The study revealed that the low-income people had less favourable attitude towards the consumer protection laws, in general, and the 'cooling-off' law, in particular, and had little knowledge of such law. The author also found that the consumers, especially from the low-income group, did not display the readiness and willingness to use the law applicable to the middle and high-income groups.

Cohen (1975) examined the Federal remedies provided against the fraudulent and deceptive practices, categorised as 'prevention', 'restitution', and 'punishment'. He found that the remedies providing for the prevention of consumer abuse, as developed by the Federal agencies, included the establishment of a code of conduct and providing for the disclosure of information. The restitution procedures related mainly to the advertising practices that included affirmative disclosures and corrective advertising. As regards the remedial measure, Cohen suggested fines and imprisonment and class-action suits. He argued that even though preventive measures formed the most desirable public policy, the history of consumer protection movement indicated such a measure, as a sole remedial action, to be insufficient. He felt that even though a consumer fraud was a harmful social behaviour, punishment should be used only sparingly to stop the most abusive practices or to deter those who persistently indulged in deceptive practices despite the use of other remedial measures. Cohen concluded that arbitration was a fertile field for restitution but the Federal regulatory agencies had not adequately explored it. Mann and Thornton (1978) noted that in many countries, the costs of pursuing consumer complaints through accepted legal channels far exceeded the value of the goods involved. They concluded that while legislation, information, and consumer education had helped in improving the consumer's position in the market, no serious attempt had been made to make the business firms more responsive to the consumer needs. Straver (1977) found that the Swedish government played a unique role in the consumer movement, financing consumer information and education.

In a comprehensive study, Verma (2002) surveyed the major developments in the field of consumer protection in India from 1984 to 2001. These measures included the enforcement of statutory measures for control of unfair trade practices, supply of defective and sub-standard goods, providing of services having deficiency, charging excessive pricing, product testing, pronouncement on the application of CPA to medical negligence by the Supreme Court of India, and stronger measures for standardisation and quality control of manufactured goods. In her study on patients' perception and the legal regulation of medical services in India, under the Consumer Protection Act, 1986 (CPA), Sobti (2002) found a substantial increase in the number of complaints received and the appeals filed in respect of deficiency in medical services, after the landmark judgment of the Supreme Court in *Indian Medical Association vs. V.P. Santha*, delivered in 1995. She also found that aggrieved patients had received justice at the hands of the National Commission and various State Commissions, and that the awareness and confidence of the patients in the grievance-redress system under the CPA had increased. She noted that a majority of the doctors opposed the application of the CPA to medical services on the ground that it would lead to increased costs of treatment, practice of defensive medicine by doctors, and forcing the patients to undergo unnecessary clinical investigations.

The review of research studies reveals that while some researchers have sought to examine the nature of consumer grievances and their consequential complaining behaviour in seeking redress, others have attempted to evaluate the redress systems available under different jurisdictions. Thus, while the 1960s and the early 1970s saw the emergence of studies by the US scholars, the late 1970s and the 1980s witnessed more of the European studies, followed by the Indian studies. It is noteworthy that in the Indian studies, it is the Consumer Forums set up under the CPA, which have recently emerged as an area of interest for many a researcher.

Insurance service represents a relatively long-term contract, where from the quality and adequacy of the service and the deficiencies therein, can be identified in order to assess the validity of the same. It is a service in which the price (i.e., premium) is real and immediate, while the benefit is distant and uncertain. This is one such field where consumers have close encounters with the service-provider and are prone to consumer dissatisfaction and grievances. There has been a marked increase in the awareness of insurance as an essential element of financial planning for both an individual and a corporate entity. Insurance is no longer a product for an emergency-need; it has become a sustenance need. In today's risk economy, downsides can happen to anyone, any time; risk-sharing has become an essential feature of modern society which is also the reason why insurance service has become indispensable in all spheres of life.

In fact, no comprehensive study has been conducted on the voicing dissatisfaction and the complaining behaviour of insurance consumers in India. In order to bridge the gap in this area of great socio-economic relevance, the present study was undertaken.

OBJECTIVES OF THE STUDY

The study has the following objectives:

1. To identify the major grievances of consumers of life and general insurance companies;
2. To identify the mode of consumers' complaints;
3. To examine the major grounds of consumers' complaints; and
4. To identify the factors which prompt consumers to resort to a specific redress-mechanism.

RESEARCH METHODOLOGY

A non-probability convenience sampling method was used to take a representative sample of consumers and company executives for the survey. The study extended to India's three metropolitan cities- Delhi, Mumbai, and Pune, and the four satellite towns of Delhi (Noida, Ghaziabad, Faridabad, and Gurgaon). Delhi, being a major metropolitan city and the national capital, is a hub of sub-ordinate offices of all the major insurance companies. Besides this, a large number of regional and divisional offices of these companies, which seek to redress consumer grievances, operated from Delhi. From the consumers' point of view, Delhi represents a microcosm of the country.

The Sample

*Sample of Consumers/Complainants***:** The sample of consumers (policy-holders) consisted of largely the aggrieved consumers of life insurance and general insurance, who had any grievance against the company and/or voiced such a complaint, or had taken action for redress. It comprised 171 insurance consumers/complainants. Distribution of the respondents according to the sector to which their company belonged as also according to the type of insurance business is shown in **Tables 1** and **2**, respectively.

*Sample of Executives of Insurance Companies***:** The sample of corporate executives was taken from all levels of organisations where any redress system for consumer grievances was in place. Hence, the executives from the head offices, regional/state/zonal offices, divisional and the branch offices (wherever applicable or referred to by higher-level executives) were approached. These executives included the managers, presidents or officers-in-charge of, or belonging to the complaint-handling system of the organisation. Sixty company executives, 30 each of the senior level (i.e., those working at the head offices and the regional or zonal offices) and the junior level (those working at the divisional and branch offices) were personally interviewed.

Table 1

Distribution of Respondents by Sector (Public vs. Private)

Sector→ Type of Respondents↓	*Public-Sector Company (N=101)*	*Private-Sector Company (N=70)*	*Total (N=171)*
Aggrieved	90 (89.1)	55 (78.6)	145 (84.8)
Non-aggrieved	11 (10.9)	15 (21.4)	26 (15.2)

Note: Percentages are in parentheses in this and subsequent tables.

Table 2

Distribution of Respondents by Insurance Type (Life vs. General)

Insurance Type→ Type of Respondents↓	*Life Insurance (N=77)*	*General Insurance (N=94)*	*Total (N=171)*
Aggrieved	62 (80.5)	83 (88.3)	145 (84.8)
Non-aggrieved	15 (19.5)	11 (11.7)	26 (15.2)

Data Collection and Analysis: The data for the study was obtained through personal interview of the consumers (complainants) and the corporate executives, with the help of structured questionnaires. The data was analysed with the help of the SPSS and MS-Word. The statistical tools used to analyse the data included cross-tabulation, frequency distribution, and the chi-square test.

DATA ANALYSIS AND FINDINGS

The major findings of the study are presented in the following paragraphs:

Types of Dissatisfaction/Grievances

The aggrieved respondents were asked to specify the type of grievances they had encountered at various stages of the buying process, namely: (a) at the time of purchasing the policy, (b) after the purchase,(c) at the time of making the claim, and (d) while seeking redress. The grievances voiced by the respondents were examined and grouped into five types: (1) Grievances related to insurance claims; ((2) Grievances related to the insurance surveyor or third-party administrator (TPA); (3) Grievances relating to the insurance policy; (4)

Grievances resulting from administrative delays; and (5) Grievances related to the payment of interest/charges. They were further examined under two heads: (a) Grievances against public-sector and private- sector insurance companies (**Table 3**); and (b) Grievances against life and non-life insurance companies (**Table 4**)

Types of Consumer Grievances: Public Sector vs. Private Sector

The distribution of consumer grievances by the sector (public and private) is shown in Table 4**.**

As noted from the table, insurance claim-related grievances were involved in the largest number of cases, followed by the grievances resulting from the company's administrative delays. Only in 13.1 per cent of cases, the respondents felt aggrieved by matters pertaining to the construction wording of the policy.

Insofar as the sector-wise distribution of grievances is concerned, the number of public-sector policy-holders far exceeded the number of their counterpart in the private-sector companies, in each type of grievance, except in the case of policy-related matters. However, among the policy-related grievances, allotment of a 'wrong plan-term' to consumers was a more common cause of grievance among the respondents belonging to private companies as against those in the public sector. The plan term is generally assigned by the insurance agent on behalf of the company on the basis of the information provided by both the parties, viz., the agent and the prospective customer. Such grievance might arise due to one or more the following factors:

1. The agent did not have adequate training and competence.
2. The agent was guided by his self-interest in terms of the commission, rather than the policy-holder.
3. The policy-holder did not supply the requisite (demographic) information.
4. The information supplied was not taken note of by the agent.

Among the claim-related grievances, the wrongful rejection of claim was the most prominent grievance, followed by the delay in settlement of claim. 'Exclusion clause' turned out to be the single largest ground for repudiation of claim. This reason was more prominent among the public-sector policy-holders. 'Concealment of facts' and 'wilful negligence of the insured' were also the grounds for rejection of claims. The lack of effective communications with the customer about the decision taken in the particular case, might have led the company to repudiate the claim. The repudiation might have taken place in the absence of a system for taking action against the person making a frivolous complaint, apart from rejecting the claim. Vaidyanathan (2007) argued in favour of a stringent law to curb insurance frauds in India. He observed that in respect of public-sector companies, the tendency to reject claims could be a deliberate attempt to prevent possible objections from the company's audit and inspection officers**.**

Among the administration-related grievances, policy-holders of both the public- and private-sector insurance companies were almost equivocal with regard to their dissatisfaction with the delivery of policy document as well as with the speed of disposal of complaints. However, while seeking redress, it was the public-sector policy-holders, who felt more aggrieved for not being attended to, as compared to their private-sector counterpart. Non-payment of interest on delayed settlement was yet another grievance of policy-holders of public-sector companies. Such grievance was negligible in the case of policy-holders of private-sector companies. The delay on the part of the company, whether in claim-settlement, in delivering relevant documents to the insured or in communicating the *status quo* of a particular act, or in providing redress, can be attributed to the following reasons:

1. Absence of a fixed time-frame for various services;
2. Lack of stringent penal provisions for insurers and intermediaries; and

Table 3

Distribution of Consumer Grievances by Sector (Public vs. Private)

S.No.	*Policy-holders→ Type of Dissatisfaction/Grievance↓*	*Public-sector Companies (N=90)*	*Private-sector Companies (N=55)*	*Total (N=145)*	*Chi-Square*
A	***Claim-related Grievance***				
1	Delay in claim settlement	24 (26.7)	12 (21.8)	36 (24.8)	0.43
2	Claim not fully settled	11 (12.2)	8 (14.5)	19 (13.1)	0.16
3	Wrongful rejection of claim on grounds of:				
(a)	Undue delay in information about death/disability	2 (2.2)	-	2 (1.4)	0.14
(b)	Failure to provide supportive documents	5 (5.6)	-	5 (3.4)	1.72
(c)	"Theft not indicative of 'forced' entry"	5 (5.6)	1 (1.8)	6 (4.1)	0.44
(d)	"Exclusion Clause"	20 (22.2)	5 (9.1)	25 (17.2)	4.13*
(e)	Concealment of facts	5 (5.6)	5 (9.1)	10 (6.9)	0.23
(f)	Absence of financial interest	-	-	-	-
(g)	Wilful negligence of the insured	4 (4.4)	5 (9.1)	9 (6.2)	0.59
(h)	Other grievances Total	3 (3.3) **44**	- **16**	3 (2.1) **60**	0.59
Total (1+2+3)		**79**	**36**	**115**	
B	***Surveyor/TPA-related Grievance***				
4	Low assessment of loss by the surveyor	10 (11.1)	3 (5.5)	13 (9.0)	0.73
5	Unnecessary appointment of more than one surveyor	-	2 (3.6)	2 (1.4)	1.18
6	Fault on the part of TPA (Health Insurance)	6 (6.7)	1 (1.8)	7 (4.8)	0.85
Total		**16**	**6**	**22**	
C	***Policy-related Grievance***				
7	Wrong plan-term allotted	2 (2.2)	7 (12.7)	9 (6.2)	4.79*
8	Furnishing of incorrect information	1 (1.1)	4 (7.3)	5 (3.4)	2.26
9	Non-disclosure of relevant information	1 (1.1)	2 (3.6)	3 (2.1)	0.19
10	Important clauses written in fine print/hidden clauses	1 (1.1)	1 (1.1)	2 (1.4)	0.00
Total		**5**	**14**	**19**	
D	***Administration/Communication-related Grievance***				
11	Delay in delivery of policy document	9 (10.0)	6 (10.9)	15(10.3)	0.00
12	Delay in delivery of premium receipt	2 (2.2)	1 (1.8)	3 (2.1)	0.00
13	Lapse of policy due to inadequate reasons	3 (3.3)	2 (3.6)	5 (3.4)	0.00
14	Non-renewal of lapsed policy	1 (1.1)	-	1 (0.7)	0.00
15	Inter-branch transfer of policy	1 (1.1)	-	1 (0.7)	0.00
16	Non-receipt of the reminder for payment	4 (4.4)	2 (3.6)	6 (4.1)	0.00
17	Non-honouring of the grace period for premium payment	-	-	-	-
18	Delay in recording change of address	-	-	-	-
19	Non-functional on–line grievance redress mechanism	1 (1.1)	-	1 (0.7)	0.00
20	On seeking redress, not being attended to	8 (8.9)	2 (3.6)	10 (6.9)	0.76
21	Undue delay in disposal of complaint	7 (7.8)	4 (7.3)	11 (7.6)	0.00
22	Non-compliance of direction issued by the Insurance Ombudsman	1 (1.1)	-	1 (0.7)	0.00
Total		37	17	54	
E	***Interest/Charge-related Grievance***				
23	Non-payment of interest on delayed settlement	11 (12.2)	4 (7.3)	15 (10.3)	0.90
24	Non-payment of interest on non-payment of maturity amt	2 (2.2)	-	2 (1.4)	0.14
25	Refusal/delay in making payment on money-back policy	1 (1.1)	-	1 (0.7)	0.00
26	Non-payment of surrender value	1 (1.1)	-	1 (0.7)	0.00
27	Non-payment of corrected surrender value	-	2 (3.6)	2 (1.4)	1.18
28	Levy of supplementary charges	-	-	-	-
Total		**15**	**6**	**21**	
Grand Total		**152@**	**80**	**271@**	

Note: @Multiple responses, hence percentages do not add up to hundred *Significant at 0.05 level

Table 4

Nature of Consumer Grievances: Distribution by Type of Insurance (Life vs. General)

S. No.	*Policy-holders→* *Type of Dissatisfaction/Grievance↓*	*Life Insurance (N=62)*	*General Insurance (N=83)*	*Total (N=145)*	*Chi-Square*
A	***Claim-related Grievances***				
1	Delay in claim settlement	9(14.5)	27(32.5)	36(24.8)	6.17**
2	Claim not fully settled	1 (1.6)	18(21.7)	19(13.1)	12.56**
3	Wrongful rejection of claim on grounds of:				
(a)	Undue delay in information about death/disability	1 (1.6)	1 (1.2)	2 (1.4)	0.00
(b)	Failure to provide supportive documents	1 (1.6)	4 (4.8)	5 (3.4)	0.34
(c)	"Theft not indicative of 'forced' entry"	-	6 (7.2)	6 (4.1)	3.03*
(d)	"Exclusion Clause"	5 (8.1)	20(24.1)	25(17.2)	6.39**
(e)	Concealment of facts	5 (5.1)	5 (6.0)	10 (6.9)	0.02
(f)	Absence of financial interest	-	-	-	-
(g)	Wilful negligence of the insured	1 (1.6)	8 (9.6)	9 (6.2)	2.67*
(h)	Any other		3 (3.6)	3 (2.1)	0.85
	Sub-total	13	47	60	
	Total(1+2+3)	**23**	**92**	115	
B	***Surveyor/TPA-related Grievances***				
4	Low assessment of loss by the surveyor	-	13 (15.7)	13 (9.0)	NA
5	Unnecessary appointment of more than one surveyor	-	2 (2.4)	02 (1.4)	NA
6	Fault on the part of TPA (health Insurance)	-	7 (8.4)	7 (4.8)	NA
	Total	**-**	**22**	**22**	
C	*Policy-related Grievances*				
7	Wrong plan-term allotted	9 (14.5)	-	9 (6.2)	-
8	Furnishing of incorrect information	3 (4.8)	2 (2.4)	5 (3.4)	0.11
9	Non-disclosure of relevant information	2 (3.2)	1 (1.2)	3 (2.1)	0.07
10	Important clauses written in fine print/hidden clauses	1 (1.6)	1 (1.2)	2 (1.4)	0.00
	Total	**15**	**4**	19	
D	***Administration/Communication-related Grievances***				
11	Delay in delivery of policy document	12 (19.4)	3 (3.6)	15 (10.3)	9.48**
12	Delay in delivery of premium receipt	3 (4.8)	-	3 (2.1)	2.06
13	Lapse of policy due to inadequate reasons	4 (6.5)	1 (1.2)	5 (3.4)	1.57
14	Non-renewal of lapsed policy	1 (1.6)	-	1 (0.7)	
15	Inter-branch transfer of policy	1 (1.6)	-	1 (0.7)	
16	Non-receipt of the reminder for payment	4 (6.5)	2 (2.4)	6 (4.1)	0.62
17	Non-honouring of grace period for premium payment	-	-	-	
18	Delay in change of address on policy	-	-	-	
19	Non-functional on–line grievance redress mechanism	1 (1.6)	-	1 (0.7)	
20	On seeking redress, consumer not attended to	2 (3.2)	8 (9.6)	10 (6.9)	1.38
21	Undue delay in disposal of complaint	5 (8.1)	6 (7.2)	11 (7.6)	0.00
22	Non-compliance of direction issued by the Insurance Ombudsman	-	1 (1.2)	1 (0.7)	
	Total	**33**	**21**	54	
E	***Interest/Charge-related Grievances***				
23	Non-payment of interest on delayed settlement	6 (9.7)	9 (10.8)	15 (10.3)	0.05
24	Non-payment of interest on delayed payment of maturity amount	2 (3.2)	-	2 (1.4)	-
25	Refusal/delay in making payment on money-back policy	1 (1.6)	-	1 (.7)	-
26	Non-payment of surrender value	1 (1.6)	-	1 (.7)	-
27	Non-payment of corrected surrender value	2 (3.2)		2 (1.4)	-
28	Levy of supplementary charges	-	-	-	-
Total		**12**	**9**	**21**	
Grand Total		**83**	**148**	**231@**	

Note: @Multiple responses, hence percentages do not add up to hundred, *Significant at 0.05 level, **Highly significant at 0.01 level

3. Failure to provide the list of requisite documents at the time of entering into the contract.

Nature of Consumer Grievances: Life vs. General Insurance

A comparative statement of consumer grievances pertaining to life and non-life insurance companies is shown in Table 4. Evidently, the number of aggrieved policy-holders of life insurance out-numbered that of general insurance in grievances arising out of administrative delays, policy-related matters, and payment of interest and other charges

Claim-related grievances turned out to be highly common among general insurance consumers, especially the 'wrongful rejection of claim'. A highly-significant difference was noticed between the aggrieved consumers of the two categories, with regard to the following grievance:

1. 'delay in claim-settlement' (chi-square=6.17, p=<.01)
2. 'claim not adequately settled' (chi-square=12.56, p=<.01)
3. 'delay in delivery of policy document' (chi-square=9.48, p=<.01)

The grievances (a, b) other than the policy-related ones were noted in a relatively large number of cases among the policy-holders of the general insurance.

Consumer Grievances from the Executives' Perspective

The types of consumer grievances were further analysed from the perspective of the company executives. According to them, the grievances arising out of administrative delays occurred more extensively than the claim-related ones. They confessed that the delay in delivering the policy document was the major administrative flaw on the part of their companies. An overwhelming majority of the private-sector company executives had indicated the occurance of such grievance. We, however, observed that these companies were more techno-savvy and, therefore, in a better position to prevent such delays. The claim-related grievances, though most commonly experienced by policy-holders (as in Tables 3 and 4), did not turn out to be the most common grievance in the insurance industry. Among the surveyor-related problems, a majority of company executives of both the public and the private- sector agreed that the lower assessment of loss by the surveyor was a common cause of consumer grievance. According to Vaidyanathan (2007), surveyors often take pride in saying that "the claim amount was brought down to half", not being sure whether such an assessment was fair to the customer or not. Delay in the settlement of claims and non-payment of interest on delayed settlement were also perceived to be the major causes of consumer dissatisfaction.

Grounds of Consumer Complaints: Executives' Perception

Since service encounters are complex interactions affected by multiple elements (Kotler and Keller, 2009), customer complaints are bound to happen, more so in a contract of insurance, where the reciprocal obligations are often not properly understood and performed.

Out of the 17 possible reasons for arising of complaints (listed in **Table 5**), the four most common reasons, identified by company executives and arranged in the descending order of their frequency, are:

1. The consumer was unable to understand the terms and conditions of the policy/cover note.
2. The consumer did not disclose the relevant information.
3. The consumer had high expectations from the company.
4. The company did not adopt a fixed time-frame for various service activities.

It appears that the companies had abdicated their responsibility for complaints and left it to the consumers. They probably thought that the failure to fulfill obligations was more on the part of the

Table 5

Possible Grounds of Consumer Complaints: Executives' Perception (N=60)

Grounds of Consumer Complaint	*Rank*			
	1st	*2nd*	*3rd*	*4th*
Consumers' inability to understand terms & conditions of the policy	14 (23.3)	7 (11.7)	8 (13.3)	3 (5.0)
Lack of disclosure of relevant information by consumer	3 (5.0)	18 (30.0)	3 (5.0)	1 (1.7)
High expectations by consumer	10 (16.7)	8 (13.3)	10 (16.7)	4 (6.7)
Co.'s failure to fix time frame for various service activities	2 (3.3)	4 (6.7)	2 (3.3)	8 (13.3)
Consumers' inability to comprehend the contract of insurance	13 (21.7)	8 (13.3)	4 (6.7)	6 (10.0)
Agents' negligence/in-competency	7 (11.7)	6 (10.0)	6 (10.0)	5 (8.3)
Over-reliance on the surveyor/third party	3 (5.0)	2 (3.3)	6 (10.0)	3 (5.0)
Arbitrary assessment of loss by surveyor	1 (1.7)	1 (1.7)	2 (3.3)	7 (11.7)
Slow "turn-around" time	2 (1.7)	1 (1.7)	6 (10.0)	2 (3.3)
Lack of sensitivity towards consumers	3 (5.0)	-	4 (6.7)	2 (3.3)
Vague definition of technical terms	1 (1.70)	2 (3.3)	2 (3.3)	3 (5.0)
Unsatisfactory information from the company	2 (3.3)	2 (3.3)	1 (1.7)	3 (5.0)
Short "Free-look" period	-	-	4 (6.7)	1 (1.7)
Absence of stringent penal provisions	-	-	-	4 (6.7)
Lack of customer's faith in insurer's queries regarding claim settlement	-	-	1 (1.7)	2 (3.3)
Lack of follow-up action	-	1 (1.7)	1 (1.7)	1 (1.7)
Lack of audit of the redress system	-	-	-	1 (1.7)

customer than the company itself. With regard to the first reason, it appears that the companies did not state the terms and conditions of the policy in a language comprehensible to target customers. The policy stipulations might have used too verbose and technical terms not clearly understandable to a common man.

The executives' perception of high expectation by consumers could be due to those companies which promise more than what they could deliver, in the early versions of the product. According to Rao (2004), customer expectations of service standards are changing fast. He aptly remarks: "Satisfied customers belong to yesterday; the same customers today could be dissatisfied with the standards of services provided earlier, as their expectations of service have now gone up". Hoyer and MacInnis (1999) have rightly observed that if the expectations are too high and the promises made are such that cannot be kept, marketers are setting themselves up for a potential negative disconfirmation and dissatisfaction. However, the executive-respondents who indicated that there was no fixed time-frame for providing various service activities indirectly admitted the failure of the company's operations system as such. Consumers' inability to comprehend the contract of insurance and the agent's negligence or inability to communicate effectively were the next important reasons admitted by the executives as the possible reasons behind customer complaints.

Grounds of Consumer Complaints: Senior and Junior Executives' Perception

We sought to measure the perceptual difference between the senior executives (SE) and junior executives (JE) of the insurance companies, with regard to the reasons for consumer complaints. The following null hypothesis was put to test:

H_{01}: Senior executives of insurance companies do not differ from the junior executives in their perception of factors prompting the consumers to complain.

Table 6

Possible Grounds of Consumer Complaints: Executives' Perception

Sl. No	Rank Managerial Level→ Grounds of Consumer Complaint↓	1st SE JE	2nd SE JE	3rd SE JE	4th SE JE
1.	Consumers' inability to fully understand terms & conditions of the policy	6 **8(26.7)**	3 4	4 4	2 1
2	Lack of disclosure of relevant information by consumer	2 1	**7 11(36.7) (23.3)**	- 3	1 -
3	High expectations by consumer	6 4	3 5	5 5 **(16.7)**	1 3
4	Co's failure to fix time frame for various service activities	1 1	1 3	- 2	3 **5**
5	Consumer's inability to comprehend the contract of insurance	**9 (30)** 4	5 3	1 3	4 2
6	Agent's negligence/in-competency*	2 5	6 -	2 4	1 4
7	Over-reliance on the surveyor/third party	2 1	1 1	3 3	2 1
8	Arbitrary assessment of loss by surveyor	- 1	1 -	- 2	**6 (20)** 1
9	Slow "turn-around" time	2 -	1 -	5(**16.7**) 1	- 2
10	Lack of sensitivity towards consumers*	- 3	- -	4 -	1 1
11	Vague definitions of technical terms	- 1	1 1	2 -	2 1
12	Unsatisfactory information from the company*	- 2	- 2	- 1	3 -
13	Short "Free-look" period	- -	- -	4 -	1 -
14	No stringent penal provisions for the defaulting insurer	- -	- -	- -	1 3
15	Lack of customer's faith in insurer's queries regarding claim settlement	- -	- -	- 1	- 2
16	Lack of follow-up action	- -	1 -	- 1	- 1
17	Lack of audit of the redress system	- -	- -	- -	4 -
	Total	30 30	30 30	30 30	30 30

Note: *Significant at 0.05 level

The testing of this hypothesis was significant to the study as this could ascertain whether the causes of grievance were rooted in the attitudinal characteristics of the contact employees, and whether immediate attention was called for internal marketing, besides interactive and external marketing. The results are summarised **Table 6**.

The following findings are noteworthy:

1) While a sizeable number (30 per cent) of senior-level executives felt that consumers were unable to comprehend the insurance contract, 26.7 per cent of junior-level executives felt that more customer complaints arose from the lack of understanding of the terms and conditions of the policy.

2 While the slow 'turn-around' time, along with high expectation by the policy-holder, was the third major reason reported by senior executives (16.7 per cent), one–fifth of the senior executives confessed to arbitrary assessment of loss by surveyor as another possible reason for customer complaints.

3) A significant difference existed between the responses of the two types of executives, in terms of laying the blame on:

(a) The agent's negligence and incompetence

(Chi-square=11.75, at p=<.05)

(b) Inadequate information from the company

(Chi-square=11.00, at p=<.05)

While the senior executives attributed the blame to the agents' negligence for factors prompting the consumers to complain, the junior executives considered the inadequate information provided by the company to consumers as one of the reasons. In view of the above facts, the null hypothesis was partially rejected. Thus, we conclude that the senior executives significantly differed from their juniors in their perception about only two of the 17 factors behind the consumers making complaints to insurance companies.

The results are an indication of the alignment of the senior and junior executives on various issues concerning the organisation's functioning, the product details, and consumer relationships.

Voicing of Complaints by Consumers

We sought to identify the organisations and authorities approached by aggrieved consumers to seek redress. The findings are given in **Table 7.**

Thus, while an overwhelming majority of the respondents taking initial action first approached the company concerned, very few approached the IRDA and not many went to the consumer courts. None voiced his grievance before any other agency or approached the media. Moreover, most of the respondents registered their complaint within one month of the arising of the grievance, indicating their impatience or strong feelings of dissatisfaction. The rest of the complainants filed their complaints within six months.

Further Action by 'Despondent'

Where company does not respond to a consumer's complainant, he would seek redress through legal means, or from government regulatory bodies. **Table 8** shows the action taken by aggrieved consumers dissatisfied with the company's response, hereinafter referred to as a 'despondent'.

Thus, while not many despondent stopped pursuing their grievance, an overwhelming majority preferred to continue by complaining to the public system available to them. Among these 'continuers', a sizeable number of despondent consumers approached the Ombudsman and less than one-third filed their complaint at various

Table 7

Organisations Approached by Aggrieved Consumers
(N=145)

S.No.	Organisation/Forum Approached	No.	Per cent
1	Complaint to the company(Agent/B.O/D.O./R.O./H.O)	124	85.5
2	Complaint to the IRDA	12	8.3
3	Complaint to any Consumer Forum	9	6.2
4	Complaint to any other government agency	-	-
5	Complaint to any consumer organisation	-	-
6	Complaint to any industry association	-	-
7	Complaint to the media	-	-
8	Complaint to any of the above but not pursued	-	-

Table 8

Further Action Taken by Dissatisfied Consumers

S.No.	Types of Complainants→ Particulars of Actions Taken↓	Public-sector Companies	Private-sector Companies	Total
1	Stopped pursuing the matter	18 (22.8)	5 (10.0)	23 (17.8)
2	Complaint to the IRDA	1 (1.3)	7 (14.0)	8 (6.2)
3	Complaint to the Insurance Ombudsman	27 (34.2)	19 (38.0)	46 (35.7)
4	Complaint to the Consumer Forum	28 (35.4)	14 (28.0)	42 (32.6)
5	Complaint to the Directorate of Public Grievances	3 (3.8)	-	3 (2.3)
6	Exhausted all of the above avenues	-	-	-
7	Contacted National Consumer Helpline	2 (2.5)	5 (10.0)	7 (5.4)
8	Approached the media	-	-	-

consumer courts. The IRDA, the major government regulatory body for the insurance sector, was approached by only 8 per cent 'despondent'.

The despondent consumers reluctant to take their case further, might have done so on the belief that their grievance was not important enough to warrant the time and effort needed. As far as the 'continuers' are concerned, they believed that a fair treatment was their due, and that they had to be compensated for the loss suffered. This action was also necessary to penalise the service-provider, as revealed by such respondents during our interaction with them.

Moreover, a highly-significant difference was noted in the action taken by the despondent consumers pertaining to the public- and private-sector companies (Chi-square=16.51, p=<.01). This is evident from Table 8. While more despondent consumers from private companies approached the Ombudsman, those from the public-sector companies opted for consumer courts.

Influence of Education on Further Action by Dissatisfied Consumers

Landon (1990, p.64) has consistently argued that episode-specific measures (such as the extent of dissatisfaction, product/service involved, and attribution of blame) hold the key to understanding why consumers complain. Among these, the nature of the product or service has been frequently involved. However, consistent results are observed in respect of demographic variables. The consumers having income, higher education, lower age, and holding professional jobs are found to be more frequent complainers (Jagdip Singh, 1990, p. 62). This observation may be true for the Western countries. However, where the law itself is difficult for the educated and articulate middle-class consumers to apply, it may even be less accessible to those having fewer social skills and being lower down the social scale.

The initial zeal to file and pursue a complaint can soon turn into frustration in the absence of any obvious course of action (Mann and Thornton, 1978, p. 258). Likewise, in India, in the absence of any effective enforcement machinery, before the establishment of the consumer courts and alternate dispute resolution system, including the Ombudsman, even the well-educated consumers are reluctant to seek redress. Hence, the data pertaining to continued actions for seeking redress was further examined on the basis of the despondent consumers' education. Accordingly, the following hypothesis was formulated:

H_{02}: The consumer's education level does not have any influence on the continued actions taken by an aggrieved consumer.

The relevant results are shown in **Table 9.**

Table 9

Influence of Education on Further Action by Despondent Consumers

S.No	Education Group of Respondents→ Particulars of Further Action Taken↓	E_1	E_2	E_3	Total
1	Stopped pursuing the matter	-	6 (10.7)	17 (32.1)	23
2	Complaint to the IRDA	-	2 (3.6)	6 (11.3)	8
3	Complaint to the Insurance Ombudsman	9 (45.0)	20 (35.7)	17 (32.1)	46
4	Complaint to the Consumer Forum	10 (50.0)	20 (35.7)	12 (22.6)	42
5	Complaint to the Directorate of Public Grievances	-	2 (3.6)	1 (1.9)	3
6	Contacted National Consumer Helpline	1 (5.0)	6 (10.7)	-	7
	Total number of despondents	20(100)	56(100)	53(100)	129

Note: Group E_1: Those who studied up to Class XII, Group E_2: Graduates, Group E_3: Post-Graduates/Professionals

A highly-significant difference was noted in the three groups of respondents (Chi-square=26.27, p=< .01). As against the graduates, and the post-graduates and professionals (E_2 and E_3, respectively), a large number (95 per cent) of despondent consumers who studied either below or up to Class XII (E_1) voiced their complaint either to the Ombudsman or to the consumer forums. Amusingly, the despondent consumers having higher education and those who expressed their withdrawal from complaining further were relatively in larger number. Hence, the null hypothesis was rejected. Thus, the level of education does have any influence on the continued actions of the dissatisfied consumers. This contradicts the observation of Mann and Thornton (1978, p. 259) that the majority of consumers, especially those most in need of the protection of the law, appear to avoid taking advice from lawyers and getting involved in legal actions.

CONCLUSION AND POLICY IMPLICATIONS

The study has revealed that the claim-related grievances were the most common grounds of insurance policy holders, followed by those which pertain to lapses on the part of company's administration. The repudiation of claim was the most prominent among the claim-related complaints, which was reported to be largely due to the 'exclusion clause' of the insurance policy. Policy-related matters, though noted to be a less common grievance, pertained mainly to the allotment of wrong plan-term to the policy-holder, which is done by the agent on behalf of the company. The number of policy-holders from public-sector companies far exceeded their counterpart in the private sector, in various types of grievances, except the policy-related ones. Dissatisfied with the company's response, most of the policyholders approached either the Insurance Ombudsman or a Consumer Forum, to get their rightful redress. Amusingly, a large number of less-educated policy-holders took such an action. While only a handful of consumers approached the IRDA, none voiced his grievance to the print or other media. Such an approach of the 'continuers' suggested the aggrieved consumers' belief in the public redress system for providing a fair treatment.

Our findings have important policy-implications for the policy-makers and the policy-holders of insurance companies, as well as the regulatory bodies and grievance-redress agencies. The companies need to develop a redress-oriented approach of their executives towards consumer complaints, provide proper training to their redress officers in handling of consumers' grievances, which will lead to reduction in the number of complaints, widely publicise their complaint-handling system, and giving due recognition to good complaint-handling. These measures will make the executives not only consumer-oriented, but also grievance redress-oriented. Moreover, the insurance policy-document must be re-designed with a view to removing any ambiguity in the terms and conditions, including the 'exclusion clause', which has often been the bone of contention in many cases. Such clauses ought to be stated in clear terms. At the same time, the policy-holders should make sure: (a) not to make any misstatement or to suppress or conceal any material information, especially the age of the assured and the history of the disease suffered, and (b) not to sign on the dotted line, before thoroughly going through the policy-proposal.

NOTES

1. 1 US Dollar = About 50 Indian Rupees (Rs.)
   10 lakh = Rs. 1 million
   1 crore (100 lakh) = 10 million

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IMPACT OF INTRODUCTION OF DERIVATIVES ON STOCK-MARKET VOLATILITY IN INDIA

Kapil Choudhary* **and Sushil Bajaj****

Abstract

Derivative products, including futures and options have recently become an important device of price discovery, portfolio diversification, and risk-hedging, in global and domestic stock exchanges. This study seeks to investigate the impact of the introduction of derivatives contract on the volatility of the spot equity market, to examine the relationship between information and volatility, and to measure the effect of the shocks emanating from the US stock market on the volatility of stock market in India. The GJR-GARCH and the Bivariate GJR-GARCH models were considered to examine the volatility, taking the data from the S&P CNX Nifty, S&P 500 Index, and 30 individual securities for the period from October 14, 1996, to November 20, 2009. The study has revealed that the volatility decreased to a small extent after the inception of the derivatives contracts and the coefficient of asymmetric response has supported the assumption that positive and negative news have different impact on the volatility of the daily returns. In the cases of pre-futures and post-futures, the coefficient estimates indicated that the negative shocks had a higher next-period conditional variance than the positive shocks. Moreover, the overseas stock market of the S&P 500 index played a significant role in affecting the volatility of the Indian stock market.

Key words: ***Derivatives, Stock market volatility, Spot market, ARCH, GARCH***

INTRODUCTION

RISK is the characteristic feature of any commodity or capital market. In the terminology of finance, risk refers to the range of variability of expected returns, including the possibility of profit as well as loss. A derivative seeks to provide adequate solution to the problem of risk caused by uncertainty and volatility underlying an asset. In order to reduce the volatility in the financial market and to minimise the risk, derivatives contracts were introduced in the two major stock exchanges in India, namely, the National Stock Exchange (NSE) and the Bombay Stock Exchange (BSE), in June 2000, and on individual stocks on November 9, 2001. Since then, the derivatives trading witnessed a tremendous growth in terms of the trading value and the number of traded contracts. On September

* **Dr. Kapil Choudhary** is Assistant Professor in the Department of Commerce, Chaudhary Devi Lal University, Sirsa, (Haryana); e-mail: *kapilcdlu@gmail.com;*

** **Mr. Sushil Bajaj** is Research Scholar in the Department of Commerce, Chaudhary Devi Lal University, Sirsa, (Haryana); e-mail: *ggnbajaj@gmail.com*

21, 2010, the NSE accounted for nearly 70 per cent of India's total stock exchange trading in equities, and 99 per cent of the equity derivatives. The NSE's trading facility is now available through more than 2,50,000 trading terminals in over 1,500 cities across the country. It ranks fourth in the world, in terms of the number of transactions, and third in terms of the number of contracts traded in the index futures and options. A comparison of the trading figures of the NSE and the BSE over the years shows that the performance of the NSE has been encouraging, both in terms of the volume and the number of contracts traded, in all the product categories. It is believed that the introduction of derivatives would shift some informed traders and speculators from the underlying cash market to the derivatives market, since these investors view the derivatives as superior investment instruments because of the inherent leverage and lower transaction costs. Such migration causes reduction in the information asymmetry and, thus, an improvement in the liquidity in the underlying cash market. In addition, the migration of speculators would lead to the reduction in the volatility of the underlying cash market by reducing the amount of noise trading in the absence of informed traders.

REVIEW OF LITERATURE

Various studies have been conducted to investigate the issues pertaining to derivatives and volatility. Edwards (1988) examined the role of trading in stock-index futures in the S&P 500 index, by using the variance ratio tests. He concluded that the introduction of the futures trading had not induced a change in the volatility in the long run. In addition, there was some evidence of futures inducing the short-run volatility, particularly on the futures contract expiration days. However, this volatility did not appear to carry over to longer periods of time. Harris (1989), and Lockwood and Linn (1990) reported an increase in the variance after the introduction of futures trading in the American stock market. Chan, *et al.* (1991) estimated the intra-day relationship between the returns and the returns volatility in the stock index and stock index futures in the American stock market. They found a strong inter-market dependence in the volatility of the cash and futures returns.

Kamara, Miller, and Siegel (1992) noted that stock index futures had either decreased or not significantly increased the volatility in the spot markets. Lee and Ohk (1992) examined the effects of stock index futures trading on the stock-return volatility in Australia, Hong Kong, Japan, and the UK. They found that the market volatility increased significantly after the stock-index futures were listed on the underlying index.

Robinson (1993) analysed the daily stock price volatility on the London Stock Exchange during the period 1980-1993 to measure the effect of the futures on the cash market volatility. He concluded that the index futures contracts had reduced the volatility significantly, by around 17 per cent. Holmes and Antonoiu (1995) examined the relationship between the information and volatility in the FTSE 100 index in the UK, using the GARCH technique. They found that the introduction of the FTSE 100 index futures had changed the volatility pattern in the spot market and attributed this to a better and faster dissemination of information to spot markets. Darrat and Rahman (1995) examined the contribution of the futures trading activity on stock market volatility. Multivariate Granger-causality tests were used in tandem with Akaike's final prediction criterion to analyse the effects. Their study revealed that the futures trading activity did not increase the volatility and that the volatility of additional macroeconomic variables did not cause stock-price volatility.

Gulen and Mayhew (2000) examined the stock market volatility before and after the introduction of equity-index futures trading in 25 countries, using various models that accounted for asynchronous data, conditional heteroscedasticity, asymmetric volatility responses, and the joint dynamics of each country's index with the world-market portfolio. They found that the futures tradings were related to an increase in the conditional volatility in the United States and Japan, but in nearly every other country, there was either no significant effect or a volatility-dampening effect. Nath (2003) studied the behaviour of stock-market volatility after the introduction of the futures, using the I-GARCH model. He concluded that the volatility of the market as measured by the Nifty index had fallen in the post-futures period. In the case of individual stocks, it was observed that for most of the stocks, the volatility had come down in the post-derivatives period, while for a few stocks in the sample, the volatility in the post-derivatives period had either remained more or less the same or had increased marginally.

Shenbagarman (2003) assessed the impact of introducing the index futures and options contracts on the volatility of the underlying stock index in India. His study revealed that the introduction of derivatives contracts improved the liquidity and reduced the informational asymmetries in the market. Furthermore, derivatives trading had not led to a change in the volatility of the underlying stock index, but the nature of the volatility had changed post-futures.

Thenmozhi and Thomas (2004) examined the impact of derivatives trading on cash market volatility in the S&P CNX Nifty by considering the day-of-the week affect, domestic market factors, and world market movements, using the GARCH model. They found that the introduction of index futures and options had reduced the spot market volatility and the role of day-of-the week affect was also found insignificant after the introduction of derivatives.

Vipul (2006) investigated the changes in the volatility in the Indian stock market and found a strong evidence of reduction in the volatility of the underlying shares after the introduction of derivatives. However, the inter-day unconditional volatility of the equity index increased after the introduction of derivatives. The study explained this contradiction by an increased correlation between the prices of its constituent shares caused by arbitrage transactions in the cash market.

Karmakar (2007) investigated the stock returns of ten market indices of the Asia-Pacific countries, using the symmetric GARCH and the asymmetric T-GARCH models for a period of 11 years, from July 1994 to June 2005. The study revealed an evidence of time-varying volatility, which exhibited clustering, high persistence, and predictability of almost all the countries included in the sample.

Alexakis (2007) investigated the effect of the introduction of the stock index futures on the volatility of the spot equity market in the ATHEX (Athens Exchange), and contributed to the arguments with respect to the stability and destabilising the effects of such products. He found that the futures trading stabilised the spot market, reduced volatility asymmetries, and improved the quality of the flow of information.

Bose (2007) examined the characteristics of return volatilities in the equity market and the index-futures market in India. By using an asymmetric (threshold) GARCH model, he found that the futures market played a leading role in absorbing the information, thus, reducing the intensity of the spot-market volatility. Samanta and Samanta (2007) ascertained the effects of introduction of futures contracts on the underlying spot-market volatility, using the GARCH(1,1) model and found that the derivatives trading had neither reduced the volatility nor had any significant impact on the spot-market volatility. As far as the index is concerned, volatility in the S&P CNX Nifty had been reduced but with a very mild change.

Debasish and Das (2008) assessed the effect of the futures trading on the stability of the BSE Sensex (India) by dividing the sample period into the pre- and post-futures. They found that the volatility of the daily returns in the post-futures period was higher than in the pre-futures period, but the volatility of the monthly returns remained unchanged.

Debasish (2009) investigated the impact of the introduction of the Nifty Index futures on the Indian stock market by using the GARCH model and found no structural change after the introduction of the futures trading on the Nifty.

He concluded that the spot-returns volatility was less important in explaining the spot returns after the advent of the futures trading in the NSE Nifty. Jacobsen and Lind (2010) examined the impact of the derivative trading on the volatility and concluded that the derivative trading did affect volatility, but the speculators were the market participants that affected the volatility the most.

Barik (2011) investigated the impact of the derivative trading over the Indian stock market by taking into account five individual stocks in which the derivative trading had been introduced and four individual securities in which the derivative trading had not been introduced. With the application of the GARCH model, the study revealed that the volatility had decreased in the case of four securities, increased for two securities, and did not show any significant change in the case of the other three securities.

Gurpreet Kaur (2011) examined the volatility in the Indian stock market after the introduction of the derivatives trading, by using the ARCH, GARCH, and E-GARCH models. She concluded that the derivatives contract had increased the efficiency of the spot market by reducing the volatility and by enhancing the liquidity. Singhal, Mehta, and Kamboj (2011) examined the impact of the commodity futures trading on the volatility of commodity spot prices and evidenced no change in the volatility after the inception of the commodity futures trading.

The literature reviewed above has yielded mixed results regarding the impact of the futures market trading over the spot market volatility. This necessitates further examination of the relationship between the futures market and the spot market volatility by considering developing countries and different time periods and data. The present study is different from the earlier studies conducted on derivatives in India in terms of the sample size, which consisted of 30 individual stocks and one index. Moreover, we considered the asymmetric response of the volatility in both the pre- and post-derivatives era.

OBJECTIVES OF THE STUDY

The major objectives of the study are:

1. To assess the impact of the introduction of the derivatives contract on the spot market volatility;
2. To examine the relationship between information and volatility; and
3. To measure the effect of shocks arising from the US market on the volatility in the Indian stock market.

RESEARCH METHODOLOGY

Data Source and Time Period

Index futures on the S&P CNX Nifty were permitted for trading on the NSE from June 12, 2000. On individual stocks, the derivatives trading started on November 9, 2001. For the purpose of the present study, the S&P CNX Nifty, the S&P 500 Index, and 30 individual stocks were considered.

The daily-adjusted closing prices of the indices and the 30 individual stocks were taken from October 14, 1996 to November 20, 2009. It is pertinent to mention here that the prices of only those stocks were considered which were being traded in the derivatives market. All the data were collected from the Centre for Monitoring Indian Economy PROWESS. The returns were calculated as given in Equation (1):

$$R_t = ln\,(P_t/P_{(t-1)}) \qquad (1)$$

where, P_t is the present stock price, and P_{t-1} is the previous day's price.

Since we took into consideration the time-series data, the stationarity of the data was the primary concern to make the results reliable. The Unit Root tests provide information about the stationarity of the data. The presence of the Unit Root suggests non-stationarity in the data and can lead to spurious results. The Augmented Dickey Fuller (ADF) Test and Phillip Perron (PP) Test were applied to ascertain the presence of unit roots. The effect of derivatives on the volatility is practically an empirical question and various methodologies are available to test this hypothesis. The results vary, depending on the methodology applied. Most of the studies have answered the question of the impact of derivatives on the spot market volatility by comparing the spot market volatility during the pre- and post-derivatives period, but have ignored to assure the link between the information and the volatility.

GJR-GARCH model (1993) has been found to be the most appropriate model for accomplishing the above-mentioned three objectives of our study. This model is a simple extension of the GARCH (Bollerslev, 1986) model. One of the primary characteristics of the GARCH model is that it enforces a symmetric response of the volatility to positive and negative shocks. Several empirical studies have revealed a strong evidence, suggesting that the price volatility responds asymmetrically towards positive and negative innovations in asset returns (ε_t). The volatility increases disproportionately, at a higher rate, after a negative innovation in the returns (i.e., when ε_{t-1} is negative), rather than after the positive innovation in the returns (i.e., when ε_{t-1} is positive). Thus, it can be interpreted that volatility increases with "news" (because it is the unexpected information or news which causes innovation in return), but it is more sensitive to 'bad news' than to the 'good news'.

The mean equation of the GJR-GARCH model is defined by Equation (2):

$$y_t = b_0 + \epsilon_t, \epsilon \mid \psi_{t-1} \sim N(0, h_t) \qquad (2)$$

where, y_t is the daily spot price return and ε_t is the residual term that follows normal conditional distribution, with a mean of zero, and the time varying covariance, h_t.

The conditional variance of the process is defined by Equation (3):

$$h_t = \alpha_i + \sum_{i=1}^{P} \alpha_i \varepsilon_{t-1}^2 + \sum_{i=1}^{q} \beta_j\, h_{t-j} + \gamma \varepsilon_{t-1}^2 I_{t-1} + \lambda DF \quad (3)$$

where,

$I_{t-1} = 1$, if $\varepsilon_{t-1} < 0$

$I_{t-1} = 0$

where, *DE* is a dummy variable taking the value of zero, before the introduction of futures, and 1, after the introduction of futures, and γ is the asymmetric coefficient that has been used to see how volatility rises more after a bad news (large negative shock) than a good news (large positive shock).

If $\varepsilon_{t-1} \geq 0$, then = 0, and γ will turn into zero. If $\varepsilon_{t-1} < 0$, then = 1, and that will increase the h_t.

To address the issue of relationship between information and volatility, we divided the sample period into two parts: pre-futures, and post-futures. The GJR-GARCH model was applied on each sub-sample, without using the dummy variable, *DF*, for the existence of the derivatives trading. This allows comparison of the nature of volatility before and after the introduction of the futures trading. This relationship is defined in Equation (4):

$$h_t = \alpha_i + \sum_{i=1}^{P} \alpha_i \varepsilon_{t-1}^2 + \sum_{i=1}^{q} \beta_j\, h_{t-j} + \gamma \varepsilon_{t-1}^2 I_{t-1} \quad (4)$$

Comparison can now be made by considering the coefficients in order to see the impact of the derivatives trading on the spot-market volatility, and whether the derivatives trading has brought any change in the asymmetric response of volatility.

In order to address the last issue, whether the volatility of the Indian stock market is affected by shocks arising from the US market, a control procedure was applied by considering the other economic variable, namely, the S&P 500 Index. The variance is now defined as per Equation (5):

$$h_t = \alpha_i + \sum_{i=1}^{P} \alpha_i \varepsilon_{t-1}^2 + \sum_{i=1}^{q} \beta_j\, h_{t-j} + \gamma \varepsilon_{t-1}^2 I_{t-1} + \lambda DF + \delta_1 G_t \quad (5)$$

where, G_t is the lagged squared residuals of the S&P 500 index, since the S&P market value today will be impacting the Indian market tomorrow. A significant δ_1 coefficient indicates that the conditional variance of the S&P 500 index impacts the conditional variance of the stock index in India.

RESULTS AND DISCUSSION

Descriptive Statistics

The whole study period was divided into the pre-futures and the post-futures, using June 12, 2000 as the cut-off date for the index, and November 9, 2001, for the individual securities. The descriptive statistics of all the individual securities and the Index, namely, the S&P CNX Nifty, are given in **Table 1**.

As shown in the table, in the pre-futures period, IFCI (-0.174 per cent) had the smallest daily mean return and Dr. Reddy's (0.183 per cent) had the highest daily mean-return, but in the post-futures period, MTNL (-0.03 per cent) had the smallest daily mean-return and BHEL had the highest daily mean-return (0.17 per cent). About 17 per cent of the stocks showed the decreased daily mean-return after the introduction of derivatives contracts.

The Standard Deviation (SD) is a powerful tool for measuring the variability. In the pre-futures period, MTNL with an SD of (1.82 per cent), was found to be the safest stock and Dr. Reddy's, with an SD of (4.38 per cent), was the risky security, but in the post-futures period, Asian Paints was the safest security, having an SD of 1.77 per cent and IFCI was the riskiest security in post-futures period, having an SD of 4.81 per cent.

The results regarding the overall change show that 73 per cent of the securities have a marginal decline in the standard deviation after the introduction of derivatives in India. It can be concluded that the derivative contracts reduced the variability in the stock returns. In the case of Index, the S&P CNX Nifty showed reduction in the daily mean return (0.000526) and SD (0.017438) in the post-futures period. As far as the skewness is concerned, 18 out of the 30 stocks show the evidence of negative skewness, which suggests that there is a decrease in the spread of futures trading after its origin. All the stock returns and index show kurtosis transcends, 3, which mean more of the variance is the result of the infrequent extreme deviations. Thus, there has been a change in the volatility after the introduction of derivatives and in a majority of the cases, the volatility had reduced.

Stationarity Analysis

The empirical studies on financial time-series advocated the examination of its stationarity as the first stage of the analysis. Since the absence

Table 1

Descriptive Statistics

Company	Futures Introduction	Mean	SD	Skewness	Kurtosis
ACC	Pre-future	0.00005950	0.035156	0.045660	4.367038
	Post-future	0.000832	0.024236	-0.38115	6.456525
Apollo Tyres	Pre-future	-0.000533	0.037730	0.331472	3.779119
	Post-future	0.001070	0.029874	0.728605	8.198527
Asian Paints	Pre-future	0.000255	0.021054	0.649649	7.106664
	Post-future	0.001115	0.017659	-0.14096	9.213987
Bharat Forge	Pre-future	-0.000297	0.035817	0.136255	4.087226
	Post-future	0.001474	0.029036	0.327517	7.235806
BHEL	Pre-future	-0.000124	0.034091	0.055038	3.935683
	Post-future	0.001701	0.026498	-0.06359	8.781908
Cipla	Pre-future	0.001681	0.030010	0.104413	5.146414
	Post-future	0.000638	0.021050	-0.29557	7.927669
Dr. Reddy's	Pre-future	0.001832	0.032893	0.130431	4.485297
	Post-future	0.000378	0.022430	-0.35561	11.10293

Essar Oil	Pre-future	-0.000863	0.043763	0.821845	13.31848
	Post-future	0.001665	0.046422	0.742931	12.39445
Grasim	Pre-future	-0.000317	0.032534	0.097274	4.416639
	Post-future	0.001062	0.023153	0.165129	7.351101
HDFC	Pre-future	0.001489	0.029218	0.328315	4.732283
	Post-future	0.001045	0.023685	0.266708	14.03147
Hero Honda	Pre-future	0.001761	0.029500	0.424144	5.805517
	Post-future	0.000988	0.023743	0.241980	6.154256
Hindalco	Pre-future	0.0000467	0.025149	0.374362	5.110950
	Post-future	0.000465	0.028585	-0.25984	7.757879
Hindustan Petroleum	Pre-future	-0.000351	0.031214	0.091227	4.683321
	Post-future	0.000468	0.028756	-0.17719	12.46524
Hindustan Unilever	Pre-future	0.000816	0.023006	0.479772	5.974767
	Post-future	0.000122	0.020652	-0.13481	6.270889
Hotel Leela	Pre-future	-0.001596	0.033211	0.244516	4.130783
	Post-future	0.001401	0.033182	0.653772	8.975424
IDBI	Pre-future	-0.001046	0.029551	0.374348	5.470513
	Post-future	0.001012	0.036822	0.176967	7.595150
IFCI	Pre-future	-0.001741	0.031688	0.747865	10.01315
	Post-future	0.001377	0.048135	0.369336	7.079718
Indian Hotels	Pre-future	-0.001141	0.024852	-0.19321	6.942751
	Post-future	0.000919	0.024865	-0.04367	8.857028
ITC	Pre-future	0.000588	0.029339	0.081429	5.040488
	Post-future	0.000892	0.020357	0.186448	5.471612
LIC	Pre-future	-0.000279	0.029891	0.172158	5.824580
	Post-future	0.001544	0.031482	0.573861	10.42675
M&M	Pre-future	-0.001031	0.033798	-0.16725	4.551835
	Post-future	0.001587	0.027908	0.248434	8.546368
MTNL	Pre-future	-0.000350	0.032065	0.056680	4.157719
	Post-future	-0.000308	0.027890	-0.07942	7.273758
OBC	Pre-future	-0.000538	0.026704	0.222273	5.151341
	Post-future	0.001104	0.030909	-0.40885	10.06481
Reliance Capital	Pre-future	-0.000129	0.038301	0.216682	3.994977
	Post-future	0.001472	0.037296	-0.04565	7.881688
Reliance Industries	Pre-future	0.000813	0.028074	0.246730	4.612082
	Post-future	0.001052	0.025145	-0.95499	17.81282
SBI	Pre-future	-0.000039	0.028596	0.112953	4.318247
	Post-future	0.001261	0.025489	-0.07382	6.997375
Tata Motors	Pre-future	-0.001269	0.034382	0.053014	3.752152
	Post-future	0.001022	0.029212	-0.18738	6.955308
Tata Power	Pre-future	0.0000205	0.030434	0.187900	5.946506
	Post-future	0.001208	0.027809	-0.24103	10.17431
Tata Steel	Pre-future	-0.000731	0.030310	0.116568	4.980730
	Post-future	0.001248	0.031354	-0.34717	6.111450
Videocon	Pre-future	-0.000581	0.606291	-0.044351	6.779789
	Post-future	0.001108	0.132441	-0.226435	22.06271
S&P CNX Nifty	Pre-future	0.000554	0.018909	0.154208	6.081678
	Post-future	0.000526	0.017438	-0.303073	10.64156

of stationarity in time-series data can generate spurious results, it is essential to check the stationarity of returns series of market indices as well as the individual securities. This can be done by employing the Augmented Dickey-Fuller (ADF) and Phillip-Perron (PP) Unit Root tests to all returns series. The ADF Unit Root test is sensitive towards the lag length included in the regression equation. Hence, the lag length is chosen on the basis of the Akaike Information Criteria (AIC) and the Schwarz Information Criteria (SIC). The results of the Unit Root test are shown in **Table 2**.

Table 2

Unit-Root Tests for Individual Stocks and Indices

Company	Augmented Dickey-Fuller Test			Phillip-Perron Test		
	With Intercept	Without Intercept	With Intercept and Trend	With Intercept	Without Intercept	With Intercept and Trend
S&P CNX Nifty	-9.958138	-9.792888	-9.963629	-53.58405	-53.58947	-53.57690
S&P 500	-9.553864	-9.537936	-9.635764	-62.24587	-62.23005	-62.35712
ACC	-10.45554	-10.35110	-10.4501	-53.75137	-53.75486	-53.74502
Apollo Tyres	-8.680764	-8.657031	-8.69821	-52.56391	-52.58224	-52.54406
Asian Paints	-9.952263	-9.547955	-10.0439	-57.26102	-57.02592	-57.35338
Bharat Forge	-8.695347	-8.608451	-8.69301	-53.63724	-53.68744	-53.62971
BHEL	-9.338729	-9.170879	-9.40044	-52.88941	-52.85950	-52.89341
Cipla	-9.397185	-9.138408	-9.42623	-51.54884	-51.49564	-51.55485
Dr. Reddy's	-9.827925	-9.542122	-9.90705	-54.56622	-54.45768	-54.57940
Essaroil	-9.633179	-9.592574	-9.67272	-52.28549	-52.29701	-52.27585
Grasim	-8.982233	-8.930102	-8.99694	-51.47625	-51.50404	-51.45900
HDFC	-9.613030	-9.136302	-9.62949	-56.78808	-56.33112	-56.79804
Hero Honda	-9.845657	-9.393976	-9.88267	-53.83786	-53.56527	-53.87282
Hindalco	-9.24331	-9.226467	-9.24185	-50.48884	-50.49956	-50.48092
Hindustan Unilever	-9.842715	-9.763351	-9.88151	-55.09801	-55.02898	-55.12287
Hindustan Petroleum	-10.19195	-10.18794	-10.1925	-52.20472	-52.21103	-52.19674
Hotel Leela	-9.09274	-9.081653	-9.157714	-52.65845	-52.66482	-55.67168
IDBI	-9.87353	-9.865597	-9.922408	-51.05424	-51.06258	-51.04321
IFCI	-9.66750	-9.663565	-9.746436	-54.17006	-54.17837	-54.16747
Indian Hotels	-8.62977	-8.628371	-8.687805	-50.96018	-50.96828	-50.94198
ITC	-10.1472	-9.842111	-10.15287	-57.92215	-57.61827	-57.91343
LIC	-9.21746	-9.075183	-9.301947	-50.87407	-50.87277	-50.88383
M&M	-9.37712	-9.326058	-9.458773	-49.77582	-49.79774	-49.74492
MTNL	-10.1987	-10.17273	-10.20221	-52.96707	-52.95996	-52.96067
OBC	-9.50540	-9.469718	-9.538164	-51.57013	-51.56755	-51.56747
Reliance Capital	-9.05713	-8.981835	-9.058019	-50.50711	-50.54020	-50.49640
Reliance Industries	-10.2832	-10.02061	-10.28367	-53.78167	-53.71684	-53.77303
SBI	-10.4464	-10.28751	-10.50318	-53.15873	-53.12121	-53.17048
Tata Motors	-9.21245	-9.207111	-9.241772	-51.80632	-51.81469	-51.77911
Tata Power	-9.99201	-9.862655	-10.04077	-52.79370	-52.78586	-52.79743
Tata Steel	-8.61174	-8.577690	-8.627016	-53.60573	-53.62391	-53.59013
Videocon	-13.1145	-13.09883	-13.11687	-206.2999	-206.2097	-206.3760

Since all the estimated values in absolute terms are above 1per cent critical value, it can be concluded that all the returns series are stationary at this level.

GJR-GARCH Analysis

The GJR-GARCH equation has three effects:

1. The ARCH effect, the coefficient of which shows the impact of new information represented by the lagged squared error term (Engle, 2001).
2. The GARCH effect, the coefficient of which indicates the impact of the old information represented by the lagged variance term.
3. The asymmetric response effect, the coefficient of which suggests that a bad news elicits a larger response than a good news of an equal magnitude.

In order to check whether any change had taken place in the volatility after the introduction of derivatives trading, a GJR-GARCH (1,1) model of conditional volatility was estimated. The dummy variable was used in the equation that takes a value of zero (0) before the inception of derivatives contracts and one (1) after the introduction of derivatives contracts. The results for the entire study period and the pre- and post-periods for the index, i.e., Nifty and the sample securities, are shown in **Tables 3, 4,** and **5**.

Table 3

Impact of Nifty Futures on the Spot Market {GJR-GARCH (1,1) Model}

Parameters	Closing Price Returns	
	Coefficients	Significance
Constant	0.000027	9.616446
ARCH (1)	0.051524	6.362528
GARCH (1)	0.828360	74.58034
Asymmetric coefficient	0.156424*	10.10220
Dummy	-0.000015	-7.193690

The table shows the informational inputs for the whole study period for the Nifty. Amusingly, the coefficient of dummy variable has emerged as negative and insignificant (-0.000015), and as far as the asymmetric coefficient (γ) is concerned, it has come out to be positive and significant (0.156424). Thus, the volatility has been reduced mildly and the derivatives trading has had a negative impact on the volatility. Furthermore, the significant value of asymmetric coefficient supports the assumption that the positive and negative news have different impact on the volatility of the daily returns.

The informational inputs of the GJR-GARCH model on the Nifty, for the pre-future and post-future periods, are shown in Table 4.

Table 4

Structure of Volatility before and after the Introduction of Derivative Contracts

Parameters	Closing Price Returns	
	Pre-Futures	Post-Futures
Constant	0.000046	0.000011
	3.380477	8.585965
ARCH (1)	0.008436	0.075572
	0.612235	5.885921
GARCH (1)	0.808633	0.812769
	17.26278	56.18429
Asymmetric coefficient	0.111388*	0.153007*
	3.452076	7.888479

It is noticed from the table that, in the pre-futures period, the ARCH coefficient has a significantly positive value (0.008436), but in the post-futures period, it has scaled up to 0.075572. Thus, it appears that the impact of recent information has increased after the inception of derivatives contracts. Similar results are observed in the case of the GARCH coefficient which also has a significant and positive value (0.808633) in the pre-futures period, which increased to 0.812769 in the post-futures period, implying that the impact of old news also increased, but not in the same manner as in the case of the ARCH. As far as γ, the coefficient of the asymmetric effect, is concerned, the results exhibit statistically significant asymmetric effects during both the periods, but it increased in the post-futures period. In other words, in both the cases, i.e., during the pre-futures and the post futures periods, the coefficient estimates suggest that negative shocks imply a higher next-period conditional variance than the positive shocks of the same intensity.

The results of GJR-GARCH (1, 1) model on the individual securities are summarised in Table 5.

As shown in the table, except four securities, i.e., Hindustan Petroleum, IDBI, IFCI, and OBC, all the securities have a significant and negative value of the dummy variable that indicates that in case of the 26 (87 per cent) out of the 30 securities, the volatility had reduced after the introduction of the derivatives contract. It is also noticed that the average ARCH coefficient for the whole study period is 0.113979, which indicates the impact of recent information. As many as 50 per cent of the sample securities reported the ARCH coefficients to be below the average value of the coefficient.

Table 5

GJR-GARCH Results for Individual Stocks

Company	Constant	ARCH(1)	GARCH(1)	Asymmetric	Dummy
ACC	0.0000619	0.091971	0.840018	0.056090*	-0.0000363
	7.177622	9.500294	74.33468	4.771813	-5.659928
Pre-Futures	0.0000784	0.074802	0.833635	0.066584*	
	4.733779	4.210490	38.15073	3.075610	
Post-Futures	0.0000222	0.103741	0.843879	0.044363*	
	5.922533	8.607518	62.17164	3.146668	
Apollo Tyres	0.0000621	0.087794	0.858922	0.022864*	-0.0000197
	7.656246	9.238801	79.56467	2.320736	-3.995652
Pre-Futures	0.000128	0.181299	0.745611	-0.024906	
	5.432832	6.163427	22.43529	-0.746081	
Post-Futures	0.0000313	0.063511	0.882863	0.052411*	
	6.716193	8.013137	88.24636	5.208622	
Asian Paints	0.0000517	0.160585	0.706815	0.081909*	-0.0000171
	13.42447	10.90276	49.62278	3.992530	-7.394818
Pre-Futures	0.0000261	0.101747	0.828183	0.039365***	
	7.237478	7.953848	52.32190	1.826320	
Post-Futures	0.0000390	0.178561	0.665518	0.127405*	
	11.07099	8.111554	35.90467	4.276513	
Bharat Forge	0.0000319	0.077267	0.903144	-0.000552	-0.0000157
	7.010935	9.467184	121.1948	-0.065458	-4.746632
Pre-Futures	0.0000657	0.122412	0.845888	-0.035741	
	4.363373	5.640929	34.93792	-1.471350	
Post-Futures	0.0000137	0.065406	0.909958	0.018152***	
	6.192045	7.734503	120.2827	1.909310	
BHEL	0.0000844	0.072089	0.815737	0.109162*	-0.0000472
	8.711017	6.228715	55.88600	6.602947	-7.226117
Pre-Futures	0.0000157	0.057582	0.753096	0.108993*	
	4.421933	2.793565	15.78737	2.637544	
Post-Futures	0.0000274	0.075353	0.832700	0.117889*	
	6.303697	5.273028	55.06883	6.003450	
CIPLA	0.000107	0.128802	0.737175	0.023110	-0.000048
	9.071880	11.25693	35.15333	1.593289	-6.687915
Pre-Futures	0.000031	0.078942	0.892382	-0.011812	
	5.673471	5.784537	62.83441	-0.647176	
Post-Futures	0.000084	0.142472	0.661600	0.023995	
	8.244795	9.143110	19.51052	1.288703	

Dr. Reddy's	0.000028	0.050129	0.923503	-0.005610	-0.000012
	7.596542	8.115134	146.9549	-0.964713	-5.287927
Pre-Futures	0.000032	0.057243	0.902060	0.024928	
	4.302801	4.126619	72.46343	1.352974	
Post-Futures	0.000136	0.194643	0.596853	-0.094342*	
	9.539212	8.453944	16.75714	-3.701058	
Essar Oil	0.000374	0.248619	0.593661	0.016135	-0.000034
	13.56032	15.96058	35.74717	0.824960	-2.123357
Pre-Futures	0.000244	0.172532	0.729162	-0.040796	
	7.513776	6.911124	29.31414	-1.350134	
Post-Futures	0.000442	0.335416	0.482789	0.020059	
	13.85006	14.78757	20.80066	0.662089	
Grasim	0.000013	0.063430	0.913800	0.019574*	-0.000005
	9.294178	11.58743	158.5679	2.645646	-4.259035
Pre-Futures	0.000005	0.030830	0.957772	0.014909	
	3.828511	3.589881	138.1202	1.373446	
Post-Futures	0.000015	0.087410	0.876866	0.022108***	
	8.767745	11.60819	100.6918	1.786764	
HDFC	0.000082	0.151879	0.732795	0.089123*	-0.000037
	11.00417	9.135060	52.23889	5.235448	-7.008420
Pre-Futures	0.000112	0.170646	0.693444	0.030690	
	6.684029	5.683649	20.72062	0.841833	
Post-Futures	0.000036	0.129812	0.764414	0.111165*	
	6.819369	5.299502	19.61737	-0.556847	
Hindalco	0.000029	0.117156	0.854266	0.003007	-0.000011
	10.70903	10.27743	84.48677	0.249472	-5.957547
Pre-Futures	0.000087	0.171593	0.706024	-0.019040	
	6.819369	5.299502	19.61737	-0.556847	
Post-Futures	0.000012	0.113799	0.871350	0.009786	
	5.943515	7.996816	72.77081	0.671607	
Hindustan Petroleum	0.000025	0.082415	0.868374	0.043597*	0.0000095
	6.182749	9.400553	79.51504	4.0356704	3.895051
Pre-Futures	0.00002	0.098549	0.879011	0.012719	
	4.466648	5.922828	59.70607	0.577288	
Post-Futures	0.00005	0.068591	0.849014	0.068710*	
	6.338477	7.094589	48.51007	4.630328	
Hindustan Unilever	0.000055	0.069521	0.775651	0.099328*	-0.0000074
	8.095607	7.275882	42.41588	5.091577	-2.416515
Pre-Futures	0.000026	0.051063	0.852898	0.109086*	
	5.705721	3.801572	51.68380	4.157548	
Post-Futures	0.000081	0.091242	0.662612	0.107248*	
	5.314208	5.159835	12.43957	3.076296	
Hotel Leela	0.000130	0.134585	0.750339	0.007036	-0.000006
	9.935199	10.29162	41.79767	0.432360	-0.839271
Pre-Futures	0.000132	0.129233	0.762470	-0.026795	
	4.114470	4.994745	16.04637	-0.878212	
Post-Futures	0.000124	0.135217	0.744306	0.031038	
	10.56451	8.806261	36.71140	1.500384	
Hero Honda	0.000286	0.151862	0.504246	0.040446	-0.000102
	8.216213	6.685755	9.811697	1.303803	-6.520953

Pre-Futures	0.000502	0.235935	0.189000	0.012552	
	8.678824	4.512770	2.368946	0.194404	
Post-Futures	0.000084	0.099209	0.735682	0.035957	
	5.365514	4.493347	18.10617	1.223463	
IDBI	0.000135	0.148321	0.684654	0.045536**	0.000051
	10.88570	8.762139	31.41709	2.225556	6.355983
Pre-Futures	0.000154	0.198907	0.659537	-0.072864**	
	6.745685	6.159003	15.75153	-2.028340	
Post-Futures	0.000183	0.119639	0.687086	0.111868*	
	8.901891	6.411328	25.01924	4.378246	
IFCI	0.000123	0..135043	0.752002	0.006787	0.000150
	14.08950	12.25064	55.29298	0.419245	11.35913
Pre-Futures	0.000105	0.167670	0.778090	-0.080863*	
	9.255780	8.551529	39.51639	-3.303373	
Post-Futures	0.000286	0.124133	0.739444	0.046442**	
	10.90083	8.926867	41.40228	2.182521	
Indian Hotels	0.000028	0.084495	0.860871	0.032383*	-0.0000035
	13.35005	11.17878	143.4649	2.993997	-2.026565
Pre-Futures	0.00007	0.153896	0.722880	0.044702	
	7.782838	5.696689	26.54655	1.338095	
Post-Futures	0.000017	0.070426	0.888176	0.028318**	
	9.385555	9.131418	134.5847	2.427508	
ITC	0.00007	0.065648	0.829853	0.061566*	-0.000040
	9.079094	6.522185	54.03471	4.488645	-8.176284
Pre-Futures	0.000062	0.060369	0.856565	0.024779	
	4.430270	3.543565	30.10530	1.319553	
Post-Futures	0.000028	0.060272	0.832814	0.083674*	
	7.169275	5.157525	46.26850	4.359884	
LIC	0.000047	0.121192	0.830067	0.005710	-0.00000088
	10.46800	11.46666	78.31468	0.449204	-0.346066
Pre-Futures	0.000036	0.099893	0.869786	-0.018333	
	5.118360	6.189517	51.37827	-0.852809	
Post-Futures	0.000053	0.139710	0.806586	0.012532	
	9.890910	9.299574	55.33509	0.725733	
M&M	0.000043	0.067546	0.871599	0.055048*	-0.000019
	7.246700	6.907383	79.87938	4.749836	-4.874673
Pre-Futures	0.000093	0.103862	0.787763	0.058304**	
	4.879415	4.161367	22.55814	2.030463	
Post-Futures	0.000019	0.064882	0.882942	0.057211*	
	5.312477	5.632624	73.53409	4.116282	
MTNL	0.000072	0.118950	0.806657	0.013456	-0.000019
	7.041204	8.311730	48.58129	0.953405	-3.202220
Pre-Futures	0.000029	0.072069	0.893207	0.013881	
	3.989069	4.355856	55.86378	0.787906	
Post-Futures	0.000079	0.161430	0.737099	0.006700	
	7.177129	7.434297	28.52285	0.314097	
OBC	0.000023	0.143143	0.849727	0.020393***	0.0000021
	7.693004	12.87837	110.9064	-1.656151	0.852610

Pre-Futures	0.000057	0.209349	0.758317	-0.073436*	
	6.692081	8.795103	37.31317	-2.685009	
Post-Futures	0.000012	0.098972	0.894624	0.003585	
	5.407916	8.177354	126.8141	0.274531	
Reliance Capital	0.000079	0.120833	0.822489	0.029482**	-0.000020
	9.009450	8.499994	72.68128	2.132116	-3.450985
Pre-Futures	0.000155	0.154968	0.744090	-0.010753	
	4.751610	4.601614	19.76194	-0.340641	
Post-Futures	0.000049	0.109637	0.834171	0.056643*	
	8.371639	6.902342	72.17676	3.420285	
Reliance Industries	0.000113	0.251347	0.632770	0.021872	-0.000041
	11.56354	25.34459	41.59903	0.934254	
Pre-Futures	0.000103	0.134916	0.693747	0.094479**	
	5.626641	4.959138	18.12836	2.514665	
Post-Futures	0.000066	0.326205	0.627937	-0.049572***	
	9.991713	23.03072	37.62616	-1.659336	
SBI	0.000023	0.076706	0.889632	0.021865**	-0.00000079
	6.462155	7.948054	100.5720	2.094726	-3.274152
Pre-Futures	0.000053	0.109995	0.829385	-0.007478	
	4.582866	4.836363	32.75263	-0.299363	
Post-Futures	0.000013	0.067794	0.897159	0.037014*	
	4.582866	4.836363	32.75263	-0.299363	
Tata Motors	0.000036	0.069098	0.886925	0.034800*	-0.000016
	5.461048	6.813486	81.33321	3.072838	-3.536570
Pre-Futures	0.000039	0.061992	0.888162	0.038696***	
	3.261547	3.662986	43.19847	1.894907	
Post-Futures	0.000019	0.074228	0.883302	0.033740**	
	4.729795	5.714661	65.85698	2.386331	
Tata Power	0.000044	0.107879	0.845553	0.019966	-0.00002
	7.759956	10.93963	86.81855	1.626181	-5.522765
Pre-Futures	0.000083	0.123316	0.797325	-0.035405	
	4.749304	5.772039	26.60517	-1.435847	
Post-Futures	0.000021	0.107720	0.842533	0.050422*	
	5.766494	9.018767	72.69970	3.118561	
Tata Steel	0.000042	0.090697	0.852368	0.043467*	-0.000014
	6.700413	7.793764	72.53070	3.085717	-3.314813
Pre-Futures	0.000155	0.119088	0.666896	0.104034*	
	5.261490	3.797836	13.57064	2.606201	
Post-Futures	0.000019	0.091513	0.871527	0.032707***	
	5.413615	6.557540	70.47480	1.930451	
Videocon	0.000167	0.130380	0.888995	-0.019885	-0.000151
	5.033170	16.45557	471.3280	-1.347316	-4.582383
Pre-Futures	0.000133	0.151898	0.895230	-0.064023***	
	3.926892	7.692189	303.7343	-1.933964	
Post-Futures	0.000018	0.127603	0.880276	-0.002176	
	10.76264	14.37384	320.8796	-0.120683	

Note: (*) denotes that values are significant at 1 per cent level.
(**) denotes that values are significant at 5 per cent level.
(***) denotes that values are significant at 10 per cent level.

The effect of an old information is represented by the GARCH coefficient, with the average value of 0.802754, and 33 per cent of the sample have shown the GARCH coefficient to be below the average. The asymmetric coefficient was used in this study to identify the impact of the good news and the bad news over the volatility. For the whole study period, the average coefficient is 0.033256, and 60 per cent of the sample have exhibited this value to be below the average. As regards the pre-futures and post-futures periods, 13 out of the 30 securities have shown increased ARCH effect. Thus, for about 45 per cent of the sample stocks, the effect of new information increased. If we look at the GARCH effect, 50 per cent of the sample stocks had a decreased GARCH effect. Thus, the impact of old news has decreased after the introduction of derivatives contract.

The asymmetric response for the pre- and post-futures periods on the individual stocks is also shown in the table. While 17 stocks showed statistically significant asymmetric response for the whole period, no asymmetric response noticed in the case of 13 stocks. As far as the pre- and post-futures period is concerned, 10 securities, namely, ACC, Asian Paints, BHEL, Hindustan Unilever, IDBI, IFCI, M&M, Reliance Industries, Tata Motors, and Tata Steel, showed significant asymmetric coefficient, in both the periods, but out of these 10 securities, IFCI (-0.08086) and IDBI (-0.072864) showed significant asymmetric coefficient, but with negative sign in the pre-futures period, and Reliance industries (-0.049572) showed significant but negative coefficient in the post-futures period. It suggests that good news have larger impact than the bad news. Thus, the assumption of asymmetric response does not hold true in the case of these three stocks. 11 stocks (Apollo Tyres, Bharat Forge, Dr. Reddy's, Grasim, HDFC, Hindustan Petroleum, Indian Hotels, ITC, Reliance Capital, SBI, and Tata Power) have shown significant asymmetric response coefficient only in the post-futures period, but out of these 11 stocks, only Dr. Reddy's has shown significant asymmetric response coefficient, but with a negative sign (-0.094342), thus, not confirming the assumption of asymmetric response. The OBC and Videocon have shown significant asymmetric coefficient only in the pre-futures, but again, the signs are not appropriate. The absence of the asymmetric response was found in the case of 7 securities, namely, Cipla, Essar Oil, Hindalco, Hotel Leela, Hero Honda, the LIC, and the MTNL. Thus, it appears that random events took place and there is no clear evidence as to whether derivatives contracts play any role with regard to the asymmetric response.

To address the last issue whether the volatility of the Indian stock market is affected by the shocks arising from the US market, a new variable, i.e., S&P 500 Index, was introduced in the conditional variance equation (Equation 5). The S&P 500 Index is used as an economic indicator that reacts to the major world economic conditions. The results of the GJR-GARCH model are summarised in **Table 6.**

Table 6

Impact of Nifty Futures and S&P 500 Index on Spot Market {GJR-GARCH (1,1) model}

Parameter	Closing Price Returns	
	Coefficient	Significance
Constant	0.000030	9.131546
ARCH (1)	0.038467	3.480556
GARCH (1)	0.807979	63.49325
Asymmetric coefficient	0.176995*	9.800118
Dummy	-0.000018	-7.099696
S&P 500 coefficient	0.019019*	4.344232

The above results reveal that coefficient of the S&P 500, namely, δ_1 is positive and significant, which suggests that the volatility of the Indian stock market is affected by the shocks arising from the US market.

CONCLUSION

The study has revealed that the volatility has decreased to a smaller extent after the inception of derivatives contract. As regards the asymmetric response, empirical results supports the assumption of positive and negative news having different type of impact on the volatility of daily returns. In both the cases, namely, pre-futures and post futures, the coefficient estimates suggest that negative shocks have a higher next-period conditional variance than the positive shocks of the same sign. Moreover, overseas market, namely, the S&P 500, also played a significant role in affecting the volatility of the Indian stock market. Thus, the derivatives played an important role in reducing the volatility though it was reduced by only a marginal amount. It is pertinent to mention here that, in India, the derivatives were introduced during the year 2000-2003, and, simultaneously, many economic reforms were introduced in the market microstructure and policies, such as the Circuit-breaker rules, and VaR-based margin system. Therefore, the marginal reduction in the volatility during the study period cannot be attributed to the introduction of the derivatives alone.

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"Here's to the crazy ones, the misfits, the rebels, the troublemakers,
the round pegs in the square holes ... the ones who see things differently --
they're not fond of rules, and they have no respect for the status quo. ...
You can quote them, disagree with them, glorify or vilify them, but
the only thing you can't do is ignore them because they change things. ...
They push the human race forward, and while some may see them
as the crazy ones, we see genius, because the people who are crazy
enough to think that they can change the world, are the ones who do."

Steve Jobs
(1955-2011)

The art of life is to know how to enjoy
a little and to endure much.

William Hazlitt
Essayist (1778-1830)

IMPACT OF ORGANISATIONAL STRESS ON EMPLOYEE MORALE
A Study of Bank Officers in Uttarakhand

Patiraj Kumari*

Abstract

Employees face numerous problems in their personal as well as work life, which tend to lower their morale. The work-life stress hampers employees' capabilities and lowers their productivity. Being service-oriented human organisations, banks need a workforce which is capable, efficient, and happy for their smooth working. In the present study, entry-level and middle-level officers of public-sector and private-sector banks in Uttarakhand were surveyed to measure the level of their organisational stress. The impact of stress on their morale was also assessed. Through statistical analysis of stress and morale scores obtained from the respondents, the study seeks to ascertain the difference in the level of stress of entry-level and middle-level officers of public- and private-sector bank, and to examine the impact of the stress on their morale. The study has revealed significant differences existing among the bank officers of different levels.

Key words: ***Organisational stress, Employee morale, Public- and private-sector banks, Uttarakhand***

INTRODUCTION

BANKS are basically human organisations; they need human expertise, time, and effort for achieving their objectives of maximizing profits and wealth through customer satisfaction. For providing better customer service, the employees should possess positive work attitudes, strong commitment, and high morale. In fact, a happy worker is a productive worker and it is the responsibility and necessity of an organisation to satisfy its employees' needs and to provide them a work-conducive environment.

There are certain factors in an individual's personal and work life which give rise to stress and have an adverse effect on his physical and mental health, morale, his personal relationship, and professional capabilities. These factors have to be identified and understood so that their creation and effect can be better controlled for the benefit of the employees as well as the organisation.

In the banks, human resources serve as the main competition tool. The stiff competition in the banking sector and the revolutionary

* **Dr. Patiraj Kumari** is Associate Professor in the Department of Management Studies, Gurukul Kangri University, Dehradun Campus, Dehradun; e-mail: *drpkumari3@rediffmail.com*

impact of information technology require skilled and motivated manpower. One of the most important tasks for a bank, like any other business organisation, is to attract skilled workforce as well as to retain them. This can be achieved only by creating an atmosphere of recognition of their talent, to encourage them, and to reward the talented employees for maintaining high level of motivation and morale and to minimise the impact of work-stress.nd Moreover, high morale keeps the employee energised to cope up with the increasing work load and responsibilities and rendering qualitative service to the customer.

CONCEPTS OF STRESS AND ORGANISATIONAL STRESS

The term, 'stress', was first used in the biological context by the endocrinologist, Selye (1956), in his book, *The Stress of Life*. He later broadened and popularised the concept of stress to include an inappropriate physiological response to any demand. According to *Oxford Dictionary*, stress is a state of affair involving demand on physical or mental energy. Stress, in general, can be defined as the reaction of an individual to the demands (stressors) imposed upon him. It refers to the situation where the well-being of an individual is detrimentally affected by his failure to cope with the demands of his environment (Erkutlu and Chafra, 2006). Occupational stress, in particular, is the inability to cope with the pressures in a job, because of a poor fit between someone's abilities and his/her work requirements and conditions (Holmlund-Rytkonen and Strandvik, 2005). The conditions that tend to cause stress are referred to as 'stressors'. The stressors are of four types: individual stressors, group stressors, organisational stressors, and extra-organisational stressors. In simple terms, stress can be categorised as personal-life stress and work-life stress.

An organisation consists of individuals and groups, and, therefore, individual and group stressors may also exist in an organisation. Unfavourable and ambiguous policies of an organisation may affect the functioning of an individual adversely and thereby subject him to stress. The organisational structure provides formal relationship among individuals in an organisation. Any defect in the structure, like the lack of opportunity for advancement, a high degree of specialisation, and line-and-staff conflict, works as a stressor. Organisational processes also affect an individual's behaviour at work. Any faulty process, like poor communication, poor and inadequate feedback on work performance, unfair control systems, and inadequate information flow also cause employee stress.

Based on the above definitions, the major features of stress are as given below:

1. Stress may result in any kind of deviation - physical, psychological, or behavioural - in a person.
2. Stress may be the result of an individual's interaction with environmental stimuli.
3. Stress is an inevitable part of life and it cannot always be avoided altogether.
4. Stress can either be temporary or long term, mild or severe, depending on how long its causes continue, how powerful they are, and how strong an individual is for tolerating the stress.
5. Stress is not always dysfunctional.

REVIEW OF LITERATURE

Studies on Organisational Stress

Bank employees have often participated in studies on work stress, including cross-cultural studies, multi-occupational designs, and service-organisations studies (Bettencourt and Brown, 2003). The National Survey of Quality of Work-life and the data from another research project show that the financial sector employees present moderate levels of satisfaction and medium levels of strain (Kahn, 2002).

According to Christo and Pienaar (2006), the causes of occupational stress include: perceived loss of job and security, long work hours or heavy lifting, lack of safety, complexity of repetitiveness, and lack of autonomy in the job. In addition, while occupational stress can be caused by lack of resources and equipment, work schedules and organisational climate can contribute to employee stress. Organisational stress often causes high dissatisfaction among the employees, resulting in job mobility, burnout, poor work performance, low morale, and less effective inter-personal relations at work (Manshore, Rodrigue, and Chong, 2003).

Johnson (2001) argued for interventions, such as identifying and determining the signs of stress, identifying the possible causes for the signs, and developing the possible solution for each sign. Topper (2007) noted that stress was a person's psychological and physiological response to his perception of demand and challenge.

Nelson and Quick (1994) posited that stress was one of the most creatively ambiguous words. Ornelas and Kleiner (2003) argued that stress was the by-product of the modern life that resulted from employees' efforts of trying to balance the demands of work place and family life. Beehr (1998) observed that job stress was particularly an area of research with a potential to be plagued by the confusion because of the general, non-technical, and popular usage of the word 'stress'. Selye (1987) classified stress as 'eustress' and 'distress', eustress being 'good stress', and distress being 'bad stress'. For avoiding the confusion over its meaning, most researchers have preferred to interpret the word 'stress' in relation to their work. For instance, Hausman (2001) defined stress as the uncertainty and even fear in connection with the implementation of new technology and systems between organisations. Varca (1999) defined stress by relating it to the environment. She defined stressful environment as a gap between environmental demands and personal resources to meet those demands.

Organisational stress can have grave consequences. The negative effects of organisational stress include: reduced efficiency, decreased capacity to perform, dampened initiative and reduced interest in working, increased rigidity of thought, lack of concern for the organisation and colleagues, low morale, and a loss of responsibility (Greenberg and Baron, 2000; Ivancevich, Matterson, Freedman, and Philips, 1990).

In their study on workplace-stress and students' learning experience, Stevenson and Harper (2006) reported that the effects of stress on academic staff include: teaching below par, absence from work, conflict with students, and seeking employment elsewhere. These have direct detrimental effect on the students' learning experience. In addition, the negative effects were undeniably significant, though there are some positive effects of stress, such as the enforcement of deadlines and improved performance. Occupational stress contributes to low motivation and morale, decrease in performance, high turnover, sick leave, accidents, low job satisfaction, low quality products and services, poor internal communication, and conflicts (Schabracq and Cooper, 2000; Murphy, 1995).

Stress is widely accepted to have both types of effects on individuals – positive and negative. While an acceptable level of stress helps in improving the individual's performance, an excessive amount of stress can lead to his decreased performance (Stevenson and Harper, 2006). Occupational stress has an increased risk of work-related diseases and accidents in both the developed and developing countries that have experienced rapid industrialisation (Manshor, Rodrigue, and Chong, 2003). Sapountzi-Krepia (2003) found that stress was a major health hazard of the contemporary century and created diverse conditions, such as psychosomatic diseases and behavioural changes, and was a major contributor to the disturbances in one's emotional, social, and family life. If not managed properly, occupational stress can lead to an increase in absentee rates, internal conflicts, and low employee morale (Christo and Pienaar, 2006). Occupational stress is ubiquitous and increasingly costly (Katherine, George, Mary, and Linda, 2008). Randolfi (1997) found that about 70 per cent of the workers reported that stress caused health problems that led to decreased productivity. In the U.S., companies spend US $69 billion annually on stress-related problems (Manning and Jackson, 1996). Occupational stress is a big threat to the quality of workforce in organisations. Good performers in organisations tend to quit when they notice symptoms of occupational stress. Such turnover affects the organisation adversely by increasing the recruitment and selection costs (Ongori, 2007).

Studies on Employee Morale

Morale refers to the possession of a feeling, on the part of the employee, of being accepted by, and belonging to, a group through adherence to common goals and confidence in the desirability of such goals. McKnight, Ahmad, and Schroeder (2001) defined morale, in the context of the workplace, as "the degree to which an employee feels good about his work and work environment." Morale is important because low morale affects the productivity of employees and causes them to lose interest in their work. High morale is represented by the use of such terms as team spirit, zest, enthusiasm, loyalty, dependability, and resistance to frustration. Low morale is described by words, such as apathy, jealousy, pessimism, and disloyalty to the organisation. It is reflected in the employees' dissatisfaction towards their work and work environment, lack of cooperation, and willingness with which they perform the organisational activities.

Some researchers have defined morale as an individual characteristic. Guion (1958) considered it as a personal phenomenon. He noted that morale defined a range within which all personal needs were satisfied and the person perceive that this satisfied need resulted from his job status. According to Kanter (1977), morale is an attitudinal and relational response of people to job status, which affected their behaviour inside the organisation. Child (1941) considered morale as a state of mental health which enabled the person to act effectively and hopefully and performed his duties enthusiastically and eagerly. Some of the researchers have emphasised the concept of morale in group expressions. According to Glimer, 1961, morale is a group concept and common description of staff's attitude in an organisation. He noted that morale in an organisation or what was called 'organisational morale' was a morale which resulted from group interactions. Viteles (1953) defined morale as an attitude towards satisfaction of objectives, tendency to maintain with objectives and decision-making for satisfying the objectives of the group or special organisation. Smith and Westen (1951) considered morale as satisfaction resulting from the tendency and interest to achieve the objectives of a special group. Theoretical works on morale show that it has been considered as a multi-dimensional construct. In order to demonstrate the complexity of this theory, Johnsrud (1996) concluded that morale was an umbrella notion, which included satisfaction of job environment and some characteristics as excitement and emotion, commitment and loyalty to the organisation, tendency towards the job, and loyalty to the group goals and objectives.

Researches on employees' morale include the effects of stress and work climate (Schaefer and Moos, 1996), management behaviour and situational factors (Wofford, 1971), collaboration in decision-making, work type and its relation with management (McFadzean and McFadzean, 2005), administrative skill (Hunter, 1982), compassion in work environment (Gautam, 2008), positive attitude to work and work evaluation (Linz, Good, and Huddleston, 2006), downsizing (Makawatsakul and Kliner, 2003), and organisational structure (Worthy, 1950).

Morale is one of the major dimensions of a healthy organisation. Most of the theorists have emphasised on the theoretical and practical significance of the organisational morale as a precise and delicate variable, and as the most effective factor on job performance (Analoui, 2000). High morale compensates the weakness in other required resources for increasing the productivity. The morale of workforce is the basis of public and private organisations' operations. While the high morale is associated with job satisfaction, creativeness and innovation, job respectability, commitment to organisation, eagerness to satisfy group objectives, instead of individual objectives, and improvement in the organisational performance, low morale results in the increase in costs, absence from job, refusal to provide services, strike and murmur, lack of motivation and interest, and decrease in the creativity and innovation, lack of inter-organisational collaborations, preventing the satisfaction of organisational objectives, and finally reducing the efficiency (Reed, 2009).

A work environment where management supports professional growth makes employees feel that the company is committed to them. Scott (2001) claims that employees are less focussed on their immediate pay-cheque if they feel they work in the organisation that encourages growth and provides opportunities for training and education and skill improvement. He urges managers not to follow the current trend of many companies drastically reducing their education budget and creating workplace that produces overworked employees who have no time for learning and reflection. The providing of ample staff development and training opportunities will not only boost their morale, but will also allow them to stay current in the ever-changing information field.

Based on the data collected from two groups of teachers and executives, Mackenzie (2007) concluded that workload status of teaching and a limited access to quality professional development had an effect on employees' morale. Buvaneswari (2008) noted that corporate culture, as a management programme, had a positive impact on employees' morale and motivates them to improve their own and the organisation's performance. Based on the data collected from 100 teachers, Naong (2007) found that there was a direct correlation between the teachers' morale and the learners' discipline at the school.

Studies on Impact of Stress on Employee Morale

Stress is perhaps the most common cause of low employee morale. The factors that increase employees' stress and decrease their morale include: low control over job, job insecurity, relationship with the manager, absence of the sense of belongingness with the organisation, unfair treatment, and unhygienic conditions. Bragg (2002) noted that managers can boost the employees' morale by encouraging their involvement and communication, keeping the employees informed of the major business decisions, offering extensive training, and encouraging a balance between the work and home life. It has been seen that when workers facing high demands had more control, their stress was lower and morale was higher. Riley (2004) found that employees, who felt overwhelmed, overworked, and underappreciated, showed low morale and productivity.

In a survey on mega-mergers, Chambers and Honeycutt (2009) examined the impact of the mega-merger between two Southeastern U.S.-based telecommunication conglomerates on employee morale and turnover intention. The survey revealed that the merger impacted morale in a negative way. It was found that low morale was caused by insecurity about the job, changes in the processes, management, a new pay structure, and, most importantly, the labour contract.

Behm, Veltri, and Kleinsorge (2004) examined the relationship between occupational safety, health performance, and employee morale. They supported the view that workplaces with active, visible safety leadership, had fewer injuries and had more productive employees. Safety and health management programmes improve a company's bottom line, including productivity and employee morale.

A review of literature has revealed that though the researches have been conducted on organisational stress and morale, there has been no study on the employees of public- and private-sector banks. There has been a significant gap in the research studies conducted for determining the relationship between stress and morale. The present study seeks to bridge the gap in this important area of business.

RESEARCH OBJECTIVES AND HYPOTHESES

The present study had the following major objectives:

1. To measure the level of stress experienced by lower- and middle-level public-sector and private-sector bank officers;
2. To determine the relationship between stress and morale in public-sector and private-sector bank officers; and
3. To assess the effect of stress on morale of public-sector and private-sector bank officers.

In accordance with the above objectives, the following hypotheses were formulated for testing:

H_{01}: Bank officers with low stress have high morale.

H_{02}: Public-sector bank officers have lower stress as compared to their counterpart in the private-sector banks.

H_{03}: Middle-level bank officers have lower stress as compared to the entry-level officers.

RESEARCH METHODOLOGY

Population for the Study

The population for the present study comprised the entry-level and middle-level officers employed in the public- and private-sector banks, functioning in Uttarakhand. On July 1, 2011, there were thirteen districts in Uttarakhand (later increased to 17), which are organised into two divisions – the Kumaon division and the Garhwal division. The Kumaon division included 6 districts, whereas the Garhwal division had 7 districts. Since it was not possible to include all the elements of the population in the investigation, the study was conducted on a representative sample, having the salient features of the population.

The Sample

When we select some of the elements with the intention of finding out something about the population, we refer to such group of elements as a sample. The respondents for the survey belonged to public- and private-sector banks located in the main cities of the 13 districts of Uttarakhand. A sample of 300 respondents, 75 each from amongst the entry-level and middle-level officers from public-sector and private-sector banks, was taken. The age of the respondents ranged from 30 to 40 years and the level of education varied from graduation to post-graduation.

Sampling Method

The stratified random sampling was used for selecting the sample for the study. The division of the sample into distinct and independent strata enabled us to draw inferences about the specific sub-groups. The four strata chosen for the purpose were the entry- and middle-level officers from the public-sector banks, and the entry- and middle-level officers from the private-sector banks.

The Tools Used

Stress Inventory

The questionnaire intended to measure the stress level of the respondents consisted of 51 items, covering two dimensions (personal-life stress and work-life stress). The reliability of stress inventory was determined with the use of Cronbach's alpha. Nunnally (1978) recommended that Cronbach's alpha level of 0.8 or greater was an indication of good internal consistency. The value of Cronbach's alpha for these responses was calculated to be 0.958, for the whole scale, and 0.92 and 0.96 for the two sub-scales, respectively.

Morale Survey

The questionnaire designed to measure the respondents' morale consisted of 20 items. The value of Cronbach's alpha for the responses was calculated to be 0.917.

DATA ANALYSIS AND INTERPRETATION

Morale of Low- and High-stress Officers

In order to assess the effect of stress on morale, the respondents were categorised into high- and low-stress groups on the basis of their median scores. The *t*-value was also calculated to test the significance. The significant differences existing between the mean scores of the two groups are presented in **Table 1**.

As shown in the table, the high-stress group has a lower-level of morale, whereas the low-stress group has a high level of morale. The mean value of morale of low-stress group was comparatively higher than the mean values of morale of the high-stress group, implying that the officers with lower stress had higher morale.

The difference between the low-stress group and the high-stress group was found to be significant at 0.01 levels.

Hence, the first hypothesis was accepted.

Dimensions of Stress

We compared the four groups (entry- and middle-level officers from private-sector banks and entry- and middle-level officers from public-sector banks) on the basis of dimensions of stress. The significant differences found are presented in **Table 2**.

From the table, we note that the middle-level officers of the public-sector banks scored the highest mean value for personal-life stress (SDIM1) and work-life stress (SDIM2), followed by middle-level officers of the private-sector banks, entry-level officers of the public-sector banks, and entry-level officers of the private-sector banks, in decreasing order of mean scores.

It is also noted that the different mean scores of the Groups G1, G2, G3, and G4, on SDIM1 and SDIM2, have *F*-values of 10.76 and 14.66, respectively, which were significant at the 0.01 level. While Group G2 had a significant relation with Groups G1 and G3, Group G4 had a significant relation with Groups G1 and G3. Groups G3 and G1 also had a significant relation.

Hence, the second hypothesis was also accepted.

Dimensions of Morale

We also compared the four groups of officers (entry-level and middle-level officers from the public- and private-sector banks) on the various

Table 1

Differences between Mean Scores on Morale of Low- and High-stress Groups (N=300)

Variable	Low-stress Group			High-stress Group			*t*-Value
	N	Mean	S.D.	N	Mean	S.D.	
Morale	148	89.57	20.18	152	76.22	21.34	20.87**

Note: NS - Not significant, *→Significant at 0.05 Level, **→ Significant at 0.01 Level

Table 2

Dimensions of Employee Stress using Duncan's Mean Test

Dimensions of Stress	G1 (N=75)		G2 (N=75)		G3 (N=75)		G4 (N=75)		Significant Pairs (*)	F-value
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D		
SDIM 1	67.83	10.49	80.67	11.69	76.20	11.44	81.20	13.66	G3 V/SG1 G2 V/SG1 G2 V/SG3 G4 V/SG1 G4 V/SG3	10.76**
SDIM 2	117.27	19.43	136.73	20.04	131.73	18.19	137.07	17.62	G3 V/SG1 G2 V/SG1 G2 V/SG3 G4 V/SG1 G4 V/SG3	14.66**

Note: 1. G1= PvtE, G2=PvtM, G3=PubE, G4=PubM,

2. NS - Not significant, * → Significant at 0.05 level, **→Significant at 0.01 level

dimensions of morale. The significant differences found are shown in **Table 3**.

The table presents the comparison among the Group G1 (private bank entry-level officers), Group G2 (private bank middle-level officers), Group G3 (public bank entry-level officers), and Group G4 (public bank middle-level officers) on the basis of morale. Public bank middle-level officers scored the highest mean values for morale, followed by private bank middle-level officers, public bank entry-level officers, and private bank entry-level officers in the decreasing order. These differences have an *F*-value of 9.41, which was significant at the 0.01 level. While, Group G2 had a significant relation with Group G1 and Group G3, Group G4 had a significant relation with Group G1 and Group G3. Moreover, Group G3 and Group G1 also had a significant relationship.

Stress and Morale of Bank Officers

It is noted that stress is related with morale of public- and private-sector bank officers. The correlation coefficients are presented in **Table 4**.

The table presents the inter-correlation values between the two dimensions of stress and morale of the officers of private and public banks. As shown in the table, morale has a significant correlation with the work-life stress (SDIM2) of private-bank officers. The correlation of morale with work-life stress of public-bank officers is significant. Moreover, morale has a significant correlation with personal-life stress (SDIM1) of officers of both the private-sector and private-sector banks.

Stress and Morale of Private Bank Officers

The relationship between stress and morale has been found to be significant for the entry- and middle-level officers of the private-sector banks. **Table 5** presents the values of correlation coefficients.

The table depicts the inter-correlation values of the two dimensions of stress and morale with respect to the entry-level and the middle-level officers of the private-sector banks. We note that while morale is significantly correlated with personal-life stress (SDIM1) of entry-level and

Table 3

Morale among different Employee Groups, Using Duncan's Mean Test

Dimensions of Morale	Group G1 (N=75)		Group G2 (N=75)		Group G3 (N=75)		Group G4 (N=75)		Significant Pairs (*)	F-value
	Mean	S.D	Mean	S.D	Mean	S.D	Mean	S.D		
MDIM	73.15	16.18	86.47	17.60	82.00	15.75	88.20	16.53	G3 V/S G1 G2 V/S G1 G2 V/S G3 G4 V/S G1 G4 V/S G3	9.41**

Note: 1. G1= PvtE, G2=PvtM, G3=PubE, G4=PubM,

2. NS - Not significant, *→ Significant at 0.05 level, **→ Significant at 0.01 level

Table 4

Correlation Coefficients between Dimensions of Stress and Morale of Banks Officers

Morale	Dimensions of Stress			
	Private-sector Banks (N=150)		Public-sector Banks (N=150)	
	SDIM 1	SDIM 2	SDIM 1	SDIM 2
MDIM	0.4140**	0.7954**	0.4679**	0.7440**

Note: NS-Not Significant, *→ Significant at 0.05 Level, **→ Significant at 0.01 Level

Table 5

Correlation Coefficients between Dimensions of Stress and Morale of Entry- and Middle-level Officers of Private-sector Banks

Morale	Dimensions of Stress			
	Entry-level Officers (N=75)		Middle-level Officers (N=75)	
	SDIM 1	SDIM 2	SDIM 1	SDIM 2
MDIM	0.3935**	0.7330**	0.3521*	0.8863**

Note: NS - Not significant, * → Significant at 0.05 Level, **→ Significant at 0.01 Level

Table 6

Correlation Coefficient between Dimensions of Stress and Morale of Entry- and Middle-level Officers of Public-sector Banks

Morale	Dimensions of Stress			
	Entry-level Officers (N=75)		Middle-level Officers (N=75)	
	SDIM 1	SDIM 2	SDIM 1	SDIM 2
MDIM	0.3665**	0.7948**	0.4935*	0.8568**

Note: NS - Not significant, *→Significant at 0.05 Level, **→ Significant at 0.01 Level

middle-level officers of the private-sector banks, the correlation of morale with work-life stress (SDIM2) of entry-level and middle-level officers of the private-sector banks is significant.

Stress and Morale of Public Bank Officers

Stress has been found to be significantly correlated with morale of entry- and middle-level officers of public-sector banks. **Table 6** presents the values of correlation coefficient.

The table shows the inter-correlation values of two dimensions of stress and morale with respect to entry-level and middle-level officers of the public-sector banks. While morale is significantly correlated with personal-life stress (SDIM1) of entry-level and middle-level officers of the public-sector banks, the correlation of morale with work-life stress (SDIM2) of entry-level and middle-level officers of the public-sector banks is insignificant.

DISCUSSION

We sought to determine the level of organisational stress among the entry-level and middle-level officers of the private-sector banks, and entry-level and middle-level officers of the public-sector banks. The relationship between stress and morale was also examined. Stress can occur in a bank officer owing to a multitude of reasons, ranging from personal problems, like sickness, strained relations with family and friends, less leisure time, and weak financial position; and work problems, like unclearly defined role, not keeping up with technological innovations, heavy workload, absence of senior and/or peer support, office politics, lack of autonomy, unfair salary, benefits and services, lack of proper training and development programmes, weak performance appraisal, lack of career management, and unhygienic work place conditions. The private-sector bank officers cited high targets and the pressure to achieve them, harmful office politics, and job insecurity as the main reasons of stress alongside personal problems. Public-sector bank officers indicated lengthy time-bound promotions, disparity in salaries of private and public bank officers, lack of open-door policy, and inadequate maintenance of hygiene in small branches as the causes of stress along with personal problems.

The results show that high stress had adverse effect on the employee morale. The total sample of bank officers was broken into two groups on the basis of low stress and high stress. The mean score of morale for the low-stress group was seen to be higher than the mean score of morale of the high-stress group, thus, establishing our first null hypothesis.

The mean scores presented in Table 2 show that public-bank officers had a lower stress (shown by higher stress mean scores) than their counterpart in private banks, and that the stress level of middle-level officers was less than that among the entry-level officers in both the bank sectors. This data support Hypothesis 2 and Hypothesis 3.

The better condition of public-sector banks, as compared to private-bank officers, in the context of stress and morale, has found support in some past researches (Lehal, 2007; Kumar, 2006). Srivastav (2004) found service conditions (security, promotion, and welfare) to be responsible for the overall low degree of job satisfaction and the leading cause of stress in private banks. Kumar (2006) found that the non-nationalised bank employees had a high stress as compared to the nationalised-bank employees. Among the occupational stress variables, role overload, role authority, and lack of senior-level support was found to contribute more to stress among the employees of the non-nationalised banks. It was also found that the middle-level officers were less stressed than the entry-level officers, both in the public-sector banks and the private-sector banks.

Sager (1990) found that the ability to handle stress associated with the job and the organisation increased with age (length of experience). Dua (1994) noted that the younger staff members reported more job stress than their older colleagues. Rajendran (2004) found that the employees of lower age-group perceived both the personal-life and the work-stress, differently. The research by Vokic (2007) did not match the results of this study. He found that the hierarchical level was significantly related with the occupational-stress levels, with the middle-level managers experiencing higher stress than the entry-level managers.

CONCLUSION AND POLICY IMPLICATIONS

On the basis of the above results and discussion, we can conclude that middle-level officers in public-sector banks have the lowest level of the personal-life stress as well as work-life stress in all the four categories of bank officers. Middle-level officers of the public-sector bank enjoy more job security, greater autonomy, and better pay and benefits, due to which they have less stress. They are also found to have the high level of morale. The middle-level bank officers are seen to have lower stress and higher morale in comparison to the entry-level bank officers. Personal-life stress has been seen to have a significant inverse relation with morale among the bank officers, and work-life stress was seen to have a highly significant inverse relationship with morale among bank officers. Low-stress group of bank officers has been seen to have a higher level of morale.

The success of the organisation depends on the performance of the employees in the organisations. Organisational stress and employee morale are considered as important moderators of performance. Hence, the banks ought to seriously think of adopting the appropriate coping strategies for managing organisational stress, which would result in improved performance and high morale of bank employees. It is hoped that the findings of this study would be of interest to managers of both the public- and private-sector banks. This study will also help the banks in assessing the stress level and its impact on their employees' morale, and provide impetus to researches to explore other correlates of these variables for minimising the negative impact of the organisational stress and improving their employees' morale.

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MEASURING TECHNICAL EFFICIENCY OF COMMERCIAL BANKS THROUGH DATA ENVELOPMENT ANALYSIS

Pankaj Kumar Gupta* and Seema Garg**

Abstract

Due to fierce competition with financial corporates, banks have to use various performance measurement tools to improve the quality of their services. The study seeks to examine the competitiveness of commercial banks in India. For this purpose, the study investigates, analyses, and compares the efficiency of 49 commercial banks by employing the Data Envelopment Analysis (DEA) resulting in the delineation and identification of the causes of inadequate performance. The performance of commercial banks in India from private and public sectors is also measured using the non–parametric techniques. Constant returns to scale and variable returns to scale DEA models are used for the analysis. The impact of scale on the efficiency scores is also assessed. The study reveals that there is a variation in the technical efficiency and the scale efficiency of most of the banks.

Key words: ***Commercial banks, Technical efficiency, Data Envelopment Analysis, India***

INTRODUCTION

FINANCIAL institutions play a major role in any developing economy. As one of the fastest-growing economies in the world, India has been experiencing increase in the expectation of the business partners. This trend has many folds as compared to that of the past and is expected to continue in future also. Relative and competitive service quality is most important for survival and existence of any banking the institution because of the cut-throat competition. The Indian banking sector has faced serious functional problems during the past few decades. Banks are undergoing tremendous technological and managerial changes due to the dynamic environment. Though the financial system in India has had an advantage that it has operated in a closed and a regulated environment, it has gone through a sea change during the nineties.

To introduce efficiency and competition into the system, the Reserve Bank of India (RBI) initiated certain reforms, such as de-regulation of interest rates, entry de-regulation, branch de-licensing, and permitting public-sector banks to increase up to 49 per cent of their equity

* Dr. Pankaj Kumar Gupta is Associate Professor in the Centre for Management Studies, Jamia Millia Islamia University, New Delhi; e-mail: *pkg123@eth.net*

** Ms. Seema Garg is Assistant Professor in the Management Department, Institute of Management Studies, Ghaziabad; e-mail: *seemgarg@yahoo.co.in*

from the capital market. These factors created competitiveness and immense pressure in the banking industry, which resulted in the greater use of information technology, consumer credit, more transparent balance sheet, and product diversification. It has also raised concerns of performance of Indian banking system, especially, due to the non-performing assets (NPAs). In the current atmosphere, the banks are under pressure to make credit more affordable and expand their lending portfolio, to reverse the slowdown and spur the growth. Effectiveness of any institution is measured by efficiency and competitive edge over others. Therefore, an analysis of a bank's performance is of crucial importance to the markets, the government, and the society at large. Banks are constantly trying to achieve international benchmarks with best practices. The demarcation between the private and public sector is fast-hazing, as all the banks are improving their efficiency by adopting new technologies and process management. They are venturing on global expansion and many foreign banks are looking towards India.

The Data Envelopment Analysis Approach

Data Envelopment Analysis (DEA) is a non-parametric method for the measurement of the efficiency relative to the various decision-making units (DMUs) under study. It is an extended application of the linear programming technique, where the frontier is assembled on a piece-wise basis from the DMUs. The DMUs are the homogeneous units whose performance is to be measured. In the present context, the DMUs are commercial banks. Technical efficiency score is the total weighted sum of output divided by the total weighted sum of inputs. In this model, the efficiency is measured by the ratio of weighted outputs to weighted inputs. The efficiency of a bank can be measured as to how efficiently it utilises its inputs. Thus:

$$Efficiency = \frac{Weighted\ Sum\ of\ Outputs}{Weighted\ Sum\ of\ Inputs} = \frac{u_1y_1+u_2y_2+\ldots+u_ny_n}{v_1x_1+v_2x_2+\ldots+V_nX_n}$$

where, u and v are the weights for the outputs ($y_1,\ldots\ldots\ldots.y_n$) and the inputs ($x_1\ldots\ldots\ldots\ldots\ldots..x_n$), respectively.

Technical efficiency comprises pure technical efficiency and scale efficiency. This requires the estimation of the two DEA models - one with constant returns to scale (CRS) and the other with variable returns to scale (VRS). The models with constant returns to scale is known as the CCR model as it was proposed by Charnes, Cooper, and Rhodes (1978) and the model with variable returns to scale is known as the BCC model after Banker, Charnes, and Cooper (1984). If there is a difference in the two technical efficiency scores for a particular bank, it means that the bank has scale inefficiency.

Let the CCR and the BCC scores of a DMU be θ_{CCR} and θ_{BCC}, respectively. The scale efficiency is defined as:

SE = θ_{CCR} / $\theta_{BCC,}$ where SE is not greater than one.

While the CCR score is called the global technical efficiency, the score of the BCC expresses the local or pure technical efficiency (PTE) under the VRS using these concepts. Relationship in Equation (1) demonstrates the decomposition of efficiency as:

$$\theta_{CCR} = \theta_{BCC} * SE$$

$$TE_{CRS} = TE_{VRS} * SE$$

The CRS technical efficiency measure is the product of the pure technical efficiency and the scale efficiency.

Technical efficiency (TE) = Pure technical efficiency (PTE) X {Scale efficiency (SE)}.

The scale efficiency measure does not indicate whether a bank is operating at increasing returns to scale. This may be determined by imposing non-increasing returns to scale to the DEA problem.

LITERATURE REVIEW

A number of researches on the banking sector have been conducted by various authors in the global as well as the Indian context. Some of them have worked on banking efficiency measurement. Banking sector is a highly-capital-intensive sector in nature and has attracted attention of researchers' worldwide due to poor managerial skills and lack of attentiveness, in addition to technical problems related to transactions, size of the banks, NPA's, documentation, etc.

Berger and Humprey (1997), in their extensive international survey, found that out of the efficiency analysis of 130 financial institutions covering 21 countries, only about 5 per cent examined the banking sectors of developing countries. They also noted that about 75 per cent of efficiency literature was focussed on the banking markets of well-developed countries, with a particular emphasis on the US market. The studies conducted abroad are summarised in **Table 1**.

Studies Conducted in India

The literature on the banking efficiency in emerging markets, like India, focusses mainly on the efficiency differentials among the banks with different ownership status and asset size. In India, the research on banking efficiency is in the growing stage {Bhattacharya, *et al*. (1997), Saha and Ravisankar (2000), Sathya (2001), Galagadera and Edirisueiya (2004), Mukherjee, *et al.* (2002), Shanmugam and Das (2004), Chakrabarti and Chawla (2005), Debasish (2006), Rangkakulnuwat (2007)}. The studies on banks performance conducted in India are summarised in **Table 2.**

Granger's causality results on the relationship among the loan quality, cost-efficiency, and the bank capital suggest that the inter-temporal relationships between problem loans and cost

Table 1

Summary of Studies on Banks' Performance Evaluation (In the Global Context)

Author(s)	Summary
Avkiran (2006), Avikaran and Rowlands (2008)	Used the DEA to evaluate the efficiency of foreign banks in Australia and explored their managerial performance.
Johanshaloo, *et al.* (2008)	Proposed a new ranking system for extremely efficient DMU's, based upon the omission of these efficient DMU's from the reference set of the inefficient DMU's
Luciano (2007)	Illustrated the efficiency features of Italian banking system through the review of the most empirical studies over the last 15 years
Wu, *et al.* (2006)	Integrated the DEA and the Neural Networks (NN) to examine the relative branch efficiency of a large Canadian bank.
Asmild, Paradi, and Kulkarni (2006)	Combined DEA with a traditional regression models to measure the software development performance in a large Canadian bank
Yang (2006)	Evaluated the branches performance of a large Canadian bank, using the DEA and identified various environmental factors affecting the performance levels of these branches.
Sherman and Rupert (2006)	Investigated the earnings impact of one multi-bank merger as reflected in the operations of its branch networks.
Chen, Skully, and Brown (2005)	Employed the DEA to examine the cost, technical and allocative efficiency of 43 Chinese banks.
Casu and Molyneux (2003)	Investigated efficiency across European banking systems
Krishnasamy (2003)	Used both the DEA and the Malmquist total productivity index (MPI) to evaluate bank efficiency and productivity changes in Malaysia.
Drake and Howcroft (2002)	Assessed the relative efficiency of the UK clearing bank branches, using the DEA
Yildirim (2002)	Evaluated the efficiency of the Turkish commercial banks from 1988 to 1999, using the DEA
Alirezaee and Panne (1998)	Indicated that the average branch efficiency score varied inversely with the number of branches in the sample, taking case of a Canadian bank.

Table 2

Summary of Studies on Banks' Performance Evaluation (In the Indian Context)

Author(s)	Summary
Bhattacharya, *et al.* (1997)	Used a two-stage DEA approach to examine the impact of liberalisation on the efficiency of the Indian banks
Saha and Ravishankar (2000)	Suggested that the DEA could be a suitable approach towards measuring the relative efficiency of banks in the Indian context.
Sathya (2001)	Compared the productive efficiency of publicly-owned, privately-owned, and foreign-owned banks operating in India
Galagadera and Edirisuriya (2004)	Investigated the efficiency of Indian commercial banks using the DEA, and their productivity growth using the Malmquist index
Mukherjee, *et al.* (2002)	Used the DEA and the MCC (Multiple Correlation Clustering) techniques to examine the performance of Indian banks
Shanmugam and Das (2004)	Investigated the efficiency of Indian commercial banks during the economic reforms period, 1992-1999, using a parametric techniques
Chakrabarti and Chawla (2005)	Applied the DEA methodology to evaluate the relative efficiency of Indian Banks during the 1990-2002 periods
Debasish (2006)	Attempted to measure the relative performance of the Indian banks, using the output-oriented CRR DEA model
Rangkakulnuwat (2007)	Utilised the DEA technique to estimate the technical efficiency of nine commercial banks.

efficiency, ran in both directions for the US commercial banks between 1985 and 1994, with as few as three inputs and three outputs could lead to a substantially upward bias in the efficiency scores. Casu and Molyneux (1999) used non-parametric methods to measure the bank productivity using the Malmquist Productivity index.

Recent Studies Using DEA

Cook and Hababou (2001) studied both the sales and the service efficiencies of the banks, using a standard additive DEA modelling approach, based on goal programming, to derive optimal efficiency scores while accounting for the shared branch resource inputs.

Seiford and Zhu (1999) examined the performance of the top 55 US banks, using a two-stage DEA approach. The results indicated that the relatively large banks exhibit better performance on profitability, whereas the smaller banks tend to perform better with respect to marketability. Shanmugam and Das (2004), on the other hand, investigated the efficiency of Indian commercial banks during the reform period, 1992-1999, using a parametric methodology. They observed that the state and foreign banks were more efficient than the nationalised and the privately-owned domestic banks. The most recent and comprehensive survey of research, analysing the performance and efficiency of banks, can be found in Debnath and Ravishankar (2008) and Kumar and Gulati (2009, 2008). These studies are summarised in **Table 3**.

Pramodh, *et al.* (2008) used the DEA-FMADM (DEA), which is a data-driven technique and the FMADM (Fuzzy Multi-attribute Decision-making), which is a knowledge-driven technique hybrid for ranking the productivity of Indian nationalised commercial banks. Avkiran (2006, 2008) used the DEA to evaluate efficiency of foreign banks in Australia and explored their managerial performance.

We drew our motivation from the literature and found a research gap in the available literature in examining the efficiency of the banks. Unlike others, our study emphasised the effect of the scale efficiency by using the BCC and the CCR efficiency scores for two financial years.

OBJECTIVE OF THE STUDY

The objective of the present study is to examine, analyse and evaluate the performance of Indian commercial banks from private and public sector, using the non-parametric technique.

Table 3

Summary of Recent Studies on Banks' Performance Evaluation (Using the DEA Approach)

Author(s) and year(s)	Methodology	Units- DMUs	Inputs	Outputs	Findings
Roma Mitra Debnath and Ravishankar (2008)	CCR and BCC DEA Model	50 Indian banks	1-Total assets 2-Deposits	1-PAT 2-Operating profit 3-Interest income 4-Total income 5-Advances 6-Net non-performing Assets	Estimated and compare the efficiency of banks in India; identified the priority areas for banks, which could improve the performance.
Sunil Kumar and Rachita Gulati (2009, 2008)	CCR DEA model	27 PSB's for 2006-07	1-Physical Capital 2-Labour 3-Loanable Funds	1-Advances 2-Investment	Found that high efficiency does not stand for high effectiveness in the public-sector banks.
Satya Paul and Khaled Kourouche (2008)	CCR and BCC model - scale efficiencies	10 Australian banks for 1997-2005	1-Interest expense 2-Non-interest expense	1-Net interest income 2-Non-interest income	Examined TE and found that the extent of TE varied across the banks and over the years.
Sahoo, Sengupta, and Mandal (2007)	BCC and cost efficiency models	100 banks for period 1997-98 and 2004-05	1-Average interest paid 2-Average staff cost 3-Non–labour operational cost	1-Investments 2-Performing loan assets 3-Non interest income 4-Average interest earned on per rupee unit of investment 5-Average interest earned 6-Non-interest fee-based income	Estimated the productivity performance in terms of banks' TE, cost efficiency, and scale efficiency; Found that foreign banks had an edge over operational and price measures of performance.
Mihir Dash and Christabel Charles (2007)	CCR Model and (CRS) Intermediation approach	49 major banks of India	1Borrowings 2-Deposits 3-Fixed assets 4-Net worth 5-Operating expense	1-Advances 2-Loans 3-Investment 4-Net interest income 5-Non-interest income	Investigated the TE of Indian banks segmented in terms of ownership.
Amarender Reddy (2005)	CCR model	70 banks in the period 1986-91	1-Fixed assets 2-Interest expended 3-Wages	1-Total income 2-Liquid assets 3-Total advances	Investigated the TE of Indian banks segmented in terms of ownership.

RESEARCH METHODOLOGY

Nature of the Study

The study involves a multi-input multi-output performance evaluation and comparison of 49 commercial banks in India, which is done with the help of an applied mathematical tool, namely, the Data Envelopment Analysis (DEA), to examine the technical efficiency of banks during financial years 2007-08 and 2008-09 financial years, using the input-oriented approach. To enrich the analysis, technical efficiency can be decomposed into the product of pure technical efficiency and scale efficiency. We use both the CCR, developed by Charnes, Cooper, and Rhodes (1978), and the BCC model, developed by Banker, Charnes, and Cooper (1994). The CCR model accounts for the constant returns to scales (CRS), under which the, production possibility set is formed without any scale effect. It is also called the global efficiency model. The BCC model accounts for variable returns of scale (VRS), under which the production possibility set is the convex combination of the observed units. This is also called the 'local efficiency' (LE) model.

The BCC model relaxes the CRS assumptions of the CCR model. In this model, the variables of technical efficiencies are measured, which are confounded to the scale efficiency. The convexity constraint is added to the standard CCR model. It indicates that the BCC model analyses each DMU locally, that is compared to the subset of the DMU's that operate in the same region of the RTS, rather than globally. Thus, the BCC efficiency scores are also called 'pure technical efficiency' scores. If a DMU is fully (100 per cent) efficient in both the CCR and the BCC scores, it means it is operating at the most productive scale size. If the DMU has the full BCC score but a low CCR scores, then it is considered locally efficient but not globally efficient, due to its scale size. Thus, it is reasonable to characterise the scale efficiency of a DMU by the ratio of two scores. The decomposition depicts the sources of inefficiency, i.e., whether it is caused by inefficient operation (LE) of observed units. The BCC model relaxes the CRS assumption of the CCR model and eliminates the scale part of efficiency from the analysis and, therefore, the CCR efficiency score for each DMU will not exceed the BCC efficiency score.

Selection of Inputs and Outputs

In the banking literature, there is a considerable disagreement among researchers about what constitute inputs and outputs of the banking industry (Casu, 2002; Sathya, 2003). Therefore, selection of variables for the DEA process is long debated among the researchers. The efficiency of banks can be measured with respect to interest, cost, and profitability. The literature reveals three approaches to measure the efficiency of a financial institution: (1) The production approach, (2) intermediation approach, and (3) the asset approach. Most of the DEA follows the intermediation approach, as it seems to be more suitable for evaluating the performance of an entire financial institution. The intermediation approach (Sealey and Lindley, 1977) considers a financial institution as an intermediary that converts financial assets from surplus units into deficit units. In this approach, the inputs are operating and interest costs whereas the various outputs are interest income, total loans, total deposits, and non-interest income.

In this paper we are using the intermediation approach as a bank is considered here as an intermediary between the savers and the investors where outputs are interest-spread, non-interest income, advances, net profit, and deposits. The inputs are the employees, equity funds, and operating expenses. Bhattacharya (1997) studied the impact of interest expense and operating expense on advances, deposits, and investments.

We considered a sample of 49 banks and used the latest available data. The size of the sample was considered satisfactory as it represented more than twice the sum of the inputs and the outputs.

Data Collection

The study is based on the data, published by the Reserve Bank of India's (RBI) annual publication, titled "Trends and Progress of Banking in India", for the period 2007-08 and 2008-09 (31st March for each year). It seeks to examine the efficiency of the Indian scheduled commercial banks and to ascertain whether it changed during the sample years. The RBI classifies the banks as 'Scheduled Commercial Banks', 'Foreign Banks', and 'Other Scheduled Commercial Banks'. In this study, we classified the banks into two groups: (a) Public-sector banks (27), and (b) Private-sector banks (22).

DATA ANALYSIS AND RESULTS

Efficiency based on the CCR

We used the CCR model to investigate the inefficiency of 49 banks. Researches have demonstrated that the CCR is the most appropriate model for the study of banking utilities. The CCR model assumes the constant returns to scale (CRS) and does not discriminate between the units based on their size in the computation of their efficiency. The results of this model are presented in **Table 4**.

Table 4

Result of CCR/BCC Formulation

S. No.	Banks	Years						Diff. in 2007-08 and 2008-09	
		2007-2008			2008-2009				
		CCR	BCC	SE	CCR	BCC	SE		
PSU-1	State Bank of India	0.85	1.00	0.85	0.87	1.00	0.87	0.02	+ve
PSU-2	State Bank of Bikaner & Jaipur	0.97	0.99	0.98	1.00	1.00	1.00	0.02	+ve
PSU-3	State Bank of Hyderabad	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
PSU-4	State Bank of Indore	0.98	0.99	0.99	1.00	1.00	1.00	0.01	+ve
PSU-5	State Bank of Mysore	1.00	1.00	1.00	0.86	0.87	0.99	0.01	-ve
PSU-6	State Bank of Patiala	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
PSU-7	State Bank of Travancore	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
PSU-8	Allahabad Bank	0.99	0.99	1.00	0.91	0.91	1.00	0.00	No change
PSU-9	Andhra Bank	0.96	0.96	1.00	0.94	0.94	1.00	0.00	No change
PSU10	Bank of Baroda	0.95	1.00	0.95	1.00	1.00	1.00	0.05	+ve
PSU11	Bank of India	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
PSU12	Bank of Maharashtra	1.00	1.00	1.00	0.95	0.96	0.99	0.01	-ve
PSU13	Canara Bank	0.92	1.00	0.92	0.94	1.00	0.94	0.01	+ve
PSU14	Central Bank of India	0.94	1.00	0.94	0.97	1.00	0.97	0.03	+ve
PSU15	Corporation Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
PSU16	Dena Bank	.1.00	1.00	1.00	0.97	0.97	1.00	0.00	-ve
PSU17	IDBI Bank Ltd	.1.00	1.00	1.00	1	1	1.00	0.00	No change
PSU18	Indian Bank	0.93	0.94	1.00	0.93	0.97	0.96	0.04	-ve
PSU19	Indian Overseas Bank	1.00	1.00	1.00	0.92	0.93	0.99	0.01	-ve
PSU20	Oriental Bank of Commerce-	1.00	1.00	1.00	0.95	0.98	0.97	0.03	-ve
PSU21	Punjab and Sind Bank	0.82	0.82	1.00	0.93	0.93	1.00	0.00	No change
PSU22	Punjab National Bank	0.92	1.00	0.92	0.99	1.00	0.99	0.07	+ve
PSU23	Syndicate Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
PSU24	UCO Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
PSU25	Union Bank of India	1.00	1.00	1.00	0.98	1.00	0.98	0.02	-ve
PSU26	United Bank of India	0.80	0.81	1.00	0.81	0.82	1.00	0.00	No change
PSU27	Vijaya Bank	1.00	1.00	1.00	0.91	0.92	0.99	0.01	-ve
Pvt.-1	Axis Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
Pvt.-2	Bank of Rajasthan	0.84	0.86	0.97	0.77	0.78	0.98	0.01	+ve
Pvt.-3	Catholic Syrian Bank	0.87	0.91	0.96	0.88	1.00	0.88	0.08	-ve
Pvt.-4	City Union Bank	1.00	1.00	1.00	0.94	0.98	0.96	0.04	-ve
Pvt.-5	Development Credit Bank	0.97	1.00	0.97	0.73	0.83	0.87	0.10	-ve

Pvt.-6	Dhanalakshmi Bank	0.96	1.00	0.96	0.74	0.91	0.82	0.14	-ve
Pvt.-7	Federal Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
Pvt.-8	HDFC Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
Pvt.-9	ICICI Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
Pvt.10	IndusInd Bank	1.00	1.00	1.00	0.97	1.00	0.97	0.03	-ve
Pvt.11	ING Vysya Bank	0.96	0.98	0.98	1.00	1.00	1.00	0.02	+ve
Pvt.12	Jammu & Kashmir Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
Pvt.13	Karnataka Bank	0.94	0.94	1.00	0.94	0.97	0.97	0.03	-ve
Pvt.14	Karur Vysya Bank	1.00	1.00	1.00	0.98	0.99	1.00	0.00	No change
Pvt.15	Kotak Mahindra Bank	0.89	0.89	1.00	0.96	0.97	1.00	0.00	No change
Pvt.16	Lakshmi Vilas Bank	0.80	0.87	0.91	0.87	1.00	0.87	0.04	-ve
Pvt.17	Nainital Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
Pvt.18	Ratnakar Bank	0.90	0.96	0.93	0.90	0.93	0.97	0.04	+ve
Pvt.19	SBI Comm. & Intl. Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
Pvt.20	South Indian Bank	0.90	0.91	0.99	0.89	0.90	1.00	0.00	No change
Pvt.21	Tamilnad Mercantile Bank	0.94	0.95	0.99	0.90	0.90	1.00	0.00	No change
Pvt.22	Yes Bank	1.00	1.00	1.00	1.00	1.00	1.00	0.00	No change
Total=49	Mean	0.96	0.97	0.98	0.95	0.97	0.98		+

As shown in the table, some banks had changed their leadership positions in 2009. The results were computed as given below:

1. Twenty four banks had shown no change in their scale efficiency. Out of these 24 banks, 12 belonged to the public sector, and 12 to the private sector. Moreover, 16 banks retained their leadership position in 2008-09.
2. Six banks lost their leadership position, out of which 4 belonged to the public sector.
3. Four new leader banks were added in 2008-09. These included 3 public sector and 1 private sector bank.

Table 4 was further disintegrated into three tables (Tables 5, 6, and 7), for further analysis.

Efficiency Scores

Scale efficiency scores of Indian banks, during the two years under study, are shown in **Table 5.**

Table 5

Scale Efficiency Scores over the Years

	Year	
Efficiency	**2007-08**	**2008-09**
Mean CRS Efficiency	0.96	0.95
Mean VRS Efficiency	0.97	0.97
Mean Scale Efficiency	0.98	0.98

As shown in the table, Indian banks differ significantly in the scale efficiency during the two years. For the year 2008-2009, the technical efficiency (CRS) had a mean score of 0.95 per cent for all 49 DMU of which 20 lie below the average value.

Table 6

Distribution of Banks based on CRS Efficiency

Class of Banks	Year			
	2007-08		2008-09	
	No. of Banks	Total	No. of Banks	Total
Leaders	Public Sector: 15	25	Public Sector: 10	19
	Private Sector: 10		Private Sector: 09	
Moderate Performers	Public Sector: 04	7	Public Sector: 06	9
	Private Sector: 03		Private Sector: 03	
Laggards	Public Sector: 09	17	Public Sector: 10	21
	Private Sector: 08		Private Sector: 11	
	Total	49	Total	49

Technical Efficiency of the Banks

Table 6 shows increase in laggards' in 2008-09 as compared to 2007-08.

As shown in the table, there is a positive improvement in the moderate performers in the public-sector banks, thereby improving the efficiency in the mediocre banks due to technological upgradation and competitiveness among the employees. Further, it is observed that there is a reduction among leaders due to tough competition among them. Moreover, the PSU banks have maintained their leadership position in tact.

The BCC model assumes variable return to scale (VRS) by considering the sizes of utilities. This formulation ensures that similar utilities are benchmarked and compared with each other. These distribution of banks by VRS Efficiency is shown in **Table 7**.

It is observed that there is a reduction of the leaders in 2008-09. The public-sector banks maintained their leadership and performance of these banks was better than that of the private-sector banks. In consecutive financial years, the public-sector banks positions, on the average, was at about the same distance from the BCC frontiers. The scale efficiency score improved, i.e., out of 10 banks, 7 public-sector banks and 3 private-sector banks consistently maintained the public-sector improvement in the performance. Moreover, there was inefficiency in 15 banks, including 8 public-sector and 7 private-sector banks, there was no change in scale efficiency in 24 banks. They maintained their status quo. This implies that the public-sector banks were in an advantageous position as compared with the private banks and their global inefficiency was mainly attributed to their inefficient operation and

Table 7

Distribution of Banks based on VRS Efficiency

Class of Banks	Year			
	2007-08		2008-09	
	No. of Banks	Total	No. of Banks	Total
Leaders	Public Sector: 10	19	Public Sector: 16	28
	Private Sector: 09		Private Sector: 12	
Moderate Performers	Public Sector: 06	9	Public Sector: 04	7
	Private Sector: 03		Private Sector: 03	
Laggards	Public Sector: 10	21	Public Sector: 08	14
	Private Sector: 11		Private Sector: 06	
	Total	49	Total	49

their poor management. Out of the 49 banks, 19 banks were technically as well as scale-efficient. It means that they utilised the resources most efficiently and operated at the optimum level. The public sector-4 bank has a fully efficient BCC score and a low efficiency (0.87). This can be interpreted as the global inefficiency of this bank.

CONCLUSION

The study has revealed that some banks were inefficient and were not operating at the optimal level of operations. The existence of scale inefficiency suggests that there is need for restructuring of present operations which may help the banks to compete globally. To improve the performance of the banks, a number of policy measures are required. These include encouraging competition and restructuring, followed by mergers. It is suggested that the banks should be well equipped with the state-of-the art information technology, strong human resources team, and well-trained and highly motivated employees who can help the banks to reach newer heights in the global scenario.

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There are two kinds of truth: the truth that lights the way and the truth that warms the heart. The first of these is science, and the second is art. Neither is independent of the other or more important than the other. Without art science would be as useless as a pair of high forceps in the hands of a plumber. Without science art would become a crude mess of folklore and emotional quackery. The truth of art keeps science from becoming inhuman, and the truth of science keeps art from becoming ridiculous.

Raymond Thornton Chandler
Writer (1888-1959)

MENACE OF PLAGIARISM

In the last issue of our journal, we raised a matter of public concern, namely the menace of plagiarism, which is widespread and going unabated. We often receive articles for publication which are either partly or fully copied from others' works, despite the author having given a declaration to the effect that the article is original and an exclusive contribution to our journal, and having submitted a certificate of cessation of copyright in our favour. The dare-devilry is shocking! This is outright deceit and cheating. Amusingly, the practice is not confined to Indian authors; foreign authors are no exception.

This time again, we came across two such cases, one each from Indian and foreign authors. The articles could have gone into print, but for the alacrity and the incisive eye of our referees.

We have been facing another problem of somewhat similar nature, involving professional ethics. We spend a lot of efforts, time, and money in reviewing, short-listing, and editing of each article which passes the preliminary scrutiny. When asked to make further revision or supply the missing information, some of the authors stop communicating with us and submit the paper improved through our efforts to some other journal. They do so despite having submitted a declaration that the paper is an exclusive contribution to our journal, and shall not be withdrawn at a subsequent stage, unless rejected/permitted by the Editor.

It needs no emphasis that plagiarism is not only an unethical practice, particularly so for an academician, it is also a violation of the code of conduct governing the services of University teachers, but also amounts to a criminal offence, under the Copyright Act, 1957 (which certainly does not grant us a 'right to copy!'). Any infringement of copyright under the Act is an offence, punishable with imprisonment for a minimum period of six months, extendable up to three years, and a fine, ranging from Rs. 50,000 to Rs 2 lakhs.

It is worthwhile to caution such unscrupulous people. Many people have already faced disciplinary action leading to their dismissal from service. These include teachers at all levels – lecturers, associate professors, professors (including one in a top Central university, one in a top IIM, and one in a State university), and one Vice-Chancellor of a State university.

Writing an article is a demanding as well as a rewarding task. Those looking for an unearned reward are surely inviting trouble.

- Editor

IMPACT OF OUTSOURCING ON EMPLOYEE ATTITUDES
A Study in the Jammu Region

Jeevan Jyoti* and Himani Arora**

Abstract

Outsourcing is the strategic use of outside resources to perform activities that a firm can usually handle through internal staff and own resources. It has become a popular option for many firms. This study seeks to examine the impact of outsourcing on employee attitudes. The data was collected from 100 employees working in different manufacturing firms operating in the Industrial Estate in the Jammu region. One outsourcing construct and five employees attitude constructs were used to ascertain the impact of outsourcing on employee attitudes. The data was analysed with the help of uni-variate and bi-variate techniques. Reliability and validity of the scales were also checked. The study has revealed that most of the non-core, non critical activities and non-core, critical activities were outsourced and companies did not outsource core critical activities. Furthermore, outsourcing had a positive effect on morale and job security and a negative effect on job satisfaction and intention to leave.

Key words: ***Outsourcing, Employee attitudes, Job satisfaction, Job security, Morale, Commitment, Intention to leave***

RELEVANT CONCEPTS

Outsourcing

OUTSOURCING is an arrangement where one firm provides services to another, which could be or usually have been provided in-house (Nag, 2004). In its most succinct form, outsourcing can be defined as the delegation of authority to another party for the provision of services under a business contract that incorporates the service-level agreement relating to cost, quality, and timely delivery of the product or service. It is a management strategy where an organisation assigns major non-core functions to a specialised and efficient service-provider, thereby saving time and money (Stroh and Treehuboff, 2003). It is nothing less than the wholesale restructuring of the corporation around the core competencies and outside relationship (Elmuti, 2003). In recent times, however, the concept of outsourcing has experienced a vast change. The traditional outsourcing, which emphasised benefits, like cost reduction, has recently been replaced by productivity, flexibility, and

* **Dr. Jeevan Jyoti** is Assistant Professor in the Commerce Department, University of Jammu, Jammu; e-mail: *jyotigupta64@rediffmail.com*

** **Ms. Himani Arora** is Ph.D. Scholar in the Commerce Department, University of Jammu, Jammu; e-mail: *himani_arora112@rediffmail.com*

innovation. Therefore, successful implementation of an outsourcing strategy has resulted in cutting cost, increasing and improving capacity, quality, profitability, productivity, financial performance, and lowering innovation cost and risk (Elmuti, 2003).

Employee Attitudes

Attitudes are the feelings and beliefs that largely determine how employees will perceive their environment, commit themselves to intended actions, and ultimately behave (Newstrom, 2007). It is used in describing people and explaining their behaviour. It is a persistent tendency to feel and behave in a particular way towards some object. It forms a mental set that affects how people view something. It can be broken down into three components: (1) Emotional attitude, (2) Informational attitude, and (3) Behavioural attitude (Luthans, 2011). Employee attitude has five dimensions: (1) Job satisfaction, (2) Job security, (3) Morale, (4) Employee's intention to leave, and (5) Commitment. Job satisfaction is considered to be the most important dimension of attitude. An employee can have a positive or negative attitude, which can affect his performance. With a positive attitude, he works harder and with interest, and avails of a smaller number of leave, thereby improving his performance. On the other hand, an employee with a negative attitude does not work hard, takes it as a burden, prefers exit, and has little loyalty to his work, thereby reducing his performance and productivity.

The world has embraced outsourcing and companies have adopted its principles to expand into other markets (Elmuti, 2003). Outsourcing is a new *mantra* to reduce costs, improve quality, help the organisation focus on core competencies, and reduce specialised skills and knowledge needed for faster innovation (Bourne, 2002; Fan, 2000; Nag, 2004; Phipps and Meristosis, 2005). It is one of the recent business strategies that has emerged in response to the demand for more efficient ways to address organisational competitiveness (Jiang and Qureshi; 2006). Companies have realised that in a highly-turbulent environment, it is essential to focus on some core competencies rather than getting involved in non-core activities, which is possible by outsourcing the latter (Sivigami, 2005, p. 196).

LITERATURE REVIEW

Due to the time-constraint or availability of a specialised service-provider outside, a company often resorts to outsourcing. There are generally three types of activities in an organisation: core critical activities; non-core, critical activities; and non-core, non-critical activities (Sivigami 2005, p. 196). Companies mostly outsource the non-core, non-critical activities and some of the non-core, critical activities (Bolat and Yilmuz, 2008; Zappala, 2000). They rarely outsource core critical activities, as these are the main activities of the organisation, and are preferred to be performed in-house (Stroh and Treehuboff, 2003). By outsourcing such activities, companies are able to retain control on most vital functions and save time and money (Lawes, 1994; Baldwin, Irani, and Love, 2001).

Researchers have also examined the merits and demerits of outsourcing and the functions and types of the activities outsourced (Nayak, Sinha, and Guin, 2007; Phipps and Meristosis, 2005; Nag, 2004). Elmuti (2003) noted the activities often outsourced, like information technology, management services, payroll, human resource functions, executive-level researches, distribution or sale of product or services, manufacturing of components, product design, and research process. Bolat and Yilmuz (2008) added some more activities for outsourcing, viz., room cleaning, laundry, kitchen operation, gardening, transportation, and security services. The above-mentioned activities of outsourcing are supported by several other researchers (Nag, 2004; Gilley and Rasheed, 2000; Phipps and Meristosis, 2005). Some researchers have focussed on the reasons and motivation for outsourcing (Fan, 2009: Stroh and Treehuboff, 2003; Phipps and Meristosis, 2000; Kakabadse and Kakabadse, 2002; Nag, 2004; Nayak, Sinha, and Guin, 2007; Mukherjee and Ramachandaran, 2007). While Elmuti (2003) noted that cost reduction was the most important reason for outsourcing, Stroh and Treehuboff (2003) found a variety of both financial and non-financial reasons for outsourcing, such as getting re-engineering benefits, gaining access to world-class capabilities, benefiting from an infusion of cash, freeing up resources for other purposes, making capital funds available, reducing operating expenses, minimising risk, and benefiting from the resources not available internally.

Outsourcing trends and strategies, that companies take into account while effectively managing their outsourcing activities, have also been established (Gilley and Rasheed, 2000; Elmuti, 2003; Baldwin, Irani, and Love, 2001).

The researchers have divergent views on the effect of outsourcing on organisational performance. While Jiang and Qureshi (2006) found a positive relationship between outsourcing and organisation performance, a negative relationship was noted by Ainavolu (2007). Moreover, while Bolat and Yilmuz (2008) found that the organisational performance had increased after outsourcing, Gilley and Rasheed (2000) noted that it had no significant direct effect on the firm's performance and the relationship was mediated by the firm's strategy and environment dynamism.

Outsourcing can affect the morale of employees (Elmuti, 2003). If the in-house management of a function is poor and the decision to outsource it is seen as providing a better opportunity for employees, they would view the decision to outsource in a positive way. Conversely, if the outsourcing agency fails to meet the expectation, the reaction is likely to be negative (Stroh and Treehuboff, 2003; Bourne, 2002). Applebaum and Pratt (2008) noted a fall in the employees' morale (or sagging morale) due to outsourcing.

When some employees are transferred to a vendor organisation, it would result in fear and resistance among them, they would experience emotional upheaval (Armstrong-Stassen, 1993) and feel pessimistic, experience anxiety (Goswan and Gatewood, 1997), and lack of control, which would make them feel as a commodity, resulting in their sagged morale, which, in turn, affect their job satisfaction (Domberger, 1998; Charara, 2004). Allen, Rucell, Reizenstein, and Rentz (2001) found that outsourcing leads to long-term reduction in employees' motivation, job satisfaction, and job security. Such transfer can be undesirable for the employees involved. It may result in difficult relations with the employer and a negative long-term impact (Charara, 2004). Elmuti (2003) and Morgan and Symon (2000) noted negative relationship between job satisfaction, job security, and outsourcing, since the individuals have concern about their career development and are likely to experience anxiety. They are likely to have a feeling of insecurity and difficulty in adjusting themselves with new relationship that might lead to adverse health consequences.

The study by Vries and Balzas (1997) revealed an increase in the employee's turnover due to outsourcing. Employees with self-confidence and marketable skills are more likely to leave the organisation and if they are the key people, a part of the memory of organisation disappears, leaving the organisation vulnerable (Mishra and Mishra, 1994).

The studies reviewed in the foregoing paragraphs appear to have concentrated on the reasons of outsourcing, functions or activities to be outsourced, benefits, and limitations of outsourcing. There is hardly any empirical study that examined the impact of outsourcing on employee attitudes. The present study seeks to investigate the impact of outsourcing on employee attitudes, pertaining to their job satisfaction, job security, intention to leave, commitment, and morale.

RESEARCH OBJECTIVES AND HYPOTHESES

The main objectives of the study are:

1. To measure the impact of outsourcing on employees' attitudes;
2. To ascertain the extent of outsourcing in manufacturing firms; and
3. To identify the types of activities often outsourced by firms.

In consonance with the objectives of the study, the following hypotheses were formulated.

H_{01}: Outsourcing has a positive effect on employee's morale.

H_{02}: Outsourcing has a negative effect on employees' job satisfaction.

H_{03}: Outsourcing has a negative effect on employees' job security.

H_{04}: Outsourcing has a negative effect on employees' commitment to the organisation.

H_{05}: Outsourcing has a significant effect on employees' intention to leave.

RESEARCH DESIGN AND METHODOLOGY

The present study is both exploratory and evaluative in nature. In order to make it more objective and scientific, the following steps were taken.

Generation of Scale Items

The questionnaire was designed after reviewing the existing literature and after having a discussion with the experts and interaction with the employees of the sample organisations. The questionnaire had two sections. The first section contained eight general statements about outsourcing, types of activities outsourced (22 options), and benefits of outsourcing (15 statements) (Fan, 2009; Stroh and Treehuboff, 2003; Phipps and Meristosis, 2000; Kakabadse and Kakabadse, 2002; Nag, 2004; Nayak, Sinha, and Guin, 2007: Mukherjee and Ramachandaran, 2007; Elmuti, 2003). The second section included the statements pertaining to job security (Michael, 2006), job satisfaction (Ololube, 2006), intention to leave (Mobley, Griffeth, Hand, and Meglino, 1979), morale (Mackenzie, 2007), and organisational commitment (Ugboro and Obeng, 2006).

The Sample

The data was collected from ten medium-size firms, located in the industrial area of Jammu region of the State of Jammu and Kashmir. One hundred employees (10 from each firm) were personally contacted for collecting the data, and were briefed about the purpose of the study.

Scale Purification: Exploratory Factor Analysis

The multivariate data-reduction technique of factor analysis was used for the study. The primary purpose of factor analysis is to define the underlying structure in the data matrix. It involves the examination of interrelationship among numerous variables and reduction of a large number of variables into a few manageable and meaningful sets. The factor analysis was carried out with the help of the Statistical Package for Social Sciences (SPSS, 15th version) to simplify and reduce the data. It was carried out with the Principal Component Analysis method, along with the orthogonal rotation procedure of the Varimax for summarising the original information with a minimum number of factors and the optimal coverage. The statements with factor loading of less than 0.5 and the Eigen value of less than 1.0 were ignored for the subsequent analysis (Haire, *et al.*, 2006; Sharma and Jyoti, 2006). The data reduction was performed in three steps: First, through the anti-image correlation, the items having a value of less than 0.5 on the diagonal axis were deleted. Second, the extracted communalities (the amount of variance in each variable) were checked, and the items having a value of less than 0.5 were ignored for the subsequent analysis. Third, in the rotated component matrices, the statements having multiple loadings and values of less than 0.5 were ignored. The purification of six scales was carried out separately.

Outsourcing Scale

It consisted of eight general statements about outsourcing, which were compressed under three factors, namely, impact of outsourcing on performance (F1), awareness about outsourcing (F2), and the role of outsourcing (F3). The KMO values (0.591) and Bartlet's Test of Sphericity (x^2 =95.52, $p<0.05$) revealed the adequacy of the data for factor analysis. The Eigen value is above 1. The total variance explained by these factors is 74 per cent. The relevant computations are shown in **Table 1**.

Table 1
Results from Scale Purification
(Factor Loadings, Variance Explained, Mean, S.D, KMO Values, and Eigen Values)

Scale	Factors	Mean	S.D.	F.L.	V.E. (%)	K.M.O. Values	E.V.	Avg. Mean
Outsourcing	Impact of Outsourcing on Performance (F1)							
	Financial performance	3.757	0.867	0.779	28	0.591	2.25	3.77
	Employee performance	3.512	0.939	0.745				
	Operational performance	3.515	0.905	0.853				
	Awareness about outsourcing (F2)							
	Awareness about outsourcing	4.181	0.583	0.944	25		2.03	
	Organisation practices outsourcing	4.181	0.464	0.806				
	Outsourcing (F3)							
	Plays an important role	3.787	0.927	0.813	20		1.61	
	Service-provider extends innovative ideas	3.484	1.202	0.718				
	Beneficial for organisation	3.786	0.926	0.632				
Job security	**Job Security (F4)**							
	'The job is secured'	3.6061	1.02	0.726	63	0.776	2.53	3.66
	'The job provides steady employment'	3.424	0.969	0.823				
	'Secured with the type of work they do'	3.909	0.804	0.834				
	'Will like to join some other organisation on the same pay'	3.697	0.769	0.795				
Job satisfaction	**Job Satisfaction (F5)**							
	'Satisfied with the kind of work I do'	3.848	0.618	0.905	41	0.551	1.67	3.61
	'Satisfied with my fellow colleagues'	3.848	0.618	0.911				
	Satisfaction with Work Load (F6)				37		1.5	
	'Highly satisfied with this job'	3.303	0.809	0.867				
	'Feel overburdened with my job'	3.454	0.904	0.846				
Intention to Leave	**Intention to Leave (F7)**							
	'I frequently think of quitting my job'	2.697	0.9180	0.844	51	0.700	3.57	2.68
	'No opportunity for advancement'	2.212	1.053	0.856				
	'I want to quit my job'	2.303	1.015	0.912				
	'Join other organisation on the same pay'	2.000	1.000	0.845				
	'I do my job under lot of stress'	2.697	1.185	0.724				
	Other Opportunities (F8)							
	'Have the opportunity to get the better job'	3.606	0.998	0.928	27		1.89	
	'Have other options available'	3.272	0.875	0.920				
Commitment	**Commitment I F(9)**							
	'I feel as if the organisation problems are my own'	4.181	0.527	0.648	32.17	0.592	3.5	3.90
	'Feel emotionally attached'	3.909	0.678	0.781				
	'Highly committed to my job'	4.090	0.578	0.765				
	'Organisation has a great deal of personal meaning for me'	3.848	0.712	0.688				
	'I feel I am needed in this organisation'	3.908	0.677	0.811				
	'I am loyal to this organisation'	4.151	0.565	0.559				
	Commitment II F(10)							
	'Positive work climate'	3.848	0.507	0.916	23.92		2.63	
	'Right place to work'	3.909	0.630	0.902				
	'Like to represent organisation favourably to outsiders'	3.54	0.794	0.782				
	Commitment III F(11)							
	'I feel sense of belongingness here'	3.545	0.794	0.903	14.98		1.65	
	'I always like to put my efforts for the success of this institution'	4.060	0.496	0.680				

	Morale I F(12)							
	'Medical facilities are available'	3.909	0.842	0.909	24.30		1.94	
	'Job allows to sharpen my skills'	3.818	0.808	0.810				
	'Appropriate training is provided'	3.545	0.869	0.556				
	Morale II F(13)							
	'Chances of growth in my organisation'	3.939	0.609	0.814				
Morale	'Overall infrastructure is good'	3.818	0.527	0.744	24.04	0.643	1.92	3.74
	'Salary is adequate in view of the amount of work'	3.424	0.830	0.714				
	Morale III F(14)							
	'Management appreciates skills, knowledge and abilities'	3.484	0.905	0.854	21.40		1.71	
	'There are opportunities to acquire new knowledge and skills'	4.000	0.790	0.847				

Key: FL= Factor Loadings; SD=Standard Deviation; V.E=Variance Explained; EV Eigen Value.

'Job Security' Scale

The scale initially consisting of five statements got compressed to only one factor (F4) after two rounds of factor analysis. The KMO values (0.776) and Bartlet's test of sphericity (x^2=38.609, $p<0.05$) revealed the adequacy of the data for factor analysis. The total variance explained by this factor came to 63 per cent (Table 1).

'Job Satisfaction' Scale

The scale initially consisted of nine statements, which got reduced to four, under two factors, namely, job satisfaction (F5) and satisfaction with work load (F6), after five rounds of factor analysis. The KMO values (0.551) and Bartlet's test of sphericity (x^2=28.13, $p<0.05$) revealed the adequacy of the data. The Eigen value is greater than 1. The total variance explained by these factors came to 72 per cent.

'Intention to Leave' Scale

The scale initially consisted of eight statements which got reduced to seven, under two factors, namely, ITL (F7) and other opportunities (F8), after two rounds of factor analysis. The KMO values (0.700) and Bartlet's test of sphericity (x^2=148.23, $p<0.05$) revealed the adequacy of the data for factor analysis. The total variance explained by the factors is 78 per cent.

'Organisation Commitment' Scale

The scale originally consisted of twelve statements, which got reduce to eleven, under three factors, namely, commitment I (F9), commitment II (F10), commitment III (F11), after four rounds of factor analysis. Here again, the KMO values (0.592) revealed the adequacy of the data for factor analysis. The Eigen value is greater than 1. The total variance explained by the factors is 71 per cent.

'Morale' Scale

The scale consisted of thirty statements, which got reduced to eight, under three factors, namely, morale I (F12), morale II (F13) and morale III (F14). The KMO value (0.643) revealed the adequacy of the data for factor analysis. The Eigen value is also good (>1). The total variance explained by the factors comes to 69 per cent.

Reliability Test

The reliability of the scale was assessed through Cronbach's alpha, which measures the internal consistency of the scale. The relevant computations are shown in **Table 2**

As shown in the table, the alpha reliability for each of the scale is high (above 0.7), indicating the internal consistency.

Table 2

Results of Reliability Analysis

Construct	Cronbach's alpha
Outsourcing	0.773
Job security	0.797
Job satisfaction	0.732
Commitment	0.846
Morale	0.756
Intention to leave	0.877

Validity Test

The construct validity was judged in three ways:

Face Validity/Content Validity: The face/content validity of the constructs, namely, outsourcing, job security, job satisfaction, morale, intention to leave (ITL), and commitment was duly assessed through the review of literature and the discussions held with the subject experts, and company employees.

Convergent Validity: The convergent validity refers to the extent to which the measure correlates with other measures that were designed to test the same thing. A high correlation indicates that the scale was measuring the concept (Haire, *et al*., 2006). The convergent validity has been proved through high factor loadings and high variance explained by the scale (Table 1).

Discriminant Validity: The discriminant validity refers to the extent to which the measure differs from other similar measures designed to test different concepts (Malhotra, 2007). The variance explained by each construct should be greater than the squared correlation between the constructs. Since the variance explained for each of the construct, namely, outsourcing, job security, job satisfaction, ITL, commitment, and morale, is greater than their squared correlation, it affirms the discriminator validity. The relevant computations are shown in **Table 3**.

Nomological Validity: It refers to the extent to which the scale correlates in theoretically-predicted ways with the measures of different but related constructs (Malhotra, 2007). The nomological validity was proved as outsourcing was found to be related with the employees' job satisfaction, job security, commitment, morale, and intention to leave.

Limitations

The subjectivity in the data cannot be ruled out because the respondents furnished the information on the basis of their own perception. Furthermore, the study was limited to selected employee attitudes.

MAJOR FINDINGS

Extent of Outsourcing

The overall extent of outsourcing in the manufacturing firms is found to be moderate (M=3.77, Table 1). It is also noteworthy that an overwhelming majority (96 per cent) of the respondents were aware of the concept of outsourcing and an equal number of organisations were having the practice of outsourcing. A majority (69 per cent) of the respondents favoured outsourcing, saying that it played an important role as the service-provider extends innovative ideas (57 per cent), which

Table 3

Computations of Discriminant Validity

	Outsourcing	Job Satisfaction	Job Security	Intention to Leave	Organisation Commitment	Morale
Outsourcing	0.73					
Job Satisfaction	0.06	0.79				
Job Security	0.24	0.018	0.63			
Intention to Leave	0.17	0.176	0.307	0.78		
Organisational Commitment	0.014	0.202	0.031	0.375	0.71	
Morale	0.0081	0.00022	0.060	0.0064	0.020	0.69

Note: *The values on the diagonal axis show variance explained and the values below the diagonal axis are the squared correlations between the different scales.

enhance the financial performance, employee performance, and operational performance. Certain activities, including training, designing, and food security, were largely outsourced and the rest of the activities, viz., payroll, research and development, sales, maintenance, information technology, security services, purchasing, customer service, assembling, repair, legal activities, banking, and manufacturing, were not much outsourced. Thus, the companies outsourced only non-core, critical activities and non-core, non-critical activities and did not outsource the core critical activities. Improved quality, reduction in cost, and focus on core competencies were considered as the most important benefits of outsourcing. Other benefits, like reduction in specialised skills, availability of materials abroad, and the non-availability of resources internally, increase in revenue, faster innovation, and establishing their presence in foreign markets, are not considered as the major benefits of outsourcing.

Analysis of Job Security

As shown in Table 1, the overall degree of job security is moderate. The average security score is 3.66, on a 5-point Likert's scale. A large majority (73 per cent) of the employees feel secured because their job provided steady employment. Again, an overwhelming majority (79 per cent) of the employees felt secured with the type of work they did. Hence, the employees were satisfied with their job.

Job Satisfaction

As shown in the table, the employees were moderately satisfied with their job (3.61). An overwhelming majority (88 per cent) of the employees felt satisfied with the type of work they did and were also satisfied with their colleagues (88 per cent). A big chunk of employees (48.5 per cent) felt overburdened with their job. So, it can be concluded that the majority of the employees were satisfied with their job, but they felt a bit overburdened.

Employees' Intention to Leave

The overall degree of the employees' intention to leave is low (M=2.68). A majority (61 per cent) of the employees felt that they had the opportunity to get a better job in other organisations and felt stressed while performing their duty (39 per cent). They also felt that they had no opportunity for advancement in their present job (M=2.69). At the same time, they did not intend to quit the present job (91 per cent) and did not want to join any other organisation on the same salary (M= 2.00). Thus, it can be concluded that even though the employees had the opportunity to join other organisation, due to their loyalty to the present job, they did not intend to quit the job.

Organisational Commitment

The overall degree of commitment was found to be good (M=3.90). A whooping majority (88 per cent) of the employees felt that they were committed to their job and there was a positive work climate (M=3.848). A still larger number (91 per cent) of the employees were found to be loyal to their organisation and felt obliged to stay there (M=4.060). In a large majority (82 per cent) of the employees, the feeling of belongingness was one of the major considerations to stay with the company. It is noted that if the employees were attached to their present organisation, they would present its favourable picture to outsiders.

Employee Morale

It is noted that the overall degree of morale is good (M=3.74). As shown in the table, a massive majority (82 per cent) of the employees agreed that medical facilities were available. As many as 79 per cent employees felt that their job allowed to sharpen their professional skills (M=3.82). Furthermore, they had chances of growth in their present organisation (M=3.94) and the overall infrastructure was considered good and the salary paid to them was worth their value (M=3.42). The employees felt happy because the management appreciated their skills and abilities (M=3.48). It was also noted that the employees had a good level of morale as they felt their job presented opportunities for advancement and their efforts were duly recognised by the management.

Impact of Outsourcing on Employees' Attitudes

Regression analysis is a powerful and flexible procedure for analysing associative relationship between a metric dependent variable and one or more independent variables (Malhotra, 2007). All the necessary conditions of linearity, normal distribution, and homocedasticity were satisfied before applying the test. Linear regression analysis was conducted to ascertain the relationship of outsourcing with employee's job satisfaction, job security, intention to leave, morale, and commitment. The relevant computations are shown in **Table 4**.

As shown in the table, there is a relationship between outsourcing and job satisfaction (β= -0.367, $p < 0.05$), causing about 14 per cent variation in job satisfaction (*R2*=0.135, *R*=0.367). Therefore, the null hypothesis that outsourcing negatively affects employees' job satisfaction, stands accepted.

The regression equation is:

$$Y = a + x_1 b_1$$

or, *Job satisfaction= 5.719-0.367(Outsourcing*)

There is a positive impact of outsourcing on job security (β = 0.478, $p < 0.05$). It is causing about 23 per cent variation in job security (Table 4). Therefore, the null hypothesis that outsourcing negatively affects the job security, stands rejected.

The regression equation is:

$$Y = a + x_1 b_1$$

or, *Job security= 8.053+0.478(Outsourcing)*

Furthermore, there is a negative relationship between outsourcing and intention to leave (β = -0.360, $p < 0.05$), causing about 13 per cent variation in the intention to leave (*R2*=0.130, *R*=0.360). Therefore, the null hypothesis that outsourcing significantly affects the employee's intention to leave is accepted.

The regression equation is:

$$Y = a + x_1 b_1$$

or, *Employee's Intention to leave= 4.982-0.360 (Outsourcing)*

It is noted that there is a positive but insignificant relationship between outsourcing and the commitment among employees (β = 0.119, $p > 0.05$) Therefore, the null hypothesis, that there is a negative effect of outsourcing on the employees' commitment, stands rejected.

The regression equation is:

$$Y = a + x_1 b_1$$

or, *Commitment= 3.751+0.119(Outsourcing)*

A positive relationship is found between outsourcing and the employees' morale (β = 0.257, $p = 0.042$), causing about 6 per cent variation in morale (*R2*=0.257, *R*= 0.066). The hypothesis, that if the employees have a positive perception of the outsourced function, their morale will be high, stands accepted. The regression equation is:

$$Y = a + x_1 b_1$$

or, *Morale= 2.791+0.257(Outsourcing)*

Table 4

Model Summary

Independent Variable	Dependent Variables	*R*	R^2	β	Sig.
Outsourcing	Job security	0.478	0.228	0.478	0.005
	Job satisfaction	0.367	0.135	-0.367	0.035
	Intention to leave	0.360	0.130	-0.360	0.039
	Organisational commitment	0.117	0.014	0.117	0.362
	Morale	0.257	0.066	0.257	0.042

CONCLUSION AND POLICY IMPLICATIONS

The study has revealed that outsourcing was being practised in most of the selected organisations. It did influence the employees' attitudes. The non-core, non-critical activities, like food security, were largely outsourced, which is in line with an earlier study (Bolat and Yilmuz, 2008). Among the non-core, critical activities, only training and designing were being outsourced and the rest of the non-core, critical activities, like payroll, research and development, and sale were not fully outsourced. Core critical activities were not at all outsourced which is in line with the earlier researches. It suggests that outsourcing was not in its full boom in these industries. Outsourcing has positive effect on employee's morale, which is consistent with the earlier researches. It is found that the employees who have positive perception of outsourcing would view it positively. So, they view outsourcing as vital for the firm's health. Moreover, outsourcing has a positive but insignificant effect on the employees' commitment which is not consistent with the earlier researches. The study has revealed that the employees were committed to their present job and did not intend to quit the job. Furthermore, job security was found to have a positive effect on outsourcing, which is not consistent with the earlier research. It is noted that employees were so loyal to their job that even if the opportunities were available, they did not want to leave the job. Moreover, the management was not rationalising their workforce. Therefore, it affected job security positively. Outsourcing has a negative effect on the job satisfaction, which is consistent with an earlier study (Allen, *et al.*, 2001). It is possible that some of the jobs which they were very competent at were outsourced, resulting in the decline in their satisfaction. Outsourcing is inversely related with the intention to leave, which is not consistent with earlier research. It is concluded that the employees no more view outsourcing negatively because their mindset has changed; they now feel comfortable with their present job and do not want to quit it. Moreover, the employees realise that by outsourcing non-core but critical activities and non-core but non-critical activities, the spare time can be used by the organisation in core critical activities and for the development of their employees. Thus, employees have started viewing outsourcing in a positive way.

Employers should present a positive picture of outsourcing before their employees so that they do not feel de-motivated due to outsourcing of some of the activities. The managers should make the employees aware of the benefits of outsourcing, assuring that their time saved from outsourcing of activities will be spent fruitfully and they will be provided specialised training. This would result in employees having a positive view of outsourcing.

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There was a time when corporations played a minor part in our business affairs, but now they play the chief part, and most men are the servants of corporations.

Blaise Pascal
Philosopher and mathematician (1623-1662)

Language is the armoury of the human mind; and at once contains the trophies of its past, and the weapons of its future conquests.

Samuel Taylor Coleridge
Poet, critic, and philosopher (1772-1834)

It is unwise to be too sure of one's own wisdom. It is healthy to be reminded that the strongest might weaken and the wisest might err.

Mohandas K. Gandhi
(1869-1948)

When small men begin to cast big shadows, it means that the sun is about to set.

Lin Yutang
Writer and translator (1895-1976)

VIEWERS' PERCEPTION OF CELEBRITY-ENDORSED TV ADVERTISMENTS
A Study in West Bengal

Indrani Majumder*

Abstract

In this era of globalisation, celebrity endorsement has become popular among advertisers all over the world. They try to use the fame of celebrities in the fields of film, sports, and television to promote their products and services. In order to position or reposition their brand, the companies often use the public recognition of a celebrity for his expertise in a particular field. Celebrity endorsements span across different products and services, including food and beverages, paints, home appliances, readymade garments, hotels, and banks. The celebrities used in various ads are mostly film stars and sports persons. The present study seeks to examine the demographic aspects of popular celebrities and the effectiveness of the celebrity-endorsed TV ads. For the purpose, a survey of selected customers was conducted in five towns of the Nadia district of West Bengal (India). The study has revealed that the advertisers should develop celebrity-endorsement strategies for TV ads, with a clear demographic perspective of the target audience. It surely brings the brand increased media exposure, if designed with a clear understanding of the target audience.

Key words: ***TV ads, Celebrity endorsement, Viewers' perception, Purchase intention, Brand image***

INTRODUCTION

CELEBRITY endorsement in advertisements started its journey with the endorsement of Pears soap, in 1893, by a British actress, Lillie Langtry (Bergstrong and Skarfstad, 2004). In India, the FMCG giant Hindustan Unilever Ltd. (HUL), then known as Hindustan Lever Limited, applied this strategy in the early 1950s, for their beauty soap, Lux. In recent years, the use of celebrity-endorsed advertisements has become a common tool among the advertisers. It is often seen as an integral part of the integrated marketing communication. It is perceived as a winning formula for building corporate and brand image. To make a product visible, to develop a pre-purchase, positive attitude towards the brand, and to generate new demand, almost every company, now-a-days, runs after popular celebrities. Cinema and television have particularly extended the scope of endorsement as an advertising technique.

* Ms. Indrani Majumder is Assistant Professor (Marketing) in the Department of Commerce, Vidyasagar University, Midnapore, West Bengal; e-mail: *indrani.m09@gmail.com*

Celebrities' word-of-mouth helps in positioning and repositioning a brand by extending their personality, popularity, social status, and/or expertise in the field of the brand.

Research has shown that, in general, celebrity endorsement influences the consumer perception and attitude towards the advertisement and the brand, which hightens the purchase intention and consequently, increase the sale. Scholars have also argued that celebrity-endorsers are more effective than non-celebrity-endorsers in terms of arousing the intension to purchase and creating the actual sales (Erdogan, 1999). Celebrity-endorsers have the potential of serving a valuable role in enhancing a brand's competitive position and developing brand equity (Tellis, 1998). Horton and Wohl (1956) have observed that individuals have a tendency to form illusions of an interpersonal relationship with celebrities. They sought to establish a link between the celebrity endorser and the consumer perception and attitude towards the endorsement and, ultimately, the endorsed product. They tried to find out the most influential demographic factors that influence the attitude formation towards celebrity endorsement and to ascertain whether celebrity endorsement had any role in the consumer's decision-making process. They highlighted the success factors of celebrity-endorsed advertisements.

Portrayal of Celebrities in TV Ads

The period of 1950 to 1980, when only a few channels of communications were available to the marketer, was the pioneering phase of celebrity-endorsement in the Indian ad industry. Only some of the big companies introduced the concept of celebrity-endorsement based on their global experience. The then Hindustan Lever Limited (since renamed as Hindustan Unilever) used a Hindi film actress to endorse their beauty soap, LUX, during the 1950s. During the 1980s and afterwards, Indian ad industry saw the swelling of a new trend. TV has given a momentum to this practice of promotion. The sports persons were the advertiser's choice, at that time. Cricketer Farokh Engineer was the first sports person endorse in India for Bryl cream. Vimal, Thums-up, Gwalior suitings, and Dinesh suitings are among the other brands that used tactfully the sports persons' appeal. At that time, advertisements featuring stars, like Tabassum (Prestige pressure cooker), Jalal Agha (*Pan Parag*), Kapil Dev (Palmolive shaving cream), and Sunil Gavaskar (Dinesh suitings) became the popular endorsers. When Palmolive used Kapil Dev in the 1980s, his line 'Palmolive da jawaab nahin' became famous and is remembered even today. Pataudi gave Gwalior suiting a strong competitive edge and pushed it to Number 2 position in the consumers' perception in the suitings market.

The recent scenario of celebrity endorsement in TV advertisements in India, as studied by AdEx India, a division of TAM Media Research, is given in **Table 1**.

Table 1

Celebrity Endorsements in TV Ads: Trends over the Years

Celebrities Type	Year 2010	Year 2009	Year 2008	Year 2007	Year 2003
Film Actor	41 per cent	37 per cent	47 per cent	50 per cent	44 per cent
Film Actress	44 per cent	44 per cent	34 per cent	31 per cent	21 per cent
TV Actor	1 per cent	2 per cent	1 per cent	3 per cent	1 per cent
TV Actress	1 per cent	2 per cent	2 per cent	2 per cent	7 per cent
Sports Persons	12 per cent	15 per cent	16 per cent	14 per cent	27 per cent

Source: AdEx India

As shown in the table, celebrity endorsement on TV has been on a growth curve, and the celebrities from the film industry accounted for 85 per cent share of the overall celebrity-endorsed ads on TV in 2010, and Bollywood actresses accounted for a larger share of celebrity-endorsement than the film actors. Sports and TV personalities followed the film celebrities in the endorsements race.

Table 2 shows the ranks of celebrities from different fields according to the number of endorsements.

Table 2

**Ranks of Celebrities
(Based on No. of Endorsements)**

Year 2010		Year 2009		Year 2008		Year 2007	
Name	**No.**	**Name**	**No.**	**Name**	**No.**	**Name**	**No.**
M S Dhoni	28	M S Dhoni	26	Shahrukh Khan	18	Shahrukh Khan	21
Shahrukh Khan	23	Shahrukh Khan	21	M S Dhoni	15	Amitabh Bachchhan	20
Sachin Tendulkar	18	Kareena Kapoor	15	Hrithik Roshan	11	Sweta Tiwari	19
Kareena Kapoor	13	Sachin Tendulkar	15	Amitabh Bachchhan	10	Sachin Tendulkar	17
Amitabh Bachchan	13	Katrina Kaif	14	Saif Ali Khan	8	Rahul Dravid	16

As shown in the table, Mahendra Singh Dhoni topped the list of celebrities endorsing for maximum advertisements on TV during 2010. Moreover, shampoo was the top product in celebrity-endorsement in TV ads.

SURVEY OF LITERATURE

The main objective of the marketing communication programme of any business organisations is to touch the heart and mind of the target audience and afterwards it should create an image of success and prosperity for them when they use the products. The use of human models has been advocated as it could provoke attitudinal and emotional reactions (Kanungo and Pang, 1973). Therefore, humans who are placed as models and are seen as supporting the advertiser and its claims are known as endorsers (Tellis, 1998). Over recent decades, the use of celebrity endorsement in TV advertising has been rapidly increasing looking into the substantial positive impact on financial returns for the companies that use them (Endorgan, 2001). Many researchers have confirmed that the celebrity endorsement can have that impact. It may have impact on the consumer's recall, attention and purchase intentions. Researches have shown that celebrity endorsement help in increasing the recall value of the advertisements. Companies prefer celebrity-endorsed advertisements to minimise the adverse effect of media clutter. Specific image, high profile, and familiarity of a celebrity endorser basically make the advertisement distinctive (Atkin and Block, 1983; Sherman, 1985).

The studies conducted by Friedman and Friedman (1979) and Atkins and Block (1983) have established that in the case of high-involvement situation, celebrity-endorsed advertisements are appropriate, especially where the social and psychological risks are perceived to be high. Atkin and Block (1983) and Petty, *et al.* (1983) also found that the celebrity-endorsers helped produce more positive attitude towards an advertisement and resulted in greater purchase intentions than the non-celebrity-endorsers. Friedman and Friedman (1979) noted that consumers liked to purchase expensive and complex products that were endorsed by expert celebrities rather than by typical customers. According to them, a celebrity-endorser could lead to higher believability, a more favourable evaluation of the product advantage and a significantly higher intention to purchase.

Celebrities have the potential of helping the advertisements to stand out from the surrounding clutter, guiding towards an improved communicative ability by cutting through excess noise in a communication process (Sherman, 1985). McCraken (1989) argued that celebrities had the capability of delivering meanings of extra depth, power, and refinement and also offered a range of lifestyle and personality. According to them, another reason for the use of celebrity endorsement is that it has a strong impact on the learning style and memory which is critical to the success of the marketing communication. This is because most consumers are not in a purchasing situation when they come into contact with the brand message.

Jagdish and Wagner (1995) observed that celebrities made the advertisement believable and enhance the message recall. Celebrity spokespersons are used in marketing because they provide a set of characteristics that support consumers in evaluating the brand involved (Martin, 1996). The study, conducted by O'Mahony and Meenaghan (1998), revealed that a consumer held a positive attitude towards celebrity-endorsements. Potential advantages of utilising celebrity-endorsers are that it can increase attention, polish the image of the brand, especially when a brand is going to be introduced in the market or the brand is repositioned (Pelsmacker, *et al.*, 2004). The younger people look upon the celebrity as their role model (Choi and Rifon, 2007).

However, an opposite view is also held by many researchers. When any negative information spreads about a celebrity, it influences not only the consumer's view of the celebrity, but also the endorsed product (Klebba and Unger, 1982). Tom, *et al.* (1992) found that non-celebrity endorsers or created endorsers were more effective in creating a link to the product than the celebrity endorsers, since in the non-celebrity endorsers, the consumers are significantly more focussed on the brand and its features, whereas with celebrity-endorsers the subjects were more concentrated on the celebrity in the advertisement. Moreover, companies have a limited control over the celebrity's personality, which can also result in a 'high risk and no gain' situations (e.g., the "scandals" surrounding certain celebrities, like Michael Jackson, Kate Moss, Britney Spears, and Paris Hilton). Their argument was based on the fact that companies had more controlling power over created endorsers and they built these characters in such a manner that they were fitting with the brand and the target audience and that these characters were not allowed to endorse more than one brand. Overshadowing, which is better known as the 'vampire effect', occurs when the celebrity-endorser appears in the presence of multiple other stimuli which all compete to form a link with the celebrity endorser. Negative information and publicity regarding the celebrity is one risk associated with the use of celebrity endorsers (Till, 1998). For Evans (1998), it is a fairly familiar problem that tends to 'water out' the image and association present between the celebrity and the brand being endorsed and the one that leads to the lack of clarity for the consumer. According to Erdogan (1999), consumers fail to notice the brand being promoted because they focus their attention on the celebrity. Moreover, in the case of multiple endorsements, both in terms of a single brand hiring multiple celebrities and that of a single celebrity endorsing multiple brands, consumers often get confused about the brand endorsed. When a single celebrity endorses numerous brands, the recall and the popularity of the brand gets reduced. Not many people can remember all the brands that a celebrity endorses and the chances of losing the brand recall increases if the celebrity endorses multiple brands (Taleja, 2005). Moreover, some consumers term celebrity to be a 'puppet' used by companies, implying that they perceive the celebrity to be lying, when endorsing certain products (Temperley and Tangen, 2006).

Supporting the positive result of celebrity endorsement, Patzer (1985) affirms that physical attractiveness of the celebrity endorsers is an informational cue. Erdogan (1999) argues that physical attractiveness involves effects that are inescapable, persuasive and subtle. According to Belch and Belch (2001), a spokesperson is often chosen for his knowledge, experience, and expertise in a particular product. Moreover, a celebrity can be respected for his ability and skill in his respective field. Furthermore, a respected celebrity who endorses a brand can improve a brand's equity via the positive attitude the consumers may have towards the brand. They also state that the consumers are more easily influenced by a message coming from someone with whom they feel a sense of similarity. Schiffman and Kanuk (2010) suggest that a celebrity must be trustworthy when endorsing a product.

Thus, the earlier studies have revealed that the use of celebrities in advertisements can have a positive influence on the message recall and memory of the advertisement and, consequently, on consumers' purchase intentions. Even though some people have a negative view that there is a risk that the celebrity and/or his/her unexpected behaviour may overshadow the product, the company makes use of the celebrity's characteristics and qualities to establish an analogy with the products specialties with the objective of positioning them in the minds of the target consumers. The literature has also shown that the match between the brand and/or product and the celebrity has to be optimal. When a brand and/or product is endorsed by a celebrity-endorser, the perceived celebrity image and the perceived brand image interact with each other and the images transfer from the endorsed brand to the celebrity endorser and vice versa.

RESEARCH OBJECTIVES AND HYPOTHESES

This study has on the following key issues:

1. The attitude of consumers towards celebrity-endorsed ad;
2. The demographic factors behind the attitude development;
3. The role of celebrity-endorsed ad in the consumers' decision-making process; and
4. The major characteristics of celebrity-endorser.

In the context of the above objectives, the following hypotheses were formulated for testing:

H_{01}: Viewer's attitude towards celebrity-endorsed ads is gender-independent.

H_{02}: Viewer's attitude towards celebrity-endorsed ads is age-independent.

H_{03}: Viewer's attitude towards celebrity-endorsed ads is income-class-independent.

RESEARCH METHODOLOGY

The Data and Sample Size

The study is based on the primary data collected by personally interviewing the sample buyers. A structured questionnaire was designed, taking into consideration the objectives of the study. The demographic profile of the respondents is presented in **Table 3.**

In order to judge the role of celebrity-endorsed advertisements in the consumers' decision-making, products like refrigerator, TV, two-wheelers, 4-wheelers, and washing-machine, were chosen from the durable products category, and hair oil, tooth paste, cold drinks, health drinks, and

Table 3

Demographic Profile of Respondents

Distribution of Respondents by Age					Distribution of Respondents by Income				
Age	**No.**	**Male**	**Female**	**Per cent**	**Income Per capita* (in Rs.)**	**No.**	**Male**	**Female**	**Per cent**
Below 20 years	24	8	16	12	< 1,000	8	8	0	4
21-30 years	136	76	60	68	1,000-3,000	128	70	58	64
31-40 years	20	12	8	10	3,000-5,000	28	12	16	14
Above 40 years	20	16	4	10	5,000-10,000	36	20	16	18
					>10,000	8	8	0	4
Total	200	112	88	100	Total	200	112	88	100

Distribution of Respondents by Occupation				
Category	**No.**	**Male**	**Female**	**Per cent**
Unemployed	132	52	80	66
Blue-collar Employee	12	8	4	6
White-collar Employee	32	28	4	16
Business person	24	24	0	12
Total	200	112	88	100

Note: per capita income=HH income/no. of family members. The objective behind taking this per-capita income was to consider the income status orientation of the financially dependent respondents dress material, from the FMCGs category, were considered. From the service category, banking, insurance, and cell phone services were chosen.

In order to study the message-recall influence of the celebrity-endorsed advertisements, the names of the celebrities listed in Exhibit were mentioned to the respondents:

Exhibit

Names of Celebrities Selected for the Study

1. Mahendra Singh Dhoni (Cricketer)	8. Akshay Kumar (Film star)
2. Sachin Tendulkar (Cricketer)	9. Hrithik Roshan (Film star)
3. Katrina Kaif (Film star)	10. Shahrukh Khan (Film star)
4. Saif Ali Khan (Film star)	11. Kareena Kapoor (Film star)
5.Salman Khan (Film star)	12. Aishwarya Rai (Film star)
6. Aamir Khan (Film star)	13. Juhi Chawla (Film star)
7. Amitabh Bachchan (Film star)	

The ten statements used to experiment on the negativity or positivity of the consumer perception of the celebrity-endorsed advertisements are listed below:

1. 'A celebrity can communicate the benefits of the product clearly.'
2. 'Celebrity-endorsed (CE) ads are relatively more attractive.'
3. 'CE ads reflect the status of the brand.'
4. 'CE ads do not interfere much with enjoying a TV programme that the others do.'
5. 'Celebrities do not use the endorsed products.'
6. 'It distracts the attention from the brand.'
7. 'Celebrities do not convey their own opinion; rather they are paid to say it positively.'
8. 'The commercials do not make me convinced to buy the product.'
9. 'I'm tired of celebrity-endorsed ads.'
10. 'The commercials are much more attractive.'

A 7-point Likert's summated scale, the range of which is indicated below, was used to rate each of the above-mentioned statements related to the measurement of attitude towards celebrity-endorsed advertisements:

1. Strongly Disagree
2. Disagree
3. Somewhat Disagree
4. Neither Agree Nor Disagree
5. Somewhat Agree
6. Agree
7. Strongly Agree

In order to avoid the complexity of the signs, the positive numbers from 1 to 7 - where 4 is the neutral point - were selected.

Another 7-point scale was used to determine the role of the celebrity-endorsed ads in decision-making (at any stage from the need recognition to brand selection). The particulars of the scale are given below:

1. Total Negative Role
2. Negative Role
3. Somewhat Negative Role
4. Neither Negative Role Nor Positive Role
5. Somewhat Positive Role
6. Positive Role
7. Total Positive Role

Thurstone's Case V scaling model was used to identify the most striking celebrity attribute.

Area of Study

The field survey was conducted in five towns of the Nadia district of West Bengal, namely, Kalyani, Gayeshpur, Chakdaha, Ranaghat, and Krishnanagar.

Sample size

Forty viewers from each of the five towns were selected, making a total of 200 respondents, who belonged to different income, occupation, and age groups.

The Tools Used for Analysis

The Chi-square analysis was used to study the significance of the demographic factors of age, income, occupation, and gender, on attitudes towards celebrity-endorsed TV ads. The correlation coefficient was computed to reveal the degree of association of the respondents' age, gender, and the other demographic factors, with attitude towards celebrity-endorsed TV ads.

DATA ANALYSIS AND FINDINGS

The recall of the celebrity-endorsed ads was such that only 16 respondents out of the total of 200 could not tell about a single ad endorsed by the selected celebrity. A weight of '1' was assigned to the right recall of the advertisement endorsed by the above-mentioned celebrities. If one could remember 2, 3, or more ads, endorsed by that particular celebrity, then the corresponding weightage to that respondent and the celebrity concerned was given. For example, if one could remember 5 ads endorsed by Amitabh Bachchhan, it was counted as 5. The average was estimated just by dividing such summed up numerical by 15 (the total number of celebrities). Afterwards, the correlation between the age and the number of advertisements recalled by the respondent was computed, which resulted in a negative figure, -0.2303. It is an indication of the fact that the younger persons were more fond of celebrity-endorsed advertisements.

Responses to Likert's recall to measure the attitude of the respondents towards celebrity-endorsed ads have revealed the fact that some of the respondents did possess positive attitude towards celebrity-endorsed advertisements and some of them did possess a negative attitude. An attempt was made to find out the dependence between the attitude and the most important demographic factors, such as age, sex, occupation, and income, through hypothesis-testing.

Hypothesis Testing

The results of the hypotheses testing are given below:

1. Influence of Viewers' Sex on their Attitude towards Celebrity-endorsed Ads

The computations of the influence of sex on the attitude of celebrity-endorsed TV ads are shown in **Table 4**.

As shown in the table, the estimated value of χ^2 is greater than its critical value. Thus, the null hypothesis stands rejected, implying that there is a significant difference between the attitude of male and female customers towards the celebrity-

Table 4

Respondents' Attitude towards Celebrity-endorsed TV Ads: Influence of Sex (Chi-square test)

A- Observed Frequencies						B-Expected Frequencies			
Sex	**Freq. of +ve attitude**	**Freq. of -ve attitude**	**Freq. of neutral attitude**	**Row sum**	**Per cent of positive attitude**	**Sex**	**Freq. of +ve attitude**	**Freq. of -ve attitude**	**Freq. of neutral attitude**
Male	64	40	8	112	57	Male	56	49.28	6.72
Female	36	48	4	88	41	Female	44	38.72	5.28
Column sum	100	88	12	200		estimated χ^2 =7.124 d. f.= (Row-1)(Column-1)= 2			
per cent	50	44	6	100		Table χ^2 (at 95 per cent level of significance) = 5.99			

endorsed TV advertisements. The percentage analysis reveals that various male viewers favour celebrity-endorsed TV ads much more than their female counterparts.

2. Influence of viewers' age on their attitude towards celebrity-endorsed ads

The computations of influence of respondents' age on their attitude towards celebrity-endorsed TV ads, are summarised in **Table 5**.

As shown in the table, the estimated value of χ^2 is greater than its critical value. Therefore, the null-hypothesis is rejected and obviously the alternative hypothesis is accepted. Thus, the age factor plays a significant role in developing the viewers' attitude towards celebrity-endorsed TV ads. The correlation coefficient between the viewer's age and his attitude is as follows:

Correlation (age, attitude to CE) = - 0.12, which is negative.

Since the figure of correlation is so small, the significance test of the correlation coefficient was conducted. The test yielded the following result:

$$t = r.$$

$$\sqrt{[\frac{(N-2)}{(1-r^2)}]} = 1.701$$

and the critical value of t, at 95 per cent level of significance, is 1.645.

Since the calculated value of t is greater, we can conclude that the correlation coefficient figure, though so low, is significant enough to arrive at the conclusion that attitude towards celebrity-

Table 5

Respondents' Attitude towards Celebrity-endorsed TV Ads: Influence of Age (Chi-square test)

A-Observed Frequencies					B-Expected Frequencies			
Age	Freq. of +ve attitude	Freq. of -ve attitude	Freq. of neutral attitude	Row sum	Age	Freq. of +ve attitude	Freq. of -ve attitude	Freq. of neutral attitude
below 20 years	16	4	4	24	Below 20 years	11.52	11.52	0.96
21-30 years	60	72	4	136	21-30 years	65.28	65.28	5.44
31-40 years	12	8	0	20	31-40 years	9.6	9.6	0.8
Above 40 years	8	12	0	20	Above 40 years	9.6	9.6	0.8
Column Sum	96	96	8	200	Estimated χ^2 = 21.1; d. f. = (Row-1)(Column-1) = 6; Table χ^2 (at 99 per cent level of significance) = 16.81			

Table 6

Respondents' Attitude towards Celebrity-endorsed Ads: Influence of Income (Chi-square test)

A- Observed Frequencies					**B-Expected Frequencies**			
Income class	**Freq. of +ve attitude**	**Freq. of -ve attitude**	**Freq. of neutral attitude**	**Row sum**	**Income class**	**Freq. of +ve attitude**	**Freq. of -ve attitude**	**Freq. of neutral attitude**
Below 1,000	0	4	4	8	Below 1,000	3.84	3.68	0.48
1,000-3,000	64	52	8	124	1,000-3,000	59.52	57.04	7.44
3,001-5,000	12	16	0	28	3,001-5,000	13.44	12.88	1.68
5,001-10,000	20	16	0	36	5,001-10,000	17.28	16.56	2.16
Above 10,000	0	4	0	4	Above 10,000	1.92	1.84	0.24
Column sum	96	92	12	200	Estimated χ^2 = 40.399, d.f.= (Row-1)(Column-1)= 8, Table χ^2 (at 99 per cent level of significance) = 20.09			

endorsed TV advertisements is dependent on the age of the viewer and the person with a lower age holds a positive attitude towards such an ad, whereas the aged persons are not so prone towards such advertisements.

3. Influence of viewers' income on their attitude towards celebrity-endorsed ads

The computations of viewers' attitude towards celebrity-endorsed TV ads, as influenced by income, are shown in **Table 6**.

As shown in the table, the chi-square test result rejects the null hypothesis and accepts the alternative hypothesis. Thus, the viewers' attitude towards celebrity-endorsed ads depends, to some extent, on income. The application of the correlation coefficient has revealed that there is a negative relationship between one's income and his attitude towards celebrity-endorsed ads, as shown as follows:

Correlation (Income, attitude to CE) = - 0.12

The significance test of the correlation coefficient has yielded the following result:

$t = r.$

$$\sqrt{[\frac{(N-2)}{(1-r^2)}]} = 1.701$$

and critical value of t, at 95 per cent level of significance, is 1.645

as the calculated value of t is greater so we can conclude that the correlation coefficient figure, though so low, is significant enough to make a conclusion that attitude towards celebrity-endorsed advertisements is dependent on the income class of the person. Since the figure is negative, it can be said that higher-income class people are not so prone towards these types of advertisements.

4. Influence of viewers' occupation on their attitude towards celebrity-endorsed ads

The computations of viewers' attitude towards celebrity-endorsed TV ads, as influenced by their occupation, are shown in **Table 7**.

As shown in the table, the estimated value of χ^2 is greater than its table value. Thus, the null hypothesis is rejected and the alternative hypothesis is accepted. The frequencies also reveal another scenario that the positivity of the attitude towards the kind of advertisements is more in unemployed and business persons. The reason may be the fact of the comparatively plentiful time for entertainment and conversely the busy schedule of the employed.

5. Role of celebrity-endorsed advertisements in Viewers' decision-making

Using a 7-point scale, responses were collected on the role of celebrity-endorsed advertisements in the decision-making process of the respondents

Table 7

Viewers' of Attitude towards Celebrity-endorsed Ads: Influence of Occupation (Chi-square test)

A-Observed Frequencies					B-Expected Frequencies			
Occupation	**Freq. of +ve attitude**	**Freq. of -ve attitude**	**Neutral**	**Row sum**	**Occupation**	**Freq. of +ve attitude**	**Freq. of -ve attitude**	**Neutral**
Unemployed	68	56	8	132	Unemployed	66	58.08	7.92
Blue collar	4	8	0	12	Blue collar	6	5.28	0.72
White collar	12	20	0	32	White collar	16	14.08	1.92
Business	16	4	4	24	Business	12	10.56	1.44
Column sum	100	88	12	200				
Estimated χ^2 = 18.29247 d. f.= (Row-1)(Column-1)= 6; Table χ^2 (at 99 per cent level of significance) = 16.81								

for the FMCGs, durables and services. The mean scores computed for different product categories are given in **Table 8**.

Table 8

Role of CE Ads in Decision-making Mean Scores

	Durable	FMCGs	Service	Average (for all product
Mean Score	4.32093	4.763566	4.658915	4.581137
Rounded figures	4.00	5	5	5

As shown in the table, while in the case of FMCGs and services, this kind of ads has a positive role to play in viewers' decision-making, in the case of durable products, the picture is neutral. Moreover, while the extent of positive role in the case of FMCGs and services is not so great, the overall scenario is a positive one. Somehow, these ads play a role in the decision-making process, either at the stage of need recognition or at the brand selection stage.

6. **Celebrity-endorser's attributes behind the success of the ad**

Following the experts' viewpoint, an attempt was made to identify the reasons behind the likings of celebrity-endorsers' word of mouth. The dataset given in **Table 9** was used to determine the preferred celebrity-endorsers' attributes, namely, his/her physical attractiveness (PA), trustworthiness (T), similarity (S), respect (R), and expertise (E). The figures in each cell indicate the number of respondents preferring the column attribute to the row attribute.

Thus, the attributes preference pattern of celebrity-endorser for the respondents is as follows:

$$E > T > PA > S > R$$

This suggests that the respondents' attitude towards celebrity-endorsed ads is first of all guided by the expertise (E) of the celebrity, followed by his/her trustworthiness (T). While physical attractiveness is the third important

Table 9

Ranking of Attributes of Preferred Celebrity-endorsers

A. Observed frequencies of respondents preferring row attributes to column attributes						B. Observed frequencies of respondents preferring row attributes to column attributes					
Most Preferred Attributes						Most Preferred Attributes					
	PA	T	R	S	E		PA	T	R	S	E
PA	0	115	68	89	115	PA	0	0.574468	0.340426	0.446808	0.574468
T	85	0	68	119	102	T	0.425532	0	0.340426	0.595745	0.510638
R	132	132	0	72	128	R	0.659574	0.659574	0	0.361702	0.638298
S	111	81	128	0	128	S	0.553192	0.404255	0.638298	0	0.638298
E	85	98	72	72	0	E	0.425532	0.489362	0.361702	0.361702	0

Z-values related to preference proportion					
	PA	T	R	S	E
PA	0	0.19	-0.41	-0.23	0.19
T	-0.19	0	-0.41	0.24	0.03
R	0.41	0.41	0	-0.34	0.35
S	0.23	-0.24	0.34	0	0.35
E	-0.19	-0.03	-0.35	-0.35	0
Column Sum	0.26	0.33	-0.83	-0.68	0.92
Mean	0.052	0.066	-0.166	-0.136	0.184
Rank	0.218	0.232	0.00	0.006	0.35

factor of this attitude development, similarity (S) and respect (R) come at last when the viewers perceive a celebrity-endorsed ad.

CONCLUSION AND POLICY IMPLICATIONS

Companies frequently use celebrities as spokespersons to deliver their ad message and to persuade and convince the potential buyers for their brands. This is obviously a matter of billions of dollars. This research suggests tentatively that the use of celebrity-endorsers in TV commercials could be effective in influencing the prospects' attitudes and purchase intentions. However, the success of the use of celebrity-endorsers varies across different products. Still more significant is the inference that the success of using the celebrity-endorsers in the ads depends on the demographic segment the ad is targeted — whether for the males or female; for the teenagers; for the white-collar workers; for the housewives, or for the students, i.e., for the financially-dependents; or for the business persons. The number of males in the sub-group of the sample holding the positive attitude towards the celebrity-endorsed advertisements was greater than that of the females - most of them belonged to the age-group of 20 to 40 years, in the lower-income group (Rs. 1,000 to Rs. 3,000, p.m.), and the unemployed. So, while deciding the celebrity endorsement for an advertisement, or an ad campaign, the marketers should consider the demographic factors while selecting the strategy with a long-term perspective. Moreover, while selecting the celebrity, the advertiser should consider the expertise of the respective celebrity in the field and his/her trustworthiness. The advertisers, then, have to consider the physical attractiveness of the celebrity. This way only, the marketing organisation can be able to grab the first attention of its prospects to its brand.

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Besides the noble art of getting things done, there is the noble art of leaving things undone. The wisdom of life consists in the elimination of nonessentials.

Lin Yutang
Writer and Translator (1895-1976)

Most people are mirrors, reflecting the moods and emotions of the times; few are windows, bringing light to bear the dark corners where troubles fester. The whole purpose of education is to turn mirrors into windows.

Sydney J. Harris
Journalist and author (1917-1986)

INFLUENCE OF HIV/AIDS ON INVESTMENT IN TOURISM PROJECTS
The Case of Botswana

Lisbon Simeon Ketshabile*

Abstract

This paper seeks to explore the theoretical underpinnings and practical implications of HIV/AIDS for the investment on tourism projects in Botswana, where tourism is one of the key economic sectors, coming second after mineral mining. Botswana and the rest of the South African region have been facing severe problem of HIV/AIDS. This paper is based on the results of the empirical research conducted in various tourism companies in the country. It analyses the possible threat of HIV/AIDS on the investment in Botswana, with special reference to the tourism sector from a collaborative approach. Further research on the possible impact of HIV/AIDS on the tourism investment is imperative for exploring its implications for economic development and diversification in Botswana. The policy-makers and tourism investors should also focus their strategies to fighting against HIV/AIDS. The strategies for policy-makers and investors should not be limited to tourism development but should also include minimising the impact of HIV/AIDS on the tourism business. The findings of the study shall be useful to policy-makers and stakeholders who wish to take informed decisions on the fight against HIV/AIDS in the tourism sector. The findings shall also be of interest to academics who wish to expand their knowledge on the economic impact of HIV/AIDS, particularly in the tourism industry.

Key words: ***HIV/AIDS, Investment, Tourism projects, Botswana***

INTRODUCTION

MOST of the research studies on the HIV/AIDS in Botswana and in some other countries in the South African region have been commissioned by State governments and non-government organisations (NGOs). These studies have concentrated on social implications of HIV/AIDS, such as death rate, poverty, mortality rates, and morbidity. Besides social implications, the research often focusses on various national issues, such as the GDP and the economic development. Little research has been done on the implications of HIV/AIDS for business firms, including those in the tourism industry. This paper seeks to examine the possible implications of HIV/AIDS on investments, particularly on Botswana's tourism industry.

* **Dr. Lisbon Simeon Ketshabile** is Lecturer in the Department of Tourism and Hospitality, University of Botswana, Gaborone, Botswana; e-mail: *lisbon.ketshabile@mopipi.ub.bw*

The Botswana government's intervention in the fight against HIV/AIDS, such as providing free HIV/AIDS treatment, like ARV, to infected people prolong the lives of people living with the HIV/AIDS. The population of those on ARV treatment include the people who are working in the tourism industry. HIV/AIDS treatments, like ARV, do not cure HIV/AIDS but it prolongs the life and boosts the immune system of the infected person. The treatment and interventions, therefore, benefit the tourism industry because it reduces the staff turnover and death rates that could affect the tourism companies in a no-treatment intervention scenario. However, the Botswana government, tourism business community, and the host community need to work together to fight the spread of the HIV/AIDS. Moreover, HIV/AIDS infection may threaten the future investment in the Botswana tourism industry, particularly with the global economic down-turn (recession) because the increased demand for people in need of ARV and other HIV/AIDS treatments may put pressure on the government budget. The increasing number of people in need of ARV means that eventually the death rate may rise in future, which may impact negatively on the country's economic sectors including tourism.

SOCIO-ECONOMIC ENVIRONMENT AND HIV/AIDS IN BOTSWANA

Botswana is among the countries experiencing the severest HIV/AIDS infection rate in the world (UNAIDS, 2009). Botswana has 2,70,000 people projected to be infected with HIV/AIDS out of a population of 1.8 million (Letamo, 2003). The adult HIV prevalence rate in the country is projected at 24.1 per cent, which is the second highest in the world after Swaziland (UNAIDS, 2006). Besides the fact that the HIV/AIDS prevalence rate in Botswana is still high, efforts made by the Botswana government and other stakeholders in the fight against the disease have benefitted the country significantly (Botswana's Ministry of State President National AIDS Coordinating Agency, 2005). For example, the prevalence of HIV/AIDS in the country significantly declined from 37.4 per cent in 2003 to 32.4 per cent in 2006 (ACHAP, NACA, and UNAIDS, 2008).

The prevalence of HIV/AIDS in Botswana varies according to the country's various districts/regions (Central Statistics Office, 2005). Chobe District, in particular, is projected to have HIV/AIDS prevalence rate of 42 per cent, which is the highest in the country. Kgalagadi District recorded the HIV/AIDS prevalence rate of 19.1 per cent (ACHAP, NACA, and UNAIDS, 2008). Generally, the prevalence of HIV/AIDS in Botswana is reported to be high in the northern and eastern parts of the country. To be specific, Ngamiland (Maun) is reported to have the HIV/AIDS prevalence rate of 35.4 per cent, Selibe-Phikwe 41.1 per cent, and Chobe/Kasane 42 per cent (ACHAP, NACA, and UNAIDS, 2008). Chobe and Ngamiland are the key Botswana's tourism destinations, hence, there is a need to investigate the possible threat of HIV/AIDS on tourism investments within these districts.

Botswana boasts one of the fastest-growing economies in Africa. Its economy is largely dependent on natural mineral resources and the tourism sector (Wood and Sekhwela, 2006). Mineral mining, particularly diamond mining, accounts for 60 per cent of Botswana's mineral output. Botswana's tourist attractions include the unspoilt vegetation and the vast species of wild animals found abundantly in the northern part of the country (Botswana's Department of Tourism, 2009). Tourism in Botswana is projected to be contributing US$240 million to the country's annual government revenue (Mmopelwa and Blignaut, 2006). Diamond mining, tourism, and agriculture are the Botswana's major economic sectors. Diamond mining accounts for 45 per cent of government revenue and 75 per cent of export earnings in Botswana (Mbendi, 2007). Tourism plays a vital role in the economy of Botswana after diamond mining (Woods and Sekhwela, 2006). However, these economic contributions are only based on the gross domestic product (GDP), and they do not include other economic contributions, such as employment-creation. It is clear that in case any of the stated economic sectors can be affected by HIV/AIDS prevalence rate which is high in Botswana, the country's economy could be seriously affected (Botswana's Ministry of Health, 2008). Both Botswana tourism and mining sectors are labour-intensive, and they employ large numbers of migrant workers. However, this paper focuses on the possible impact of HIV/AIDS on investment on the Botswana tourism industry. When observing both the contribution of tourism to Botswana's GDP and its employment-creation, it becomes evident that the impact of HIV/AIDS on this industry could jeopardise the country's economic growth (Goodwin and Robson, 2004). There is no doubt that mineral mining, particularly diamond mining, is Botswana's major economic contributor and the country's government actively promotes it. However, the fact that the global economic recession affects the mining sector means that much work needs to be done in promoting and encouraging investments in the tourism sector.

The government of Botswana encourages the country's economic diversification, which is largely dependent on mineral mining. It encourages and welcomes foreign investors in varying economic sectors, including the tourism sector (Mogalakwe, 2008). Botswana does not have excessive foreign exchange control, and the corporate tax rate within the country is only 15 per cent. The country has free market-type investment policy and foreign ownership of companies is not restricted. As a result, foreign investment is growing significantly in the country (Mogalakwe, 2008). For example, in the early 1990s, two American companies, Owens Corning and H.J. Heinz invested in the production sectors in Botswana. In 1997, the St. Paul Group bought the Botswana Insurance, one of the country's major short–term life insurance service companies. The investment of the United States of America's (USA) in Botswana is gradually increasing. The major USA investors in Botswana include Kentucky Fried Chicken (KFC) and Remax.

Botswana's economic governance is the key component encouraging foreign investors in the country (Matshediso, 2005). The government of Botswana has established a work-conducive environment for private-sector investment in both mineral and other economic sectors, including the tourism sector (Kaynak and Marandu, 2006). It permits various economic activities and a liberal exchange control system which provides opportunities for free repatriation of dividends and profits without restrictions for importing goods and services (Matshediso, 2005). A summary of the investment environment in Botswana is given in **Table 1**.

Table 1

Investment Environment in Botswana

Category	Status
Political Security Risks	Low insignificant
Corruption	Low
Mineral Potential	Good
Mineral Legislation and Ownership	Mining rights vested in state
Institutional Equity	15–35 per cent
Mining Policies and Licensing Procedures	Act of 1999
Environmental Management	Act of 1976
Fiscal Regime and Corporate Tax	25–35 per cent
Royalty	3–10 per cent
Infrastructure	Fairly good

Source: Complied from the World Bank Report (2004), Matshediso (2005), and Botswana's Ministry of Minerals, Energy and Water Resources (2007)

Botswana is confronted with many risk factors associated with the spread of HIV/AIDS, which include the migratory pattern of wage workers, alcohol abuse, and ignorance (Botswana's Ministry of Health, 2005). Other susceptibility factors are family and communal disruption (transfers), poverty, low status of women, high proportion of single parents, and early parentage (Botswana's Ministry of Health, 2005).

The impact of HIV/AIDS is felt across various economic sectors in Botswana, including tourism. HIV/AIDS threatens the economy of Botswana through its impact on the general workforce, including people working in the tourism sector (National AIDS Coordination Agency, NACA, 2002). The majority of the workforce across various sectors in Botswana comprises sexually-active young people (Globastat, 2005). Because of the HIV/AIDS, the number and quality of workforce available in Botswana tourism and other economic sectors in the country is expected to shrink (NACA, 2002). This may have impact on investment in the tourism sector of the country. The HIV/AIDS affects Botswana's GDP, average income, savings, investments, and employment, including the country's tourism sector (UNDP, 2006). The HIV/AIDS affects a number of households in Botswana through increased poverty and it negatively affects the income distribution. The disease also results in increased morbidity and mortality rates (BER, 2006). Increased morbidity affects productivity because a number of infected and affected workers often take time off duty either on sick leave, or to look after their family members infected with the disease. Low productivity may also result from employees who are demoralised by their health status (UNDP, 2006). This means that it may be difficult to attract investors in the tourism sector, in the country.

HIV/AIDS also increases expenditure of the government and the private sector in Botswana (UNDP, 2006). For the tourism companies, it is the cost incurred in the recruitment and training of the new employees to replace the employees who has been suffering from the illness. Increased costs result in low savings, which is likely to result in reduced investment attributed to lower expected profits. Despite the impact of HIV/AIDS on Botswana's economy, the country's GDP records positive growth (UNDP, 2006). However, the country's economic growth is reported to be relatively slower than that in the no-HIV/AIDS scenario. Besides HIV/AIDS, low economic growth in Botswana can also be attributed to the global economic recession. Slow economic growth affects consumption demand, particularly by the markets in poorer countries, and this, in return, affects the investment in the tourism industry.

Besides its impact on the economy, HIV/AIDS also results in increased poverty, particularly in the countries which have a high HIV/AIDS prevalence rate. On contrary, poverty also influences the spread of HIV/AIDS. It is projected that 48 per cent of households in Botswana live below the poverty line, and in rural areas more that 55 per cent of the population lives in poverty (NACA, 2002). People living in poverty often find it difficult to participate in tourism activities as clients because tourism is a discretionary activity which needs disposable income. Poverty in the rural areas influences population migration from the rural areas to urban and across the borders (Blackstock, 2005). Besides its impact on the economy and on the poverty levels, HIV/AIDS also threatens the Botswana's tourism sector's image. HIV/AIDS claims the lives of the skilled people, including those working in the tourism sector, resulting in poor-service rendered to the tourists (Caelers, 2006).

The worrying factor with regard to HIV/AIDS and its impact on Botswana's tourism industry is that many tourism companies in the country, particularly those in the private sector, do not take action in the fight against the disease. This inference is based on the fact that a number of organisations, including those in the tourism sector in Botswana, do not incorporate HIV/AIDS education into their strategic plans (Preece and Ntseane, 2004). Although, there are various educational and counselling programmes available in the selected companies, many companies do not actively engage in the fight against HIV/AIDS at workplace, and rely on government policies and programmes.

The response to the impact of HIV/AIDS by many companies differs from industry to industry (USAIDS and WHO, 2005). For example, the mining sector is generally unique in its operation. Therefore, its utilisation of employees varies from others, such as tourism. However, both mining and tourism sectors operate in a global market marked with intensive competition. The mining sector relies on employees' productivity, which is threatened by HIV/AIDS. Tourism on the other hand, relies on the quality-service rendered to the tourists, and HIV/AIDS affects the service quality by killing experienced and skilled workers (USAIDS and WHO, 2005). Both tourism and mining workers are vulnerable to HIV/AIDS because of the conditions of their work and lifestyles. Most of the working stations of these two sectors in Botswana are often located in remote areas, with limited opportunities for leisure, resulting in the engagement of workers in the risky behaviour.

HIV/AIDS has widespread impact on the economy. The medical expenses affect the savings of both the individuals and business firms. Increased medical expenses affect tourism because people who spend more on medical expenses are expected to have little disposable income to be spent on tourism. This, in turn, may affect the investment in the sense that investors may only be comfortable in investing in the business in which the market is satisfactorily sufficient. This indicates that the failure to take the appropriate action in mitigating the impact of HIV/AIDS may result in a number of tourism organisations, and Botswana in general, encountering serious macroeconomic instability and difficulties in future. This may also have an adverse impact on the investment due to loss of confidence by the investors not only on the tourism sector but in general (Lisk, 2002). Reduced savings directly affect the investment in small-scale tourism firms, which is a source of livelihood for many people in Botswana and in the number of the Southern African countries (Ramsey, *et al.*, 2002).

HIV/AIDS disrupts budgeting and spending plans and makes saving difficult or impossible because a lot of money is spent on health care and on funerals, than on tourism (South Africa's Department of Economic Development and Tourism, 2004). HIV/AIDS threatens direct foreign investment in the country (Botswana's Department of Tourism Research and Statistics, 2008). The tourism sector of the country is one of the sectors that attract foreign investment (Ashley, 2006). The increasing number of sick tourism workers, whose health deteriorate, pushes health-care costs high and lowers the productivity (Botswana's Department of Tourism, 2003). A number of tourism organisations in the country, particularly those in the private sector, are forced to overspend due to the fact that some of their employees fall sick and have to take some days off. However, the contracts bound them to pay their salaries. This is a challenge because the concerned organisation often operates with the temporary employees and both the employee who is on leave and the temporary employee should receive salaries (Ellis and Terwin, 2004). This shows that HIV/AIDS indeed threatens investments in the Botswana tourism sector (Botswana' Ministry of Environment, Wildlife and Tourism, 2008). Despite challenges of HIV/AIDS, the government of Botswana encourages the foreign investors to invest in the country's tourism sector.

OBJECTIVES OF THE STUDY

The major objective of the study is to investigate the possible threats of HIV/AIDS on investments in Botswana's tourism industry. The study also seeks to examine the possible implications of HIV/AIDS for the tourism industry in that country.

RESEARCH METHODOLOGY

This is a quantitative research. The non-probability (snowballing) sampling method was used in identifying the respondents in this research. The target group was the tourism managers in Kasane and Maun, who were approached and the purpose of the research was discussed with them. They were then asked to identify their subordinates, also in managerial positions, who were willing to participate in this research. The purpose of using this method was that HIV/AIDS is a sensitive issue and generating information from people who are not aware about it would be more difficult than asking by their managers. The researcher made it clear to the general managers and CEOs that the participants would be free to participate in this research, and that the identity of those who voluntarily participate could be kept confidential.

The results were statistically analysed using descriptive statistics. Cronbach's Alpha was used to test the reliability of the measurement scale. The measurement scale used is Likert's

Scale. The respondents were given five options ('strongly agree', 'agree', 'neutral', 'disagree', and 'strongly disagree'). The results of the reliability test revealed that the scale used in this research was reliable. More statistical tests were conducted using ANOVA to ascertain whether the impact of HIV/AIDS on the individual tourism business firms vary according to the firm size, length of business operations, ownership, and location. The cases in which the differences according to the above variables were significant, *t*-test was conducted to further explore them.

In conducting the field research, a structured questionnaire was administered to tourism managers in various tourism establishments in Kasane and Maun and the 241 registered tourism companies based in these cities were taken into consideration.

The targeted people were those working in various tourism organisations in Kasane and Maun. These are also among the areas highly struck by HIV/AIDS. This also gives a reason why empirical research presents the number of tourism managers working in the tourism organisations within the two areas under study.

The distribution of tourism managers who participated in this research by the type of registered tourism organisation to which they belonged, is shown in **Table 2**.

From 69 registered tourism firms in Kasane, 80 managers indicated their willingness to participate in this research. Out of the 80 questionnaires distributed, 73 responses were received. The same approach was used in Maun, where all the registered tourism business firms were included in the study. People who participated in the study included the general managers, finance managers, human resources managers, and other individuals holding managerial positions, such as chief executive managers, section heads, and supervisors.

In Maun, from 172 registered tourism companies, including Okavango Delta, 87 tourism managers participated in the study. Out of them, only 76 responded. Since the CEOs were not willing to participate, the data was smaller in Maun.

RESULTS AND DISCUSSION

The distribution of respondents by the position they held in their respective organisations is shown in **Table 3.** Although the specified positions in the table included general managers, food and beverage managers, and human resources managers, most of the respondents fell under the category of 'others'. This is because most of the respondents were the company owners who are either the chief executive officers (CEOs) or managing directors (MDs). In addition to these individuals, a number of respondents indicated that they were section heads.

Although all the individuals participated in the research were managers from various tourism organisations, different organisations have different names for their various departmental managerial positions, the

Table 2

Distribution of Respondents by Type of Tourism Organisations

Type of Tourism Organisations	Kasane City		Maun City	
	Number of Registered Tourism Organisations	Number of Respondents	Number of Registered Tourism Organisations	Number of Respondents
Hotel	0	0	13	12
Lodge/Camp	28	59	64	52
Guesthouse	2	0	4	1
Others (mobile safaris)	39	14	91	11
Total	69	73	172	76

Table 3

Distribution of Respondents by Position in the Organisation

Position	Number	Per cent
General Managers	17	12
Food and Beverage Managers	6	4
Human Resources Managers	4	3
Other (CEOs and MDs)	117	81
Total	144	100

'others' category variables dominated within the respondents position. The tourism in Botswana is still in its development stage and most of the people own and manage their own firms as CEOs and MDs.

Most of the tourism managers who participated in this research were Botswana citizens in their young age and these were the people who were active at work. Majority of the respondents had at least basic educational qualification. The respondents' nationality and qualification are shown in **Table 4**.

This question aims to establish the active roles played by Botswana citizens as opposed to non-Botswana citizens against their educational qualification.

Table 4

Distribution of Respondents by Nationality and Educational Qualification

Respondent's Nationality	Number	Per cent
Botswana Citizens	124	85
Non-Botswana Citizens	22	15
Total	146	100
Respondent's Educational Qualification		
Primary	3	2
Secondary	37	25
Certificate/Diploma	77	53
Undergraduate	18	12
Post graduate	9	6
Others	3	2
Total	147	100

The distribution of respondents by gender and age is shown in **Table 5**.

Table 5

Distribution of Respondents by Gender and Age

Respondent's Gender	Number	Per cent
Male	61	41
Female	87	59
Total	148	100
Respondent's Age		
Under 20 years	1	1
20 – 29 years	56	38
30 – 39 years	63	43
40 – 49 years	17	11
50 – 59 years	9	6
60 years and above	2	1
Total	148	100

As shown in the table, most of the respondents were women, who play an active role in the development and management of tourism in Botswana. It is also noteworthy that most of the respondents come under the age group of 30 to 39 years. This is the age group that is economically active and is vulnerable to HIV/AIDS in Botswana (UNDP, 2006).

The number of tourism companies that have HIV policy, along with their location, is shown in **Table 6**.

Table 6

Company Location and HIV Policy

Location	Number	Per cent
Kasane	72	48
Maun	77	52
Total	149	100
HIV Policy		
Yes	75	54
No	63	46
Total	138	100

As shown in the table, a larger number of companies who participated in the survey belonged to Maun, because it had more tourism companies than Kasane. Moreover, most of the companies have HIV/AIDS policies. However, 46 per cent companies do not have an HIV/AIDS policy. This shows that more encouragement is needed by tourism companies to fight the impact of HIV/AIDS.

The types and ownership pattern of tourism organisations which participated in the study are shown in **Table 7**.

As shown in the table, most of the organisations were owned by Botswana citizens, either as sole owner or as partners with non-citizens. To be more specific, both hotels and lodges/camp from where the tourist manager came are owned as partnership between Botswana citizens and non-Botswana citizens (80 per cent and 35 per cent, respectively). Only one tourism manager came from a guest house and that too by a Botswana citizen. This is because according to the Botswana tourism policy, guesthouses can only be owned by Botswana citizens because they are categorised as small-scale tourism businesses. Most of the mobile safari companies from which the tourism managers came, are owned by non-Botswana citizens. Thus, tourism plays an important role in the lives of many citizens of Botswana by creating both employment and entrepreneurial opportunities. These results also vary depending on the studies indicating that the Botswana tourism sector is generally dominated by expatriates.

Reliability Test and Analysis

Initially, before conducting an analysis relating to the objectives of this study, a reliability test was prepared on three scales, namely, tourism and the HIV/AIDS in Botswana, tourism and communities related to HIV/AIDS, and the impact of the disease on the tourism firms. Cronbach's Alpha was used in conducting the reliability test and the results showed a high reliability:

1. Tourism and HIV/AIDS in Botswana in general: $\alpha = 0.84$;
2. Tourism and communities relative to HIV/AIDS: $\alpha = 0.70$; and
3. The impact of HIV/AIDS on the tourism businesses: $\alpha = 0.90$.

The results for the scale reliability tests conducted on the three measurement scales are given in **Table 8**.

The results show that the scales are reliable because they present results not far from positive (0.84). However, the only item that presents negative results is the last measurement item on scale 1.

The following section addresses the research objectives based on how the participants responded on each measurement scale.

The perception of tourism managers on the possible impact of HIV/AIDS on the Botswana tourism sector is shown in **Table 9**.

Most of the respondents confirmed that HIV/AIDS had negative impact on the Botswana tourism sector. All tourism managers who participated in the research indicated that tourism was one of Botswana's most important economic activities. Majority of respondents agreed with the statement indicating that Botswana was one country, having the highest prevalence of HIV/AIDS, and that HIV/AIDS adversely affected the country's tourism business through its negative effect on experienced workers.

Table 7

Distribution of Sample Organisations by Type and Ownership Pattern

Type of Tourism Organisation	Botswana Citizens	Non-Botswana Citizens	Partnership between a Botswana citizen and non-Botswana citizen	Total
Hotel	1 (10 per cent)	1 (10 per cent)	8 (80 per cent)	10 (100 per cent)
Lodge/Camp	44 (44 per cent)	21 (21 per cent)	35 (35 per cent)	100 (100 per cent)
Guesthouse	1 (100 per cent)	-	-	1 (100 per cent)
Other (Mobile Safari companies)	5 (25 per cent)	9 (45 per cent)	6 (30 per cent)	20 (100 per cent)
Total	51 (39 per cent)	31 (24 per cent)	49 (37 per cent)	131 (100 per cent)

Table 8

Reliability Test on the Scale of Tourism and HIV/AIDS in Botswana (Cronbach's Alpha = 0.84)

Sl. No.	Measurement Items	Corrected Item (Total Correlation)	Cronbach's Alpha if Item is Deleted
1.	'Tourism is one of Botswana's important economic activities'.	0.206	0.840
2.	'Botswana is one of the countries in the world with highest rate of HIV/AIDS infection'.	0.295	0.838
3.	'HIV/AIDS increases the poverty level in a number of rural areas in Botswana'.	0.452	0.832
4.	'Botswana tourism is losing experienced workers to HIV/AIDS'.	0.434	0.833
5.	'Botswana tourism sector is seriously threatened by HIV/AIDS in future'.	0.602	0.825
6.	'Gender inequality contributes to the spread of HIV/AIDS in Botswana'.	0.419	0.833
7.	'Government should do more to address HIV/AIDS problems'.	0.251	0.839
8.	'Prospective domestic tourism demand in Botswana is threatened by the HIV/AIDS'.	0.602	0.826
9.	'HIV/AIDS threatens new investments in the tourism private sector'.	0.616	0.825
10.	'HIV/AIDS increases health expenditure on individuals, and tourism business'.	0.435	0.833
11.	'HIV/AIDS problem reduces individual's savings due to medical expenses'.	0.520	0.829
12.	'HIV/AIDS reduces the government investment in tourism public sector'.	0.521	0.829
13.	'Tourism organisations often discuss HIV/AIDS problems among themselves'.	0.168	0.844
14.	'HIV/AIDS increases the growth rate of average incomes'.	0.287	0.839
15.	'HIV/AIDS problem results in lower population growth'.	0.318	0.837
16.	'Tourism companies are not doing much in fighting the impact of HIV/AIDS in their organisation'.	0.143	0.846
17.	'HIV/AIDS problem is expected to become much worse in future'.	0.388	0.834
18.	'Quality of service is affected by the HIV/AIDS problem'.	0.593	0.825
19.	'Alcohol abuse influence the spread of HIV/AIDS in Botswana'.	0.416	0.835
20.	'IV/AIDS increases the costs of running tourism businesses'.	0.474	0.831
21.	'Tourism organisation experience low labour productivity resulting from HIV/AIDS'.	0.627	0.824
22.	'HIV/AIDS is a serious problem for tourism industry'.	0.500	0.830
23.	'Tourism business community in Botswana often discusses the HIV/AIDS problem with the local community members'.	-0.105	0.854

Majority of the respondents agreed that the increased death rate resulting from HIV/AIDS-related illness threatened both the prospective domestic tourism demand and tourism investment both in public- and private-sectors. HIV/AIDS resulted in reduced individual savings due to increased medical expenses. The disease also resulted in increased growth of average income for tourism companies' employees. The companies that experienced severe HIV/AIDS prevalence among their employees had poor quality service, which also affected the day-to-day tourism business. Besides its impact on the service quality, most respondents reported that HIV/AIDS also results in lower labour productivity, particularly in the tourism companies that experienced the adverse impact. Many respondents agreed with the statement that HIV/AIDS resulted in lower population growth. Reduced population growth affected both availability and quality of tourism workforce and led to decreased local market for tourism.

CONCLUSION

Tourism is one of the most important economic activities in Botswana. It creates employment and entrepreneurial opportunities for the local people, attracts investors, and significantly contributes to the country's GDP. Tourism also helps in enhancing national pride. Tourism development improves the appearance of the tourism destinations. It also contributes to the conservation of the natural environment. HIV/AIDS is the major threat to this sector. This suggests that tourism planers and investors should not only focus on its development, but should also fight against HIV/AIDS. This disease also reduces population growth, which affects the availability and quality of tourism workforce and causes shortage of skilled labour for this labour-intensive industry.

Most of the tourism companies in Botswana do not take an initiative to fight the impact of HIV/

Table 9

Respondents' Perception on the Possible Impact of HIV/AIDS (N =149)

Sl. No.	Measurement Items	Descriptive Statistics				
		N	Minimum	Maximum	Mean	Standard Deviation
1.	'Tourism is one of Botswana's important economic activities'.	149	1	2	1.17	.375
2.	'Botswana is one of the countries in the world with highest rate of HIV/AIDS infection'.	149	1	5	1.97	.918
3.	'HIV/AIDS increases the poverty level in a number of rural areas in Botswana'.	144	1	5	1.85	1.051
4.	'Botswana tourism is losing experienced workers to HIV/AIDS'.	148	1	5	2.18	1.113
5.	'Botswana tourism sector is seriously threatened by HIV/AIDS in future'.	147	1	5	2.24	1.144
6.	'Gender inequality contributes to the spread of HIV/AIDS in Botswana'.	145	1	5	2.36	1.182
7.	'Government should do more to address HIV/AIDS problems'.	148	1	5	1.77	.990
8.	'Prospective domestic tourism demand in Botswana is threatened by the HIV/AIDS'.	147	1	5	2.50	.989
9.	'HIV/AIDS threatens new investments in the tourism private sector'.	147	1	5	2.56	1.099
10.	'HIV/AIDS increases health expenditure on individuals, and tourism business'.	143	1	5	2.02	.968
11.	'HIV/AIDS problem reduces individual's savings due to medical expenses'.	147	1	5	2.23	1.194
12.	'HIV/AIDS reduces the government investment in tourism public sector'.	143	1	5	2.36	1.098
13.	'Tourism organisations often discuss HIV/AIDS problems among themselves'.	144	1	5	2.49	1.194
14.	'HIV/AIDS increases the growth rate of average incomes'.	142	1	5	2.87	1.150
15.	'HIV/AIDS problem results in lower population growth'.	148	1	5	1.89	.977
16.	'Tourism companies are not doing much in fighting the impact of HIV/AIDS in their organisation'.	146	1	5	2.95	1.294
17.	'HIV/AIDS problem is expected to become much worse in future'.	146	1	5	2.79	1.128
18.	'Quality of service is affected by the HIV/AIDS problem'.	145	1	5	2.54	1.184
19.	'Alcohol abuse influence the spread of HIV/AIDS in Botswana'.	148	1	5	1.52	.804
20.	'HIV/AIDS increases the costs of running tourism businesses'.	148	1	5	2.65	1.118
21.	'Tourism organisation experience low labour productivity resulting from HIV/AIDS'.	147	1	5	2.54	1.178
22.	'HIV/AIDS is a serious problem for tourism industry'.	141	1	5	2.19	1.114
23.	'Tourism business community in Botswana often discusses the HIV/AIDS problem with the local community members'.	137	1	5	2.58	1.142
	Valid N (list wise)	108				

Note: 1= 'Strongly agree', 2= 'Agree', 3= 'Neutral', 4= 'Disagree', and 5= 'Strongly disagree'

AIDS, but rely on the government assistance. This conclusion is based on the fact that many tourism managers who participated in this study reported that their company did not have any HIV/AIDS policy. Failure to be proactive in the fight against HIV/AIDS would threaten the future of many tourism organisations. The fight against HIV/AIDS should not be the sole responsibility of the State government; it should be a collective effort involving all stakeholders, including the tourism organisations in the private sector and host communities in which tourism activities take place. Furthermore, the fact that HIV/AIDS has negative impact on the Botswana tourism industry does not suggest that the country's tourism industry is in a very bad situation.

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GUIDELINES FOR WRITING BOOK REVIEW

We invite academicians and others to write reviews of books on business management and allied subjects.

The book-reviewers are requested to follow the guidelines given below:

1. The reviewer should begin with a listing of the bibliographical details of the book, comprising the name(s) of the author(s), full title and sub-title of the book (as they appear on the cover), details of the place and name of the publisher, year of publication, number of pages in the book, whether hardbound or paperback, and the price, if mentioned.

2. The review can range from 1000 to 3000 words, depending on the topic and the importance of the book.

3. The review should engage with the theme of the book and the issues and problems raised, and should make a rigorous attempt to identify and assess the main set of arguments put forth by the author.

4. The review should be written in a manner and style that would qualify it as a short article in its own right.

5. The reviewer should provide a confirmation that this review has not been sent for publication elsewhere and that the author will cede copyright, if it is accepted for publication in *NICE Journal of Business*.

6. The book under review should have been published recently, preferably in the current or the previous year, and be preferably the new release.

7. The reviewer should also comment on the stylistic aspect and literary presentation of the book.

8. Bibliographical references should be avoided. If the references are considered essential, the citation style adopted by *NICE Journal of Business* should be used.

Thus, the review should be an objective assessment of the book, indicating its specific strengths and weaknesses, and an overall assessment by the reviewer.

BOOK REVIEWS

Ajay K. Garg, *Production and Operations Management* (New Delhi: Tata McGraw-Hill, 2012), Pages: 855, Softbound, Price: Not mentioned

Organised in seven sections in thirty chapters, spanning 855 pages, the book under review is intended to be a text book for MBA and PGDM programmes in Indian universities and business schools. In the beginning of the book, a model curriculum has been suggested in five units: introduction to production and operations management (POM), strategic issues in production and operations management, medium and short-range planning issues, total quality management, and operations and work improvement techniques.

Section 1, on 'Strategy to Manage Business Dynamics', has five chapters: understanding production and operations management, operations policy and strategy, international production and operations management, and managing technology in operations management. Each chapter has various features, such as recapitulation, key terms, objective-type questions, review questions, references, and hints and answers. These features would make it a student-friendly textbook.

Chapter 1 briefly describes how operations add value to business and emphasises the interaction among various functions of management; compares manufacturing and service operations; distinguishes between production and operations management; identifies different types of production systems and dwells on the nature and types of decision-making in POM and recent trends in the field of POM. A good case, titled "*Khana Khazana* – on Wheels", is included. This chapter identifies, through an Exhibit, the people who have contributed to operations management, but fails to provide a complete coverage as it portrays more on the early history rather than doing a comprehensive coverage of recent developments.

Chapter 2 deals with the operations at the policy and strategy level, with learning objectives so as to understand the significance of operations strategy for successful business and why companies give importance to operations strategy to increase productivity and create a competitive edge. Various perspectives of productivity are outlined. Interestingly, it also includes the concept of 'wastivity', a term coined by Prof. Sushil and Prof. Prem Vrat, as a part of former's Ph.D. dissertation under the supervision of the latter at IIT, Delhi. But nowhere under the references, there is any mention of the work of the two. It is perhaps the typical inhibition on the part of some Indian authors in citing the works of other authors used by them, although the professional ethics so demands. However, it may be pointed out that the concept of 'wastivity' was 1 *minus* Productivity, instead of 1/Productivity. In fact, 'wastivity' is the ante-thesis of productivity rather than the reciprocal of it.

Chapter 3, dealing with international production and operations management, compares domestic and international POM, identifies global companies, and outlines the recent trends in international production and operations management.

Chapter 4 describes the role of technology in managing the operations and how technology adds value to the operations function. The use of technology in design and manufacturing is described in detail, including introducing various softwares, such as ERP, SCM, NDP, and CRM. In particular, the role of SAP in systems integration in the organisation is outlined. The role of robotics and automation technology in operations is also described and the management of technology is briefed. A case study of 'Veristitch' is also included.

The last chapter in Section 1, Chapter 5, is devoted to value analysis, as applied to the manufacturing and service sectors. It brings out basic features of value analysis, value analysis process, functional analysis, FAST diagram, and integration of FAST with QFD (Quality Function Deployment). A case of 'Value Analysis Study in Manufacturing of Ball Bearings' is appropriately given.

Section 2, titled 'Product and Process Design and Development' is organised in three chapters.

Chapter 6, on Effective Product Design, identifies the attributes of a good design, stages of product design, objectives and guiding principles of product design, and lists the factors affecting product design. It outlines the design stages and essential features of the product development process. All the relevant topics, like design for manufacture, design for assembly, and design for ergonomics, are broadly discussed, along with concurrent engineering, service design, and the challenges in product and service design. A case on designing a versatile charger of mobile phone is given towards the end of the chapter.

The topic of process design and analysis is discussed in Chapter 7, which includes the concept of process and Kudos Process Development Model. The types of conversion processes and the process strategy, leading to effective process design, and the flexible manufacturing system (FMS), are briefly described. An overview of the process flow chart, along with ANSI Standard Symbols, is given.

Chapter 8 introduces the integrated product and process development (IPPD). The benefits of successful integration of IPPD, such as the reduced product delivery time, reduced costs, reduced risks, and enhanced quality, are described. The principles of the IPPD and the optimising product and process design are listed. This section does not appear to be systematically structured to make it user-friendly. Perhaps, the value engineering aspects would have fitted better under this section rather than in Section 1. The concept of Product-Life Cycle and Life-Cycle Costing would have enhanced its usefulness.

Section 3, containing five chapters, is titled 'Strategy (could be Strategic) Issues in Production and Operations Management', and starts with project management given in Chapter 9. It describes the concept of a project, major features, and categories of projects. It gives an overview of project life-cycle, followed by project planning, scheduling, and controlling project activities. The chapter also discusses project-organisation structures, skill-sets of a project manager, and project management techniques, such as PERT/CPM and project crashing. It also includes a case. The choice and sequencing of chapters in this section could have been better.

Chapter 9 and chapter 11 on demand forecasting do not relate well with the other three chapters. PERT/CPM, and demand forecasting are not necessarily strategic issues, since they pertain to operations level planning, while short-range planning horizons are also involved in demand forecasting.

Facility location, its strategic importance, and factors influencing locational decisions are dealt in Chapter 10. The case of Tata Nano is used to indicate possible mistakes often made in selecting the site. The facility location criteria along with quantitative and qualitative factors in the analysis are included, with a brief description of the location of service facility.

Chapter 11 is devoted to demand forecasting and its relevance and significance to business. The essential features of sound demand forecasting are listed. A chart indicating the various forecasting methods provides a visual overview of these techniques. The criteria for selecting an appropriate model of demand forecasting are also listed.

Chapter 12, on capacity planning, discusses the concept, categories, and determinants of effective capacity. The concept of making the buying decisions and the factors governing these decisions are also described. Capacity planning methods, decision-tree analysis, and the reasons of failures of capacity planning are briefly described.

Chapter 13 discusses facility layout, objectives of facility layout, factors influencing layout decisions, principles of layout planning, and techniques of layout-design. It also gives a brief description of assembly-line balancing, process layout, cellular layout, and computerised layout planning methods.

Section 4 of the book is devoted to medium- and short-range planning and has five chapters. Chapter 14 is devoted to aggregate planning which is a link between strategic planning and short-range operations planning. However, there could have been better sequencing of sections. For example, the role of aggregate planning follows the equation of aggregate planning problem, and the need for it follows the role of aggregate planning. This reviewer feels that the disjointed sequencing of sections in chapters does not make smooth flow into a logical and natural sequence. Alternative strategies for matching supply and demand and their relative strengths and weaknesses are listed. The concepts of marginal costs, total costs, and yield management are described as tools for matching demand and supply.

Chapter 15, on materials and resources requirement, explains the concepts, benefits and drawbacks of MRP, the difference between MRP (materials requirements planning) and MRP-II (manufacturing resources planning) and the concept, advantages, and industrial applications of ERP.

Chapter 16, on Production Planning and Control (PPC), describes the benefits of production planning, production planning system, including product planning, process planning, objectives, benefits, and levels of production control, along with dispatching, expediting/follow-up, inspection and evaluating, and corrective action. However, there is no quantitative orientation in this chapter. The sequencing of the sub-titles, too, could have been better.

Chapter 17, on Operations Scheduling and Workplace Planning, describes scheduling process, approaches to scheduling, and the rules of sequencing. Gantt chart is explained, but without showing through a figure. Johnson's Rule is illustrated through an example. The usage of batch scheduling through the EOQ method in production lots and run-out method, the scheduling of service operations, the problems associated, and strategies for service scheduling are also discussed. Moreover, the concept of Master Production Schedule (MPS), process of developing MPS, and planning and control of workplace are discussed. However, the structuring of topics, sub-themes look disjointed. In particular, MPS should have come earlier than the operations sequencing, included in a previous chapter.

Chapter 18 gives an introductory treatment to waiting line (queuing) management pertaining to service systems.

Section 5 comprises five chapters from 19 to 23, which deal with the management and maintenance of the supply chain.

Chapter 19, on Inventory Management, including Just-in-Time inventory, and contains the usual topics, such as reasons for holding inventory, inventory costs, inventory models for independent demand, and dependent demand situations, concept of inventory, EOQ model and its variants. While ABC/VED/SDE techniques of inventory analysis are briefly outlined, the concept of JIT is discussed in sufficient details, including the Kanban system, Kaizen, Jidoka, lean management, wastages, and the SMED analysis.

Chapter 20, on Supply Chain Management (SCM), identifies the objectives of SCM and introduces the traditional and modern views of SCM. The systems approach in managing the supply chain is emphasised. The major process parameters to evaluate the effectiveness of supply chains are identified. The key attributes of supply chain efficiency and the concept of virtual supply chain are also discussed in adequate detail.

While the topics of warehouse and materials management are discussed in Chapter 21, the principles of material handling are discussed in Chapter 22, which is very well-written. Maintenance policy, which forms a major issue in POM and includes modern maintenance policies and practices, planned maintenance, MRO, replacement models, as well as the general strategies for replacing the machinery, is discussed in Chapter 23.

Section 6 is on Quality Imperatives for Production Excellence and has three chapters.

Chapter 24 is devoted to quality, as a tool for achieving excellence, and explains the concepts of quality, quality management, evolution of TQM, and related concepts. Seven quality *Gurus* and their main contributions are also listed.

Chapter 25 is devoted to quality control techniques, which incorporates statistical techniques for improving product and process quality. Statistical Process Control and Acceptance Sampling are the two major tools of analysis, explained together with the Taguchi methods. The concept of 'Six Sigma' is also explained.

Chapter 26, on World Class Manufacturing, focusses on organisational attributes which excel in quality, cost delivery, and flexibility. Various tools and techniques for becoming a world-class manufacturer are outlined. It is a brief chapter and could have been combined with the TQM philosophy, explained in Chapter 24.

The last section, devoted to Work Improvement Techniques, comprises four chapters.

Chapter 27, on Work Study and Industrial Engineering, gives details on work study, including the method-study and work measurement, which was part of traditional industrial engineering. The chapter also has a few pages on industrial engineering (IE), which perhaps do not do justice to the large topic. It is wrong to perceive IE primarily as work-study. In fact, IE is what the whole book talks about. POM and IE are much similar in scope, they are not restricted to work study.

Chapter 28 is on quantitative techniques for decision-making. However, it merely spells out the decision-making process, L.P. and Integer Programming, Game Theory, and the Theory of Constraints. This is too compressed a view on a wide spectrum of O.R. Techniques and is by no means, a sufficient treatment of the wide subject. In fact, there are full-fledged text books on the subject with this chapter.

Chapter 29, on Learning Curves and Experience Curves, explains how to plot these curves. This chapter could have been combined with Chapter 27 on work study. Lastly, Chapter 30, on Reliability and Redundancy, deals with the overall production reliability (OPR), which is the product of quality, speed, and time availability, a concept used in TPM. The concepts of series and parallel system reliability, bath-tub curve, and redundancy, are included here along with their maintainability. However, reliability, as a probability, has not been adequately dealt with.

The arrangement of sub-themes could have been better and the coverage could have been wider and comprehensive. Alternatively, this could have been included in the chapter on quality as reliability is an attribute of total quality.

In conclusion, this book is a reasonably good addition to a large number of text books available on the subject. It has some strengths, but also a number of weaknesses pointed out above. On the whole, it gives a good overall coverage of the major concepts in POM, and a case at the end of each chapter, with quiz-type and other types of questions.

Prof. Prem Vrat
Vice-Chancellor and
Professor of Eminence
ITM University
Gurgaon (Haryana)
e-mail: *premvrat@hotmail.com*

Harvard Business Review, *Harvard Business Review on Building Better Teams* (Boston: Harvard Business Review Press, 2011), Pages 228, Price: Rs. 595

What exactly is the theoretical consensus, if any, on the status of a team and team-work? That is the question which this anthology of ten essays from the *Harvard Business Review* sets out to address systematically. The anthology looks to be a bit voluminous. The themes included range from the pros and cons of team-work, most effective ways to build a team, and the emergence of new forms of team-work in contemporary business culture. The contributors argue that teams *per se* do not add value to an organisation; it is only the effective deployment of a team that can make a difference to the firm and networks. The cost factor in team-work is something that is often overlooked 'because problems with co-ordination and motivation typically chip away at the benefits of collaboration'. Diane Coutu, therefore, argues that it is important to be mindful of situations where the cost factors can lead to underperformance rather than meet the stated expectations. It is important to think beyond the contemporary orthodoxy of teams and team-work since teams are not an end in themselves. It costs a lot to set up and maintain an effective team. A firm should also remember to think in terms of 'teams' in the plural and understand the competitive dynamics that constitute their interrelations and performance. For Coutu, it is especially important to protect the 'deviants' in a team given their willingness to ask questions that no one else might be willing to do. This will help in preventing the forms of group-think that characterised decision-making during the recent financial crisis.

Jon R. Katzenbach and Douglas K. Smith argue that it is important to differentiate between a 'working group' and a 'team' and emphasise the hard work and discipline that go into building and sustaining team-work. They insist that the term, 'team', should not be used loosely, but invoked only when there is both individual and mutual accountability for performance. Their main contribution in theorising a team and team-work is in the context of enhancing team performance; it focusses on harnessing 'technical expertise, problem-solving, decision-making, and interpersonal skills'. They also differentiate between three types of teams based on whether the strategic goal of the team was to 'recommend, do, or run things'. Once it is clear that there is a typology of teams, and that not all teams were the same in terms of either their compositional structure or goals, it becomes necessary to admit a greater variety of approaches in matters pertaining to both team-building and understanding the significance of team-work, depending on the situation. Since Katzenbach and Smith are consultants, the organisational scenario from which they have drawn their conclusions would be especially useful in the knowledge-based sector.

Likewise, when Lynda Gratton and Tamara J. Erickson talk about team-work, it is with specific reference to a collaborative team. They set out eight ways to build such a team, given that for any major endeavour, it is necessary to build a complex team. A collaborative team includes a virtual team as well, which may not meet directly, but interact mainly with the help of communication technology. They set out the organisational practices that are most likely to enhance team-work, with appropriate examples from Nokia, Standard Chartered, and the Royal Bank of Scotland. These practices include forging better leadership practices, HR techniques, and organisational design. The main focus is to see collaboration as the locus for creating a 'gift culture', where the mentorship of employees and team members is offered as a gift from those who are well-established in the organisation to newcomers without expecting anything in return. This gives the leadership not only an opportunity to develop 'signature relationship practices', but also model 'collaborative behaviour' effectively. The authors identify the following four traits as both constitutive of and problematic to collaborative work: 'large size, virtual participation, diversity, and high education levels'. The eight ways are important because what works when a firm is simple will not necessarily work when it becomes complex. So, they argue, 'the models for teams need to be realigned' to make it useful for our times.

Another emerging factor that is important in the context of team-work is emotional intelligence. While this was a factor mainly used in the assessment of individual potential, it is increasingly being used to evaluate team performance as well. A team should be aware of what sorts of moods are in play when it works so that it is able to regulate its structure effectively. The task of team leadership then is about being able to name the affects that are generated during any collaborative effort and find ways to channelise it effectively in the interest of value-addition. The idea is not to merely increase the number of members who are considered emotionally intelligent, but to differentiate much more rigorously between individual forms and team-based forms of emotional intelligence. What is required, then, is the effective regulation of three forms of emotional interactions comprising individuals, groups, and those with whom the team interacts. Vanessa Urch Druskat and Steven B. Wolff, therefore, argue that it is important to delineate wherein lies the 'emotional wavelength' of a group, as opposed to specific members who may or may not partake of that wavelength all the time. Developing a group-based notion of emotional intelligence presupposes that the perspectives of both the group and the individuals can be considered while thinking through options and regulating the flow of affects, since 'group emotions' affect individual emotions and vice versa. The four norms that are required for regulating emotions include: 'interpersonal understanding', 'perspective taking', 'confronting', and 'caring'. The authors explain how this works with the case-based example of the industrial-design firm, IDEO, where the focus is mainly on a creative form of collaboration.

Creative collaboration also requires the ability to reconcile or find a way through a 'multi-cultural team'. Jeanne Bret, Kristin Behfar, and Mary C. Kern set out the challenges of working in such teams by identifying four barriers and an equal number of interventions relevant to make a success of such a team. These barriers stem from direct and indirect forms of communication, difficulty in understanding foreign accents, different approaches to managing organisational hierarchy, and the modalities of decision-making. Representative problems that arise in the context of each of these barriers are discussed along with the strategic interventions necessary for solving them. These strategic interventions are discussed in terms of their advantages and disadvantages given that each of them can give rise to their own set of 'complicating factors'.

Bill Parcells argues that as a football coach what he has learnt from the three teams that he has coached is that it is difficult to turn a team around without being candid about the team's performance. This means that a coach must be willing to 'take charge', 'confront his players', 'pick the right people', and understand that 'success breeds successes'. This can, however, happen only when there is a common goal and the passion to pursue it. Bill has coached the 'New York Giants', the 'New England Patriots', and the 'New York Jets'. What he pushes everywhere as a coach is the need for a greater degree of 'directness' in human thought and action if meaningful interventions are to be made possible and when something as complex as a team has to be turned around.

Decision-making, indeed, is much more difficult in the context of teamwork. Bob Frisch is right when he asks what, if anything, can be done 'when teams can't decide' what should be done. Breaking the impasse requires the team leader to play the 'dictator by default'. This, however, should not become a regular way of life. Instead what Frisch argues for is the need to develop new 'tactics' to prevent the onset of a 'stalemate'. The main difficulty in these situations is the unwillingness to acknowledge what exactly the problem is and take action that is responsive to the demands of both the situations, which demands a decision, and the needs of the team as a whole. Frisch sets out the steps necessary to increase the quality of decision-making in a team along with the advice on how to improve the range of options available at any point in time. It is also possible, he argues, to combine features from old and new options much more effectively than the team realise. In order to do this, however, teams must know when to maintain confidentiality and what the appropriate time frame is for making a decision: only then will they be able to attain the kind of alignment that will make a difference to their teams, business, and firms.

These steps are all the more necessary when we move from a simple team to a 'virtuoso team' which, as Bill Fischer and Andy Boynton point out, comprise the top players in a given area. There is scope for much friction in such teams as the top players jostle with each other for more and more space, or seek to take the lead on the direction in which a team will move. It is, therefore, important in such a virtuoso team to differentiate between individual performances and group-based performances, so that the top players do not have to give up on their individuality in order to fit in successfully. It will also make it possible to go beyond the usual conflicts between individuals and teams and find a way of accommodating both individual identity and group identity, simultaneously. This incidentally is the strategy that Stanley Fish used to build a world-class English department at Duke University when he was in charge. The English department had a group identity that was strong enough to increase the number of applicants to its undergraduate and graduate programme, but each of the professors was also highly differentiated in terms of his own theoretical position in the English studies. The ability to manage star performers without losing out on the ability to forge a sense of group identity is what is at stake in managing a virtuoso team. Understanding the structure and function of a virtuoso team, then, is the key to talent management in a contemporary firm. Fischer and Boynton, therefore, set out the differences between traditional and virtuoso team systematically, so that those who wish to emulate their example are able to do so.

There is undoubtedly some worry that team leaders will continue to wrestle with on the possibility of internal fights within their teams. Kathleen M. Eisenhardt, Jean L. Kahwajy, and L.J. Bourgeois III argue that it might be a good idea to let different management teams have it out with each other, since conflict is not necessarily bad: there is such a thing as 'healthy conflict' that is easy to overlook in our attempts to maintain peace in the firm. It is, therefore, important to mitigate healthy conflicts so that they do not take a turn for the worse and become personal. Constructive conflicts - if mediated and mitigated effectively - will substantially reduce the possibility that they will spin out of control and embarrass the firm or its leadership. The relevant case-based examples for Eisenhardt, *et al.,* include Premier Technologies, Triumph Computers, and Star Electronics. These firms used as many as six important techniques to prevent discussions from going astray, with a relentless focus on the substantive facts, options, power, and even humour in any decision-making situation. All this is possible only if there is some prior agreement on common strategic goals for the firm as a whole, and by successfully 'linking conflict, speed, and performance'. What must never be forgotten, especially in fast-moving circumstances, is the need to constantly 'mitigate interpersonal conflict' without losing perspective on the strategic goals that animate the organisation.

Finally, Ann Majchrzak, Arvind Malhotra, Jeffrey Stamps, and Jessica Lipnack observe out that increasingly the dynamics of 'virtual teams' will have to be studied and included in any discussion on team-work. The emerging social dynamics of how these virtual teams use 'sophisticated on-line team rooms' will not only help people to retroactively understand what they meant by team-work in the first place, but succeed in the attempt at 'building better teams' in the firms and organisations to which they belong.

Shiva Kumar Srinivasan
Professor, Behavioural Sciences
Indian Institute of Planning
and Management (IIPM)
Chennai
e-mail: *shiva.srinivasan@iipm.edu*

Jerome Katz and Richard Green, *Entrepreneurial Small Business*, 2nd ed. (New Delhi: Tata McGraw-Hill, 2011), Pages: 775, Softbound, Price: Not mentioned

Few themes have been discussed and deliberated so much in the recent times as entrepreneurship and small business management. As such, there are by now a plethora of books, mainly text books, written largely by Western authors in the foreign context. Entrepreneurship and small business development being context-based, most of the books in the subject vary in their contents and intents. However, a common thread generally flows through almost all the text books in the subjects, like entrepreneurial small business, maintaining commonness at least in core contents of the subject. The book under review is not an exception to it. The book is characterised by both commonness and distinctiveness, on one count or the other, with other books on the subject.

The subject matter of the book is presented in 20 chapters, logically sequenced in five parts, each containing from chapters. Part 1 provides the scaffolding for the book by introducing the basis of small business in terms of entrepreneurial ideas. This part spills over the first four chapters, covering topics like entrepreneurial opportunities and rewards, ethics in small-business, entrepreneurial characteristics and competencies, and creativity, opportunity, and feasibility issues involved in small business. Small business paths and plans form the foci of the Part 2, consisting of four chapters dealing with the issues like entry into entrepreneurial career on a part-time and full-time basis, entry through imitation into the specific target segment in the market. While marketing issues are the focus of Part 3, accounting and financial aspects form the basis of Part 4. The major aspects of small business management such as legal issues and human resource management are dealt within the last part of the book. General and video cases, glossary of key terms, end-notes and photo credits, given at the end of the book, add further value to the book.

The book has extensive coverage of the subject matter. The contents are rich in their intent. Hardly any single book covers all the contents of the subject offered in all educational institutions. The present book covers the maximum course contents of the paper on entrepreneurial small business offered in most of the business schools. Written in a lucid and self-learning style, the book distinguishes itself from other books available on the subject. The authors have ably blended the theory and practice of entrepreneurship and small business to make the subject more useful for the prospective entrepreneurs. Both the theory and the practice have got adequate treatment in the book. The live examples given in videos and experiential exercises given in almost all the chapters make the book interesting, practical, and useful for the reader.

However, one of the weaknesses of the book for the Indian students is that it is written by the Western authors in the foreign context. Case studies are also from the West.

Since entrepreneurship and small business development are evolving concepts, changes in their intents and contents is but inevitable. From this point of view, the present book does not contain some of the topics of strategic importance in entrepreneurial small business. Growing sickness in small sector, growth strategies of small enterprises, intellectual property rights in small enterprises, and survival of family business are some of the important topics not covered in the book. Despite these weaknesses, the book is a welcome addition to the existing literature on the subject.

Prof. S. S. Khanka
National Institute of
Financial Management
(Ministry of Finance,
Government of India)
Faridabad (Haryana)
e-mail: *sskhanka05@rediffmail.com*

Paul Phillips, *E-Business Strategy* (New Delhi: Tata McGraw-Hill, 2011), Pages: 390, Softbound, Price: Not mentioned

Information Technology (IT) is an all-pervasive phenomenon. Coupled with Communication Technology, the IT is often referred to as the Information and Communication Technology (ICT), which has affected almost every sphere of human life, particularly, education, entertainment, communication, and business. The role of the ICT in business can be traced back to the 1950s. The operational mode of data-processing activity gradually assumed a strategic role in managing various business processes. In the late nineties, the ICT revolution assumed a pivotal role in many large enterprises. In the present competitive world, where pressure on quality, productivity, and innovation is equally important to cost and efficiency, the ICT has become the enabler and driver of organisational transformation. Both large and small organisations try to leverage the ICT for a competitive advantage. With penetration and proliferation of the Internet, firms have radically changed their entire business model. The term '*e*-business' was coined by IBM in 1996. Electronic business methods enable companies to interconnect their internal and external systems more efficiently and flexibly, to work cohesively with suppliers and partners, and to augment the experience of their customers by satisfying their needs.

The book under review offers significant inputs and insights into a wide gamut of *e*-business concepts, technologies, strategies, and business models. It contains a comprehensive coverage of a wide variety of useful topics, as *e*-business is an emerging discipline as well as practice in India and abroad. The book is organised into 11 chapters. Chapter 1, titled 'The Internet as a Business Driver', clarifies the different facets of technologies, including the Internet, *www*, *e*-commerce, *e*-business, and *m*-commerce. Chapter 2, titled 'The Impact of the Internet on Business Relationships', describes the relationship of the organisation with suppliers and customers.

While technology provides a lot of opportunities to organisations and individuals, it poses different types of risks too. All these are described in Chapter 3. Appropriate risk management techniques and measures for the readiness of the organisation for *e*-business are discussed. Due to the evolving nature of technology, it is necessary to understand both successful as well as failed adoption of ICT. This chapter includes appropriate examples and lessons therein.

Chapter 4, on 'Strategic Planning for *e*-Business Organisations', highlights the need for strategic planning, showcases problems with traditional strategic planning systems, and provides live guide for developing the *e*-business strategy for value-creation.

Various disruptive technologies and *e*-business models are described in Chapter 5, which includes sections on Internet pricing, on-line retailing, and *e*-business ICT architecture. Chapter 6 provides various dimensions of *e*-organisations: the organisational structure, leadership, people and culture, alignment, knowledge, alliances, and the governance. It concludes with the *e*-business infrastructure and the measurement dimensions.

While Chapter 7 explains how the web can be leveraged for marketing, Chapter 8 discusses the financial appraisal of *e*-business organisations. Chapter 9 describes the deployment of on-line resources in an organisation. While the concepts revolving around the virtual marketplace are given in Chapter 10, Chapter 11 provides the relevant legislative framework and challenges pertaining to the cyber world. The lessons learnt from the global *e*-business deployment are described in this final chapter.

In sum, it is a well-researched book with suitable illustrations and relevant cases. It can be used effectively for teaching undergraduate as well as postgraduate students of business management and technology. From the contents and writing style of the author, one can conclude that he has a good clarity of thoughts as well as real-life experiences. The key terms given on a number of pages further enhances the readers' understanding of the subject. Each chapter concludes with a major case study and one or two mini case studies. In addition to the thought-provoking 'discussion questions', each chapter also provides 'group-assignment questions', which can be used for increased involvement of students and effective analysis of the concepts in business environment.

The biggest issue for the *e*-business environment is aligned with corporate strategy, business-level strategy, and functional strategy. This alignment has been properly made. The author should also be given due credit for the intensive research done for writing each chapter.

The book, however, suffers from certain limitations. Since the original edition was of the year 2002, the text, illustrations, and cases are almost a decade-old. Due to this time lag, many of the cases lack the context and relevance in current times. This issue of timeliness is more pertinent to the IT industry, where the rate of obsolescence is very high. To make a point, in this period, the world has witnessed emergence of websites, such as YouTube, Second Life, Facebook, Twitter, and Skype, which have changed the entire landscape of not only the IT industry but almost of every aspect of human activities and interaction. In a similar vein, across the globe, companies, from private to public and big to small, have adopted a variety of technologies like Utility computing, Grid computing, Cloud computing, SAAS, VMI, SCADA, Dashboard, and Business intelligence for transforming their business models and gaining competitive edge. Due to the older edition of the book, these concepts and technologies do not find a place in the book.

Moreover, this book is intended for sale in the Indian sub-continent, i.e., in India, Pakistan, Nepal, Bangladesh, Sri Lanka, and Bhutan only. However, all the cases pertain to Europe and the U.S.A. This can be partly understandable because the Internet penetration was abysmal in this region till 2002. With a large number of successful *e*-commerce ventures, both in B2C and B2B segments in this part of the world, this book need substantial improvements. Furthermore, although the book covers external technological linkages in a lucid manner, it should have included internal integration aspects, such as the IT infrastructure – LAN, WAN, Intranet, WI-Fi, WiMAX, and Databases. Lastly, since the *e*-business involves the end-to-end business processes, integrating the entire value-chain, this enterprise integration should have been comprehensively covered, along with topics and cases in the areas of enterprise applications, such as enterprise resources planning (ERP), supply chain management (SCM), customer relationship management (CRM), and knowledge management (KM).

Despite these limitations, this is an enlightening book which is fairly easy to understand. It offers a holistic assessment of various determinants of the incorporation and transformation of *e*-commerce enterprises. With adequate coverage on the financial appraisal, legal dimensions, *e*-business models, and the risk management aspects, this book should be useful to entrepreneurs and managers too.

Dr. Nityesh Bhatt
Senior Associate Professor and
Chairman, Information Management Area
Institute of Management
Nirma University, Ahmedabad
e-mail: *nityeshb@gmail.com*

Urvashi Makkar and Harinder Kumar Makkar, *Customer Relationship Management* (New Delhi: Tata McGraw-Hill, 2012), Pages: 274, Price: Not mentioned

CRM is a modern *mantra* of customer retention. Create an emotional bonding with your customer, and you have him eating out of your hand! Is that the be-all and end-all of CRM? In the book under review, the authors seem to think so. In the Preface, they vocalise their belief that "emotional bonding with the customers…..is a potent weapon for success". Great observation, indeed! However, the customer today is looking beyond the emotions. He understands the rational, value-added imperatives that are a necessary part of the transaction and can read beyond the "in-the-emotional-garb" game of the corporate. CRM is an outstanding innovation in the field of marketing, but has the Internet not spoilt the fun? Has the advent and implementation of the CRM techniques and technological software created an actual "lifetime" customer? These are the moot points that this book has chosen to avoid.

The book highlights, in a sequential manner, the meaning, pattern, and technological imperatives of CRM, with simple and logical, yet theoretical questions given at the end of each chapter. It is suitable only for the beginner to CRM, looking for explanations with a few simplistic, real-time case studies at the end. It has a simple style of writing, creating a sequential explanatory base, and bringing out the meanings and definitions of the relevant terms.

The authors delineate the basic components of CRM by dividing the book in three parts. Terms are explained as glossary and concepts are clearly defined. The authors have made a commendable attempt at categorising, in silos, the major heads of CRM. However, there is a glaring lack of appropriately-inserted examples to connect the conceptual definitions to real-time corporate scene. In a handful of chapters, an attempt has been made to bring in the experiences of a few corporate executives. However, these are few and far between.

Part I, containing Chapters 1 to 3, focusses on the core concepts of CRM - customer care, customer life-cycle and lifetime value, and relationship marketing. This part explains various concepts, including customer focus, voice of customer, customer ownership and customer value, loyalty and advocacy. A good attempt has been made, through these chapters, to define certain 'fundamentals' of CRM. However, certain important aspects, like 'moments of truth', have been glossed over, and the customer lifetime value has been reduced to a simple formula with four variables, without any attempt to explain and justify the variables. Also included is a case study on social media and on-line presence without any linkages to concepts under discussion. Part I is definitely a good beginning for conceptually weak beginners on CRM to grasp the basics of CRM. However, advanced-level readers are bound to discover several moot points.

Part II discovers CRM as a stand-alone module. This part explains various concepts, like loyalty management, service quality, service capacity, and quality management policies and principles. Chapter 4 presents CRM as a system that integrates sales, marketing, and service functions of an organisation. Moreover, the steps involved in planning and implementing loyalty programmes, benefits, and types are briefly described. Chapter 6 deals with on quality management, leadership, involvement of people, process approach, and a fact-based approach to decision-making.

Although the reader gets a fair idea of the quality imperatives; the connect through live examples is missing. The three chapters in this part, Chapters 4 to 7, appear to be disjointed as they individually focus on different concepts as stand-alone attempts, without bringing out the synergy among the three. Loyalty programmes could have been better explained through the caselet method of retail stores and the telecommunication sector attempting to woo the customer.

Part III, Chapters 8 to 12 is devoted to the technological *avatar* of CRM, and discusses the *e*-CRM process and the stages in its planning and implementation. The critical advantages and strategic factors for successful SFA are described through some corporate examples. This part explores the issues, like selection of the right application, carrying out Business Process Re-engineering, and the alignment of all functional and operational areas of the organisation.

This part too looks like a step-by-step guide to definitions and concepts in the tech-enabled integrations, like SAP, SCM, and ERP. The chapters are a purely theoretical attempt at text-filled explanations, appealing to the readers who require a guide to the definitions, steps, and related issues.

A research paper, titled "Internet Banking Adoption in India: Comparative Analysis of Urban vs. Rural Scenario", given as Appendix I, as a stand-alone read, is a good research work. However, as it appears to be a research study on the main drivers and challenges of adoption of the Internet banking. Its inclusion in a CRM book is debatable. It does validate the research strength of the authors, but it has no relevance to the topic under discussion.

The book will definitely be helpful as a text book for students interested in learning the fundamentals of CRM, particularly in the Indian context. The basic concepts are explained in simple terms, enabling the new learners to grasp the fundamentals. However, it leaves a lot to be there as a guide for advanced-level readers.

On the whole, it is a commendable basic effort at clarifying the concepts of CRM.

Dr. Gunjeet Kaur
Corporate Consultant and Trainer
Gurgaon (Haryana)
e-mail: *gunjeetkay@yahoo.com*

Ravinder Kumar, *Legal Aspects of Business*, 2nd ed. (New Delhi: Cengage Learning India Pvt. Ltd., 2011), Pages: 801, Paperback, Price: Not mentioned

The author adopts a lucid style while discussing the legal aspects of business. His approach manifestly indicates that he wants the reader to understand the subject matter and keep it etched in his memory. He, therefore, draws on principles from the common law system, especially as it developed in England. He goes back to the English Mercantile Law, the Law Merchant, Common Law, British Statute Law, and the principles of Equity. It is a fact that a brief reference to the history of law is a valuable tool to understand the law and to trace its evolution.

By adopting this technique, he reminds the reader that to obtain a comprehensive picture of the basic principles that have a bearing on business law, it is useful to know the evolution of the relevant laws. The reader is also made aware of the colonial origin of some of our laws that have relevance and are binding even today when it comes to business transactions.

It is, indeed, interesting to note that that the Indian Contract Act, 1872, and the Negotiable Instruments Act, 1881, are more than one-and-a-quarter century old and still hold the field. This is obviously because England, being the land of the Industrial Revolution, was the seat of evolving rational principles for business transactions. Similarly, the Sale of Goods Act and the Partnership Act also belong to the early 1930s. Thus, when it comes to business transactions, experience from other parts of the world is extremely valuable and India is privileged to inherit these practices and legal traditions from the capitalist world.

During the era of globalisation, when capital, technology, and trade move seamlessly across the national boundaries, businessmen and especially those coming from abroad are keen to understand the legal regime which binds business transactions. Any curious investigator into this question will, therefore, find this book a valuable treasure and will be pleased to learn that the Indian law is so firmly rooted in the West's Common Law system. They will perhaps be happily surprised that the author has drawn on the English case law quite frequently, especially when dealing with the Indian contract law.

Since the book is essentially about the Indian law, reliance is naturally placed on the law applicable in India, despite their history or ancestry. It is for this reason that the author makes appropriate references to the Indian case law and relies primarily on the Indian statutory provisions.

Apart from the above general features, the book is valuable for the painstaking effort the author has put in to organise thirty-three chapters in a concise and pithy manner. It is not easy to cover the most relevant laws applicable to business in India in one compilation and yet make it an easily readable treatise for those interested. The author points out that the book is primarily meant for post-graduate students. Indeed this is so. But, at the same time, other students of business studies and law and entrepreneurs will find it valuable.

The use of illustrations serves a very useful purpose to understand the relevant legal concepts. The techniques of using box items are particularly valuable. It acts as a monotony-breaker while helping to gain a more in-depth understanding of a particular concept. In addition, there is a summary in each chapter, followed by exercises which stimulate the reader's mind and might even tempt him to go back to the appropriate text. This is a technique which is rare in a treatise and perhaps it comes naturally to someone who has been a teacher for long and is always thinking of the students while explaining the law.

Towards the end of the book, the author puts together a couple of other laws relating to the business world. A summary of certain major industrial legislations is given in the 'Annexure'. Instead of terming it as an annexure, it could have been titled as a separate part, under the title "Industrial and Other Legislations". These legislations include The Consumer Protection Act, the securities and Exchange Board of India Act, the Information Technology Act, and the Right to Information Act. The author does bring in a bit of labour law and briefly deals with the trade union law and the factories law also. It is indeed difficult to be exhaustive when it comes to this last category of laws and yet the author has covered the most important ones. One wonders, however, as to why the Industrial Disputes Act, 1947, which is like a mother statute, did not find place in the author's last chapter. Perhaps this is a useful reminder that one can never be exhaustive when it comes to the 'other laws'. Another notable omission in the book is the Limited Liability Partnership Act.

In sum, it can be said that the book is a valuable contribution to the students and teachers in this area of study, although there is scope for improvement. The author has made a valuable contribution in the field of business law by putting together an 800-page treatise on legal aspects of business.

Prof. Babu Mathew
Visiting Professor
National Law University
Delhi

P.G. Apte, *International Financial Management*, 6th ed. (New Delhi: Tata McGraw-Hill Education), Pages: 708, Paperback, Price: Not mentioned

There was a time when most of the financial needs of business firms were met domestically. But international developments during the post-Second World War period have brought about significant changes in the conventional pattern of financial investment. Since then, almost entire finance has become international finance. Since almost all finance is now international finance, a book on such a subject will be very useful for finance managers and would-be managers – the MBA students of various management institutes, particularly those specialising in finance. The book would also be immensely useful for those pursuing professional courses for Chartered Accountants, Cost and Works Accountants, and Company Secretaries, and other post-graduate programmes having financial management as a component.

The most useful aspect of this book is that it tries to relate the global and Indian financial markets and foreign exchange markets, something which is not available in most other standard books on International Financial Management. Written with a practical approach, it contains lucid examples and useful case studies. A summary is given at the end of each chapter along with questions and problems. References and Bibliography given at the end of the chapters are expected to be immensely useful for researchers and advanced learners. The appendices at the end of the chapters contain additional useful information.

This book is divided into twenty-two chapters, two appendices, and an index.

Chapter 1 of the book deals with financial management in a global context. It also describe the recent developments in the global financial markets.

The objectives of the firm, with special reference to the impact of hedging on the value of the firm are given in Chapter 2. Chapter 3 gives an elaborate and comprehensive discussion on the nature and measurement of exposure and risk. The discussion is of a sufficiently high standard. However, the discussion on International Accounting Standard 21, given in the Appendix to the chapter, needs to be revised.

Chapter 4 provides an elaborate discussion on the Balance of Payments, with examples from India's Balance of Payments Account. Charts and examples give an added elegance to the book.

Chapter 5 gives a brief historical overview of the old monetary systems and the current scenario, including a discussion on the European monetary system. Appendix to the chapter contains a useful discussion on Special Drawing Rights, a list of funding facilities available to the IMF member-countries and other useful information.

In Chapter 6, the author explains the differences between the domestic and offshore financial markets and separately deals with the Euro-markets. The linkages between the interest rates in the domestic and offshore markets, on the one hand and between interest rates for different currencies in the offshore market, on the other, have been examined. A brief overview of the money market instruments is also given.

Chapter 7 provides a comprehensive discussion on how currencies are quoted in the foreign exchange market and the mechanics of inter-bank trading. The examples and graphical presentation given in the chapter are expected to provide practical guidance to the reader. Besides containing useful discussion on arbitrage and forward contracts, it throws light on some practical aspects, like pricing of short-date and broken-date contracts. An elaborate discussion on the exchange rate regimes in India and the Indian foreign exchange market shall be of immense help to the Indian reader.

Chapter 8 contains detailed discussion on Covered Interest Arbitrage and swaps and option forwards. The discussion on some innovative products, like 'Forward Spread Agreement', 'Exchange Rate Agreement', and 'Forward Exchange Agreement', adds to the uniqueness of the book. Similarly a section on 'Forward Currency Markets and Rates in India' shall be useful to the reader. Chapter 9 gives a comprehensive discussion of Currency and Interest Rate Futures contracts and explains how such instruments can be used for hedging and speculation purposes. The section on Currency Futures in India shall be particularly useful to the Indian reader.

An advanced-level discussion on Currency Options is given in Chapter 10. Besides discussing the elementary option strategies and option pricing, the chapter discusses more complex types of options. The discussion on innovations with embedded options adds to the quality of the book. The discussion on pricing models in the Appendix to the chapter shall immensely benefit advanced learners. Chapter 11 deals with exchange rate determination and forecasting. Besides, a discussion on the Purchasing Power Parity, as a model of exchange rate behaviour, there is an elaborate discussion on the structural models of exchange rate determination, including the flow models and the asset market models. The exchange rate forecast, an important input into corporate financial decisions, is discussed from the practitioner's viewpoint. A section dealing with the exchange rate of the rupee has added to the utility of the book in the Indian context.

Chapter 12 addresses the issue of why companies should and do, devote much time and effort to managing their exposure to exchange rates and interest rates. It focusses on the risk management process and addresses the issues involved in setting up and implementing an exposure-management system.

Different external risk management instruments and internal hedging strategies are explained in Chapter 13. Chapter 14 addresses the issue of dealing with operating exposure, i.e., the impact of exchange rate changes on the firm's future cash flows from operations which are not fixed in terms of either the home currency or the foreign currency. The cases of an exporter firm and an importer firm have been discussed separately. Various intricate aspects of the problem, like currency of invoicing and quantity inertia have been dealt with.

Chapter 15 focusses on the various techniques for the management of interest rate exposure, including forwards-rate agreements, interest-rate options, interest-rate caps, floors and collars, and options on interest-rate futures. This is followed by a brief discussion on interest-rate derivatives in India. Chapter 16 begins with a discussion on the common types of swaps – the currency and interest rate swap and then extends the discussion to innovations in the swap markets during the last five years or so. The issue of valuation of swaps has been explained well. This is followed by a useful section on interest rate swaps in the Indian market. Some well-known credit derivates have been discussed for the benefit of the reader. A discussion of zero-coupon pricing in the Appendix shall be of immense help to the advanced reader.

Chapter 17 elaborates the different aspects of short-term financial management of the multinational corporation. It discusses how the working capital needs of the MNCs can be minimised, consistent with its policies, and how the firm can raise short-term funds at the minimum cost and deploy the short-term surplus cash at the maximum rate of return, consistent with the firm's risk preferences and liquidity needs in the international context, where many currencies are involved.

Chapter 18 on International Equity Investment deals with the issues of international portfolio diversification. The Capital Asset Pricing model is examined in a one-country setting and then extended to the two-country and multi-country versions. The issue of whether to segment or to integrate the global capital markets is also discussed in detail. The chapter also considers equity financing in the international markets with or without the issue of ADRs, EDRs, and GDRs. The Indian guidelines for, and the Indian experience with, ADRs and GDRs have also been touched upon.

Chapter 19 focusses on the raising of long-term and medium-term funds in the global financial markets. The major market segments have been dealt with in detail. The section on project finance deals with specialised funding packages available to financially large projects, especially innovations in project finance, like the BOT (Build, Own, and Transfer) device. The chapter also analyses the various issues involved in the financing decision. Although this section is very useful, it should be better placed in any earlier chapter, say, Chapter 17 or 18.

Chapter 20 discusses the factors which distinguish a foreign project from a domestic project. Although the adjusted present value framework has been considered as an improvement over the net present value approach for appraising an international project, the Options Approach has been suggested as a more appropriate approach to international project appraisal. There is also a brief, but useful, discussion on international joint ventures.

The accounting implications of international activities are discussed in Chapter 21. Accounting for foreign currency transactions and foreign currency translations are discussed with numerical examples. However, the chapter needs to be revised in the light of the revision to International Accounting Standard 21. Chapter 22 considers, in detail, the tax implications of international activities. It, however, mainly deals with the provisions of the Income Tax Act, 1961, as applicable to foreign activities of an Indian enterprise, and tax implications of activities of foreign enterprises in India, double taxation relief, and transfer pricing. While an elaborate discussion in the Indian context is very useful, a more general discussion in the international context is desirable in a book on international financial management.

While Appendix A contains a useful discussion on the interest rate mathematics, Appendix B gives selected ISO Currency Codes by continent and country. Appendix B, however, needs a thorough revision in view of the adoption of Euro as a currency by euro-zone countries.

Thus, the book covers almost all important aspects of international finance. However, a more comprehensive discussion on parity relationships, in a separate chapter, would have added to the usefulness of the book.

Prof. Jita Bhattacharyya
Department of Commerce
University of Calcutta
Kolkata
e-mail: *bhattacharyya_jita@yahoo.com*

Dhruv Grewal and Michael Levy, *Marketing*, 2nd ed. (New Delhi: Tata McGraw-Hill, 2011), Pages: 683, Paperback, Price: Not mentioned

The several new additions made by the authors in this edition of the book under review include the incorporation of the new definition of marketing, given by the American Marketing Association (AMA), in 2007. In the light of this definition, the book provides new perspective to the understanding of marketing as an area of study and marks a departure from the earlier texts on the subject in many respects. The traditional concepts of marketing are dealt with in a way which not only makes them more relevant in the current context, but makes them simpler to understand.

Value is the core marketing concept and the seven sections of the book cover the entire marketing process through value assessment, creation, distribution, and communication. The decisions involving the 4 P's of marketing are explained as value-driven decisions, that is, value-creation (product), value-capturing (price), value-delivery (place), and value-communication (promotion).

The basis to discuss the value-based marketing lies in renewed thoughts suggested by the AMA definition of marketing. The book does not delve into the discussion of various philosophies/orientations of marketing, namely, production orientation, product orientation, selling orientation, customer orientation, and the societal marketing orientation. Rather, it focusses on value-based marketing plan which caters to the needs of the customers, clients, partners, and the society at large. It lays its emphasis on ethical implications of various marketing decisions. It considers marketing as a planned, and not a random, activity. The text, therefore, aims at providing holistic understanding on marketing and is a relevant reading in the context of the current scenario.

The opening stories on products, companies, sportsman as brand endorsers, new product introduction, services, and retail outlets, given at the beginning of each chapter are enjoyable to read and to provide orientation for understanding the following discussions in the chapter. The text is supported by insights into relevant instances taken from the real-life situations. There are picture ads with the description about what they are all about. The key strength of the discussion in the chapter mainly lies in the ease of explaining the concepts with the help of related references to products, environment, people, and situations. The chapter-end cases, marketing applications and quizzes are there to allow for testing as well as application of the information and knowledge given in the text. Extensive glossary, chapter-wise endnotes, and credits for photo ads, name, index and company index are the other key features of the book which create ease in random accessing of the text.

Section I of the book deals with assessment of the market place. Chapter 1 of this section explains the concept of marketing, its key elements, importance, and how marketing creates value for the customer. Chapter 2 describes appropriate marketing strategies and marketing plan. It explores various components of marketing strategy to build sustainable competitive advantage. The four key areas of marketing strategies, namely, customer excellence, operational excellence, product excellence, and locational excellence, create and deliver customer value and build sustainable advantage for the firm vis-à-vis the competitors. Marketing plan entails analysis of the situation for the opportunities and threats it brings for the firm, details of marketing objectives, and strategies in terms of the 4 P's framework, action programmes, and projected financial statements. Thus, marketing plan is the blue print of action programme. The chapter explains each of the five steps involved in developing a marketing plan. The discussion at each step is built around the examples from the world of business. For instance, the case of Starbucks is discussed to develop the basic understanding of the SWOT analysis and how Starbuck develops segmentation of its coffee market. The case-based discussions, thus, provide hands-on experience of developing a marketing plan.

The chapter-end discussion is about scenario planning process to assess the relevance of the marketing plan in the context of different scenarios likely to emerge in the near future. Here, the brief discussion on various elements of marketing environment (both at the macro and micro levels) would bring logic to the scenario planning process.

The renewed thoughts about marketing hold multiple stakeholder approach. Also, every marketing decision requires an assessment for its implications towards the well-being of the society. Therefore, the instances of conflicts arising in the stakeholders' interests, or marketing decisions not doing much good to the society should not be considered as an exception. The need for understanding marketing ethics and various ethical dilemmas which a firm may come across while developing a marketing plan, is adequately addressed in the chapter on *Marketing Ethics*. The chapter also discusses the framework for ethical decision making and how to integrate ethics into marketing strategy. The discussions are adequately supported by various scenarios to help in understanding varied ethical issues. Also, certain dilemma situations are presented to exhibit the possible action plans.

The chapter on marketing environment discusses how a marketer can systematically uncover and evaluate marketing opportunities. Various factors originating in both micro and macro environment of the firm are explained with the apt references to the products, companies, situations, and picture ads. The idea is to develop an understanding of strategic implication of changes in these factors for various marketing decisions. CSR – Corporate Social Responsibility is another way a firm relates to its environment and over the years its prevalence has increased rapidly. It refers to voluntary action programmes taken by the firm to address the needs of its various stakeholders. For systematic approach to CSR, a framework is suggested which highlights the critical inputs and outputs involved with corporate social responsibility program.

In Section II, on market place, the authors develop the three levels of understanding the market place, discussed in one chapter each. At level one, market requires understanding at an individual level. The chapter on consumer behaviour discusses why individual consumers purchase products and hire services and the decisions involved in individual decision-making in buying a product. Consumer decision process model that contains the stages of pre-purchase, purchase, and post-purchase are explained with necessary details about the nuances of the various decisions occurring at each stage. Though the chapter discusses the factors affecting decision-making process, the differences in the decision process in terms of its complexity and rigour occurring due to influence of these factors are not explained.

Business-to-Business (B2B) marketing is the second level of understanding the market place, where the focus is on selling for intermediate consumption to key industries or market segments, rather than the ultimate consumers. In the B2B marketing, the participating organisations are resellers, manufacturers, government, and other institutions. The chapter provides details with regard to each of them with the help of examples. The B2B buying process and the manner it differs from the consumer buying process are succinctly described. Since, several people are likely to participate in the process; it is imperative for the seller organisation to understand the relationship between the people, the culture of the buying organisation and above all, the buying situation - whether it is a first-time purchase or repeat purchase. The authors also discuss these issues as factors influencing the buying process. With the example of Volkswagen, the role of the Internet in the B2B marketing is elaborated. Global marketing is the third and the most complex level of market-place decisions. The chapter explains the topics of growth of globalisation, entry strategies for a global firm, marketing mix for global marketing strategy, and ethical issues affecting global marketing.

In Section III, the first chapter describes the process of segmentation, targeting, and positioning (STP), and explains how a firm segments the market, then picks the target market, and positions its product in line with the customer's needs and wants. Unlike the vanilla discussion about the bases of market segmentation, and the possibilities for target selection and positioning, the chapter explains the STP process as a continuation to the firm's overall strategy and objectives as well as its current situation. The second chapter is devoted to marketing research and information systems. It lists various tools, techniques, and metrics that the marketers use to identify the customer needs and wants, so as to ensure that they create goods and services which provide value to the customer. Here, the authors explain the market research process and emphasises the ethical considerations in using customer information.

The three chapters in Section IV highlight the marketing contribution to value creation. The chapter on product, branding, and packaging decisions explores various strategic options to develop successful products and their brands. How a firm adjusts its product lines to meet and respond to changing market conditions is explained as a part of product decisions. Here, different possibilities are explained to provide in-depth understanding of the competing terms related to product-line decisions.

Branding as a value-addition product decision is explained in detail. The exhibit on brand elements and their corresponding descriptions helps in clearly understanding various terms related to the development of a brand. Brand equity and branding strategies are the other important discussions covered in this chapter.

The chapter on new products development explains value creation through innovation where firms develop new products to create and deliver value more effectively by satisfying the changing needs of their current and new customers or simply by keeping customers from getting bored with the current product or service offering. Since new product failure is the more common phenomenon than its success, the reasons of new product failure and the instances should have been included in the discussion.

The topic of services has been discussed separately in this section and it justifies the importance of services in today's context. The chapter takes the inclusive view of services as anything from pure service business to a business that uses services as a differentiating tool to help it sell physical products. Good customer service adds value to the product and it requires different marketing perspective. Though, there are detailed explanations about nature of services, Gap Model and service recovery, but the important descriptions about seven P's of services marketing mix have not been taken up by the author. Even a brief introduction in this regard would give an idea about how services marketing differ from goods marketing.

In Section V, on value-capturing, the authors describe how value creation requires value capturing in the market through appropriate pricing decisions. While the Chapter 1 of this section introduces various pricing concepts and the relationship between price and quantity sold, Chapter 2 explains the various methods for setting the price.

The discussion on the Five C's of pricing is a novel approach used to explain the various determinants of pricing strategies in the first chapter. Each component is explained in detail. Chapter 2 explains the different strategic and tactical approaches a firm may take up to set the product price. Discussion about psychological factors affecting value-based pricing is the new insight into setting the right price. Moreover, the chapter-end discussions about the legal and ethical considerations in the setting of right price for the product certainly widens the scope of discussion as price needs to be right in varied respects.

In Section VI, supply chain management and retailing and multichannel marketing are dealt with in two chapters. Supply chain adds value to the product by making the product more useful for the consumer and by enabling the economies of transaction in the entire system. Since supply chain management is mainly meant for ensuring efficient flow of goods and services from the producer to the consumer or user, discussions on making information flow would have been more relevant as part of marketing information system. The reviewer feels this section to be more appropriately be taken up as a part of the second chapter on marketing research and information systems, of Section III.

Logistics decisions, an important element of supply chain management, which affect the value delivery from the producer to the consumer, are given a mere passing reference in the beginning. No details are given about the issues and considerations in various logistics decisions.

In view of the changing retailing scenario and the increasing importance of retailers in the supply chain, and the use of other channels for selling the product to consumers, the chapter on 'Retailing and Multichannel Marketing' is the need of the hour. The chapter brings right perspective to the understanding of the relationship between the manufacturer and retailers as it explains the four major considerations in establishing the relationship with retailers, namely, choosing retail partners, identifying types of retailers, facilitating retail strategy, and managing multi-channel strategy.

Section VII on integrated marketing communications, having three chapters, is devoted to the value communication. Communication methods are now more complex because of new technologies and certain environmental factors. The first chapter in this section, titled "Integrated Marketing Communication", present IMC as a rule, whereas most of the earlier texts on marketing consider it as a matter of approach a marketer may adopt. The three elements of IMC, i.e., customer focus, communication channel, and evaluation of results are explained as part of the IMC strategy. So, marketing communication and IMC appear to be synonymous. One cannot achieve effective marketing communication without bringing integration of various communication channels. Though this is true, there is a fallacy in this treatment as it restricts the scope of marketing communication to various communication tools and disregards the communication potential of various corporate and other non-marketing activities. Moreover, in view of the new perspective on marketing, addressing the concerns of various stakeholders and not just the consumers, in the reviewer's opinion, IMC needs to be broad based. So, the way firm relates to its employees or to the society at large, it conveys message to the market and affects corporate image and in turn the brand image.

The last two chapters of this section describe various IMC tools, including advertising, public relations, sales promotion, personal selling, and sales management. Each of the IMC tool is explained, providing the requisite details of the issues related to development and implementation of communication decisions.

In sum, the major strengths of the book are: (1) Emphasis on value concept throughout the text; (2) State-of-the-art illustrations of marketing metrics through the entire text; (3) A separate chapter on services; (4) A separate chapter on marketing ethics; (5) Ethical dilemmas explained along with the discussion about each of the marketing decisions; and (6) Explanations about the impact of the Internet on various marketing decisions.

The book, however, suffers from certain weaknesses. These include: (1) At some places, the discussion is entirely weaved around examples with inadequate description of the concept; (2) Chapter-end questions for discussion are not given. Instead, simple direct questions are there at the end of the discussion on the topic concerned; and (3) There is no discussion on the evolution of marketing. 'Value-based Marketing' explained in various chapters is, in fact, the concept that evolved over time. Though value is always the consideration in any exchange process, at times, the product may simply require some initial sales push.

Thus, despite certain weaknesses, the book is an interesting reading on marketing. It broadens one's perspective on the subject. Both students and practitioners will find the book quite useful.

Dr. Kavita Sharma
Associate Professor, Department of Commerce
Delhi School of Economics
University of Delhi
Delhi
e-mail: *ksharma.dse@gmail.com*

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