

**DR. V. N. BEDEKAR MEMORIAL
RESEARCH VOLUME VI
2011**

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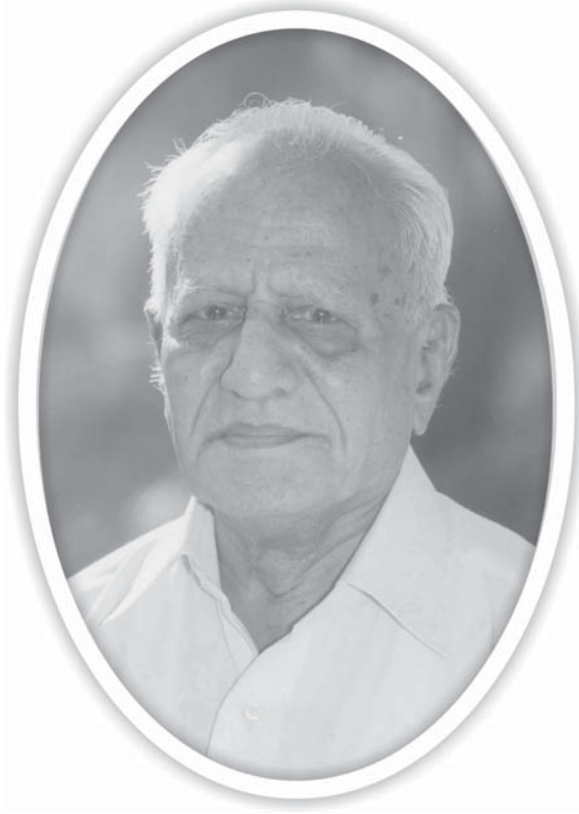
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Dr. V.N. BEDEKAR - A VISIONARY



Dr. V.N. Bedekar

'A Leader's job is to look into future, and to see the organisation not as it is ... but as it can become'

कर्मजं बुद्धियुक्ता हि फलं त्यक्त्वा मनीषिणः।
जन्मबन्धविनिर्मुक्ताः पदं गच्छन्त्यनामयम् ॥

भगवद् गीता - २.५१

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To be amongst the top five management institutes in the country and become the World-class centre of excellence in learning and innovation, driven by social sensitivity and State-of-the-Art technology

Mission

- To propagate knowledge to society to the best of our ability
- To standardize and internationalize the academic environment
- To develop promising managers by nurturing their skills
- To facilitate and empower knowledge with practical approach, while imbibing human values



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Every stakeholder says
Quality is Productivity, Productivity is Quality

Every member of VNBRIMS fraternity,
Is obsessed with quality
To continuously improve all round productivity

Every member of VNBRIMS fraternity
Is obsessed with nitty gritty to reach new levels of quality
To continuously improve all round productivity

Every member of VNBRIMS faculty
Is conscious of teaching, research and administration quality
To continuously improve all round productivity

Every member of student fraternity
Is guided by quality in every activity
To continuously improve all round productivity

Every member of the Managing Trustees is obsessed with quality
Deftly leading every activity
To continuously improve all round productivity

Every member of VNBRIMS is committed to
excellence, innovativeness and creativity
To continuously improve all round productivity

VNBRIMS is a role model says Narayana Murthy
VNBRIMS vows by Quality
To continuously improve all round productivity

- **Dr. Guruprasad Murthy**
Director General, DR VN BRIMS

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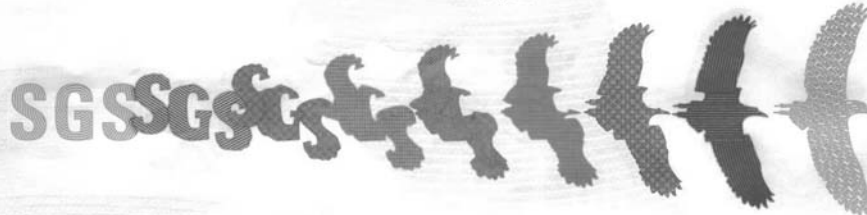


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From The Management

We are happy to release the Dr. V. N. Bedekar Memorial Research Volume VI (2011) which is based on the theme 'Creativity and Innovation in Business'. VPM's (Thane) DR VN BRIMS has been very prompt, like all other VPM group of institutions, in organizing seminars and also publishing the proceedings of the seminar within a short period of time. Over the years, since 2005, that is to say the inception of the two years full time MMS Degree course, we have had several important themes, viz. Challenges for Indian Multinationals (2006), Transforming India – A Paradigm Shift (2007) et al. The themes are announced one year in advance with a well researched preamble prepared, again a year in advance, and shared with all stakeholders, viz. students, teachers, research scholars in the area and all those who are interested in contributing to the workshop/seminar.

Importance Of Creativity And Innovation

The importance of the theme 'Creativity and Innovation in Business' can be seen from the fact that the first global innovation leaders' summit held in San Francisco accepted Norway's suggestion of introducing a Nobel prize for innovation. In the context of India's ambitious leap forward to become a super economic power by 2040, innovation driven development holds the key to India's success in the future. In fact the entire process of economic evolution and development is greatly influenced, if not exclusively determined, by innovation.

PREAMBLE (2010) on Creativity and Innovation

Preamble (2010) presented various ideas on creativity and innovation which included, inter alia, the global scenario, global innovation index, Gandhian engineering, issues at the 'Bottom of the Pyramid' and corporate experiences. The annual workshop and seminar for the academic year 2010-2011 were scheduled for 16th October, 2010 and 12th February, 2011 respectively. The perspectives of these meetings were well laid out, at the outset itself, with the said preamble. Of course, needless to add, all the issues were well addressed.

Workshop And Seminar

The October 2010 workshop included presentations by in house faculty and students. The workshop addressed the theme from various perspectives – interface the management process as well as the functional areas of management, viz. Finance, Marketing, Human Resources, and Operations.

The Seminar of 12th February, 2011 included a galaxy of speakers from different walks of life which presented to the audience a plethora of views on the theme of 'Creativity and Innovation in Business'. In fact, the keynote speaker Shri. S. P. Agarwal, President BMA, appreciated the preamble on creativity and innovation and sought copies for circulation to all BMA stakeholders which was

complied with. We proudly place this on record. This bears eloquent testimony to the quality of work done at DR VN BRIMS. The other speakers at the seminar gave their views which were indeed a rich treat to the audience.

Summits

In addition to the inputs on Creativity and innovation, this research volume captures the proceedings of the summits held in the functional areas of management, viz. Finance, Human Resources, Marketing, and Operations between 27th March, 2010 and 13th November, 2010. The summits have provided great opportunity and platform for the teachers of DR VN BRIMS to bring to fore specialized knowledge modules and provide enlightened education to all stakeholders.

London Academy of Education And Research

As it is well known by now, VPM (Thane) has established an Academy in London viz. VPM's London Academy of Education and Research. As part of its offshore academic venture, VPM (Thane) organized the third conference at the Institute of Directors, London on Friday, 22nd October, 2010. Dr. Vijay V Bedekar, Chairman, VPM (Thane) delivered the inaugural address where he said that "VPM and its group of institutions are committed to be an important contributor to and stake holder of the knowledge society that has emerged and is going to ride at the crest of the wave of progressive nations like US, China and India." Hence, the theme WHY INDIA? This was followed by four presentations on the said theme by Dr. Guruprasad Murthy, Dr. P. M. Kelkar, Dr. S Siddhan and Dr. Vishnu Kanhere. The presentations were received very well and the proceedings of the London conference have also been presented in this research volume.

VPM (Thane) and Knowledge Society

VPM (Thane) group of institutions continue its commitment to be a learning organization and an important member of the knowledge society to enable and empower our institutions so that they can focus themselves towards the cause of knowledge society.

This research volume is one amongst many other things which vouches for the role posit by VPM's (Thane) group of institutions. We wish this volume a great success and hope that it will enthrall all stakeholders to be proud members of a knowledge society in which we all take a lot of pride.

Dr. Vijay V. Bedekar
Chairman
Vidya Prasarak Mandal,Thane

Dr. Guruprasad Murthy
Director-General
DR VN BRIMS

Dr. P. M. Kelkar
Director
DR VN BRIMS

From The Editors' Desk

It's our proud privilege to present the sixth edition of Dr. V.N. Bedekar Memorial Research Volume, a compilation of pertinent knowledge assimilated in the academic year 2010-11; especially on the theme 'Creativity and Innovation in Business'. This theme assumes great importance inasmuch as heads of states have been referring to innovation in their speeches. The President of India Ms. Pratibha Patil, while addressing the Parliament on 4th June, 2010 said, "The next ten years would be dedicated as a decade of innovation". Again on 7th June, 2010, the US President Mr. Barack Obama went on record to say in a speech in Cairo that, "Education and innovation will be the currency of the 21st century."

This new buzz word innovation has caught the fancy of several countries. The Ministries of Science and Technology across continents and countries – Argentina, Australia, Malaysia, Spain, South Africa, UK and others have been re-designated to embrace the word innovation. Similarly, any change in business is also identified with innovation as a prefix viz. innovation led development, innovation driven turnaround, innovation based competition and so on.

Creativity and Innovation *a la* Edison

Thomas Alva Edison, the famous American inventor, scientist and businessman, dubbed 'The Wizard of Menlo Park' and also the man behind the invention of electric light bulb held 1,093 patents to his name in the US.* He guaranteed productivity by giving himself and his assistants idea quotas.† Dr. Keith Simonton of the University of California at Davis in his book 'Genius, Creativity, and Leadership: Historiometric Inquiries'‡, mentions that the most respected scientists produced not only great works, but also many "bad" ones. They weren't afraid to fail, or to produce mediocre in order to achieve excellence. It took approximately 10,000 failed experiments for Edison to invent the light bulb.

Canvas of Creativity and innovation

Creativity is neither limited to scientists, nor is it the prerogative of artists or writers. Businesses across the World realise the importance of 'Thinking Outside the Box', brainstorming and innovation for solving critical issues. The year 2009 will be remembered for one of the worst economic crises that the World had seen. It divided the businesses into two groups; those which took the conservative approach, cutting costs wherever possible, freezing budgets on innovation and generally hibernating till the events turned and the others which despite the gloom and doom not only recognised but seized the opportunity by creating products and services of value, using innovative tools to gain competitive edge, reaching new customers and even reinventing

* http://en.wikipedia.org/wiki/Thomas_Edison

† committing to have a predetermined number of ideas during the day

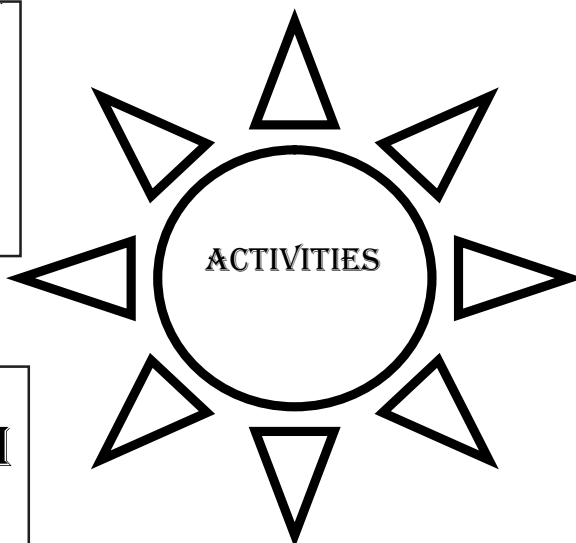
‡ Historiometry is the historical study of human progress or individual personal characteristics, using statistics to analyze references to famous people

DR VN BRIMS RESEARCH VOLUME VI - A PROFILE

ANNUAL SEMINAR
ON
CREATIVITY & INNOVATION
12TH FEB, 2011

ANNUAL
WORKSHOP
16TH OCT, 2010

FUNCTIONAL
SUMMITS
MARCH, 2010 –
NOV, 2010



RESEARCH
ARTICLES

MISCELLANY

VPM'S
LONDON ACADEMY
OF EDUCATION & RESEARCH
22ND OCT, 2010

"Without innovation any business in any industry, no matter how large or how small, whether national or international, would wither or die"

Dominic Procter, CEO Mindshare Worldwide, Economic Times, 18th March, 2011

their business models. Creativity and innovation helps organisations to keep their scientific temper alive. In fact, a continuous process of creativity and innovation ensures that organisations, in any sector, do not become a victim of a 'mental stupor'.

Creativity and Innovation in Business

In the backdrop of the global recovery of 2010 and ahead, led by creative and innovative approach of some organisations, Vidya Prasarak Mandal's (VPM)(Thane), DR VN BRIMS identified the theme 'Creativity and Innovation in Business' for its annual seminar and workshop in 2010-11. The theme was addressed from various angles and the approach was to explore the linkages between creativity and innovation and various functional areas of Management viz. marketing, finance, human resources, operations and information technology. The impact of creativity and innovation on the performance of critical management processes such as planning, organising, decision making, directing, motivating and controlling was also examined and analysed comprehensively. It is necessary to note that creativity and innovation subserves the profit motivation of enterprise, though profit may not be the one and only objective. Thus in a knowledge society innovation is a process which helps to augment the wealth producing resources of the community by establishing a direct link between knowledge assets and assets listed on the balance sheet of a business. Intellectual properties are now part and parcel of the assets of a business and are known in accounting parlance as intangible assets which include goodwill, patents, copyrights, trademark, training and development expenditure et al. Thus as Mr. R. A. Mashelkar has said, "Innovation converts knowledge into wealth. We need to recognise that Saraswati and Lakshmi should coexist⁵." George Whitesides from Harvard is the highest cited scientist in the World and the market capitalisation of his research based companies is over \$20 billion!

Minds to Market Place

The greatest challenge to enterprise today is to complete the journey from the mind or laboratory to the market place. India is not doing as well as it should be in this regard. In fact the global innovation index ranks India as 41 among 130 countries. China is ahead of India by 4 ranks. There is no dearth of genius in India. The ordinary citizen of India even in the remotest and farthest corner of our subcontinent – North, South, East, West, as the case may be, has the potential to innovate and contribute to the nation's progress. Professor Anil Gupta's 'Shodh Yatra' bears eloquent testimony to the genius of the subcontinent at work. In recent times, Tata's Nano represents a 'paradigm shift' in the Indian business landscape – nay, the innovation landscape. If India is to emerge as a leading super power by 2040 or 2050, innovation will have to be the driving force or the engine of economic development. According to Noble laureate Shumepeter Innovation is the, 'Critical Dimension of Economic Change'. India is awaiting big changes on all fronts, economic and social. However such economic changes necessarily revolve around innovation, entrepreneurship and market power which can help India to attain and maintain its competitive edge in global markets

⁵ R A Mashelkar, Times of India, Mumbai, 8th Aug, 2009, p18

London Academy of Education and Research, UK

VPM also organised a conference on the theme 'Why India !!!' in its London Academy of Education and Research, London, UK. The theme was fitting and timely as India is set to emerge as the leading economic power in the world. According to a report by Morgan Stanley, India's growth will start to outpace China's within three to five years and hence will become the fastest, large, economy with 9-10% growth over the next 20-25 years. Another research carried out by Goldman Sachs states that "India's GDP will quadruple by 2020 and even surpass that of the US by 2050"

Other Activities

There were many other activities conducted during the academic year 2010-11 which resulted in the creation and accumulation of substantive knowledge for the benefit of students, members of the faculty, businesses, public and all stakeholders at large. The Research Volume tries to capture the essence of this knowledge by consolidating proceedings of the workshop and seminar, London conference, summits in various functional areas, research articles contributed by the BRIMS faculty members and miscellany such as book reviews and biz quiz. We hope this Research Volume will help in spreading and sharing knowledge within DR VN BRIMS, other institutions of the VPM group and across many other organisations and hence contribute towards the progress of society. The knowledge management team at DR VN BRIMS duly acknowledges and thanks all the contributors to the sixth Research Volume and hopes that this kind of overwhelming support will continue for all our future endeavours. The following Sanskrit shloka sums up the innate nature of knowledge -

"Na chor haryyam, cha na raj haryyam, Na bhratri bhajyam, na bharkari

Vyaye krte vardhate ave nityam, Vidya dhan sarva dhan pradhanam."

न चोर हर्यम् च न राज हर्यम् । न भ्रातृ भज्यम्, न भारकारी ॥
व्यय करते वर्धते अवेनित्यं । विद्याधन सर्वधन प्रधानम् ॥

Neither the thief can steal it, nor can the king take it; neither divided amongst brothers, nor too heavy to carry. The more you expend it, the more it increases; Knowledge is the prime wealth and as His Holiness, the fourteenth Dalai Lama has said, "Share your knowledge. It's a way to achieve immortality", we hope that by sharing this body of knowledge we can make the World a better place and our place a little better in the World.

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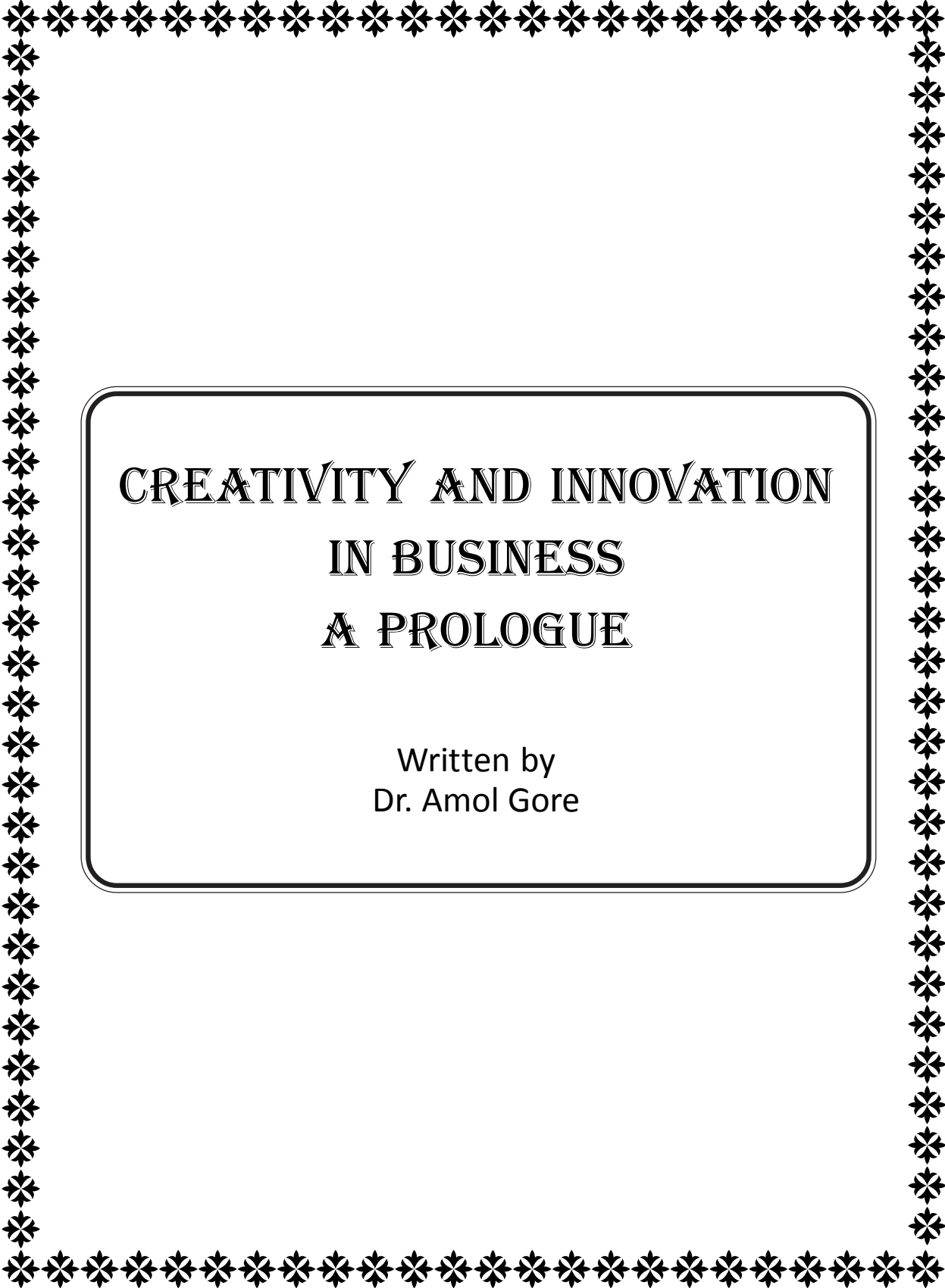
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DR VN BRIMS

Thanks
All Contributors
To
This Volume





CREATIVITY AND INNOVATION
IN BUSINESS
A PROLOGUE

Written by
Dr. Amol Gore

Creativity and Innovation in Business

Introduction

Organizations are increasingly recognizing the vital need to engage in the ongoing processes of experimentation, creative problem solving, innovation and continuous improvement, as they face unprecedented challenges in today's dynamic, complex and uncertain global business environment, typified by highly demanding customers. The current and emerging issues including flexibility and speed in responding to customers, improved operational efficiency to lower costs, effective management of diverse workforce and sustainability puts pressure on managers to develop and deliver solutions that satisfy various stakeholders of the organization. Hence, managers have to train their minds to develop a habit of imaginative creative thinking in order to meander on the 21st century business platform. As Albert Einstein has said :

“We cannot solve our problems with the same thinking we used when we created them.”

Thus, creativity and innovation are the cornerstones of modern business, industry and contemporary society.

Creativity implies bringing together of two previously unrelated planes of thought.

- Arthur Koestler

Creativity can be regarded as the quality of products or responses judged to be creative by appropriate observers and it can also be regarded as process by which something so judged is produced. Creativity is not about inventing something totally new, it is about making new synergistic connections. Anyone can learn and develop creativity through practice and by giving oneself permission to be playful, inquisitive, flexible and versatile. Individuals have to be made aware of their creative styles and preferences and their cognitive skills. They need to be motivated to flourish in a stimulating climate. Encouraging people into adventurous ideas helps promoting and provoking creativity. Pipe dreams are fine, however, an idea is only truly innovative if the right brain produces it and the left brain endorses it. The right brain has attributes that contribute to creativity, images, colours, intuition and emotion while the left brain has attributes for evaluation, logic, reasoning, analysis and realism. Hence, a right balance has to be struck between the two so that the product that results from the balance is innovative and acceptable. Although creativity and innovation are interlinked, they differ on at least four counts namely: process, risk, starting points and end results.

Innovation is the introduction and implementation of new ideas, goods, services and practices that are intended to be useful.

The main driver for innovation is often courage and energy to better the world. It is the process of bringing a new idea – one that solves problems or addresses opportunities into use. While creativity involves the production of novel and appropriate ideas by individuals or small groups, innovation refers to the successful implementation of creative ideas by the organization. The goals of innovation can vary between improvements to products, processes and services and apply to any organization, thereby dispelling the popular myth that innovation deals mainly with new product development. Although innovation in businesses remains focused on research and development, many innovations can emerge through other routes and practices.

Thus, creativity is the act of producing new ideas, approaches or actions, while innovation is the process of both generating and applying such creative ideas in some specific context.

“Creativity is thinking up new things. Innovation is doing new things.” - T. Levitt

“Innovation combines factors in a new way, or that it consists in carrying out new combinations.” - Joseph Schumpeter

Creativity and innovation are the levers that enable transformation in difficult situations and they do bring in a lot of change and turbulence. However, economic growth stems from corporate turbulence not stagnation. Industries that have displayed excellence in managing innovation have assumed market leadership, transformed into triumphant organizations and brought about transformation of societies and nations.

- ⇒ **Nokia** has turned from modest beginnings of riverside mill in Finland to a global telecommunications leader.
- ⇒ **Apple** Computer Inc. has used no fewer than seven types of innovation to launch the iPod, lapped up worldwide sales of USD 32 billion in 2008 and unique, admired company reputation in the consumer electronics industry during 2009.
- ⇒ **BMW** that initiates new car design by relocating staffers from scattered locations and multifarious functions to the automaker Research and Innovation Center called FIZ, recorded four-wheeler vehicle sales of over 1.3 million units and indisputable recognition for performance and luxury.
- ⇒ **Japan** spent a hundreded times more money during 1950s in importing licenses and technology than it did in exporting them. However, Japan tripled its R&D expenditure in the period 1965-1980 and spent almost 13% of the budget in promoting industrial growth. Japan ability to acquire, create and utilize new knowledge has catapulted it from a post-war devastated nation to an economic superpower, topping in high-tech industries, work ethics and R&D growth.

Most researchers and managers realize that creativity at individual level represents only part of the challenge. The superior objective is to create an organizational environment that nurtures and thrives with creativity and innovation. Many organizations have bureaucratic processes, layers of rules and authority, corporate norms and reward systems that discourage novel thinking and the challenge is to build an organizational structure and systems that foster creativity and innovation. Further, organizational designs and protocols that simultaneously cultivate ethics and creativity may be more readily adopted by firms than restricted designs aimed at addressing only one of these goals. The objective is to encourage managers to promote creativity by identifying assumptions and generating path to achieve innovative solutions that answer to impeachable ethical standards.

Peter Drucker had said :

“The enterprise that does not innovate inevitably ages and declines. And in a period of rapid change such as the present, an entrepreneurial period, the decline will be fast.”

Innovation and Creativity in all spheres of life and profession will dictate how we build a competitive edge over other cultures and countries. A firm may also engage in preemptive R&D in a race to gain exclusive rights to a new product or an unassailable position by patenting a new technology. By seeing something before it happens and preparing for it, there is a possibility to gain head start in this highly competitive world with depleting natural resources and rising population.

Global Scenario

Competitive advantage today comes from continuous, incremental innovation and refinement of a variety of ideas that spread throughout the organization. This kind of continuous innovation is possible only when organizations are able to design mechanisms which help them to reflect, review and critique their existing operations and offerings on a regular basis and use this learning for developing better business solutions. As a top executive of the Royal Dutch Shell Group of Companies observes, “The ability to learn faster than your competitors may be the only sustainable competitive advantage.” Learning involves creation of knowledge that enables an organization to innovate, and innovations frequently emerge from the blending of multiple perspectives, such as customer’s needs and the designer’s knowledge base, or a combination of two unrelated different disciplines. Consequently, innovation is fostered in organizations that promote integration of multiple perspectives by linking the various organizational parts more closely and by linking the organization more tightly to its customers. If successful, innovation defines the industry standards for quality of products and services. A technological innovation might have an added advantage of creating proprietary knowledge. A patented product or technology allows the innovating company to restrict entry of competitors and mould the market structure to its own advantage. Hence,

business organizations world over are spending a significant amount of their turnover on innovation and often the programs of organizational innovation are linked to organizational goals, business plan and market competitive positioning. National competencies in research are also an important input into firms' technological capabilities. Particularly in large firms, R&D laboratories actively seek support, knowledge and skills from national basic research activities like those in universities. In many countries, national advantages in natural resources and traditional industries have been fused with related competencies in broad technological fields and that then become the basis for technological advantage and competitive edge in new products. Innovation therefore involves attempts to deal with an extended and rapidly advancing scientific frontier, fragmenting markets flung right across *the globe, political uncertainties, regulatory instabilities, and a set of competitors who are increasingly coming from unexpected directions. The spreading of net wide and picking up and making use of knowledge signals are essential for effective management of innovation.* The World's most innovative Companies dazzle with new ideas and prove beyond doubt how business is a force for change.

The World's Most Innovative Companies (Source: Business Week, 2009)

Rank (2009)	Company	Particulars
1	Apple	iPhone, iPod, iPad
2	Google	Google Voice, Google Search, YouTube
3	Toyota	Automotive industry – Corolla, Prius, Scion brands
4	Microsoft	Windows Vista, Windows XP, SQL Server, MSN
5	Nintendo	Interactive entertainment products - Video Games
6	IBM	IT products and services
7	Hewlett-Packard	Printers, PCs
8	Research in Motion	Blackberry smart phones
9	Nokia	Mobile Handsets, GSM
10	Wal-Mart	Retail Stores

Businesses pay much attention to formal R&D endeavours for breakthrough innovations and developed economies are known for their impressive investments in R&D. The term research and development covers three activities viz. basic research, applied research, and experimental research. R&D comprise creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture, environment and society, and the use of this stock of knowledge to devise new applications.

Top R&D Investing Countries (Source: OECD Factbook, 2008)

Rank	Country	R&D Investment as percentage of GDP
1	Sweden	3.7
2	Finland	3.5
3	Japan	3.4
4	Korea	3.2
5	Switzerland	3.0
6	United States?	2.8
7	Austria	2.7
8	Denmark	2.6
9	Germany	2.5
10	France	2.3
42	India	0.7

R&D Investment in terms of USD

Rank	Country	R&D Investment (Billion USD)
1	USA	517
2	Japan	180
3	Germany	82
4	France	58
5	UK	48
6	China	47
7	Canada	27
8	Italy	23
9	Spain	14
10	Russia	11
13	India	6

The driving force for creativity and innovation is obviously the research and development efforts requiring massive investments, however, a recent global research underscores the importance of culture. The research conducted in 759 public companies from 17 countries including USA, Germany, Japan, India, and China, revealed that radical innovation is correlated to future

market orientation, willingness to cannibalize and a tolerance for risk (Source: Tellis et al., Innovation in companies across nations: New metrics and drivers for radical innovation, 2007). Moreover, the capability to continuously innovate and transform industry standards is dependent on more than just the quality of an organization’s accumulated knowledge-base. This implies that to leverage on invisible knowledge in the market, an organization requires knowledge that is deeply embedded in its social architecture. It resides in those specialised relationships among groups and individuals that frame an organization’s operating practices – in its particular norms and attitudes; in its information flows; in its ways of performing tasks, making decisions and formulating goals; and in the way in which its people and teams have learned to behave and interact with each other. As one CEO of a reputed steel company puts it, “We have no issues allowing people to freely visit the plant; we will be giving away nothing because they can’t take it home with them.”

Global Innovation Index is a global index produced jointly by the Boston Consulting Group, National Association of Manufacturers, USA and The Manufacturing Institute, and measures the level of innovation of a country. It is part of a large research study that considers both the business outcomes of innovation and government’s ability to encourage and support innovation through public policy. The following is a list of top ten countries that scored high on innovation index:

Global Innovation Index (March, 2009)

Rank	Country	Score
1	South Korea	2.26
2	United States	1.80
3	Japan	1.79
4	Sweden	1.64
5	Netherlands	1.55
6	Canada	1.42
7	United Kingdom	1.42
8	Germany	1.12
9	France	1.12
13	China	0.73
15	India	0.06
16	Russia	-0.09
17	Mexico	-0.16
20	Brazil	-0.59

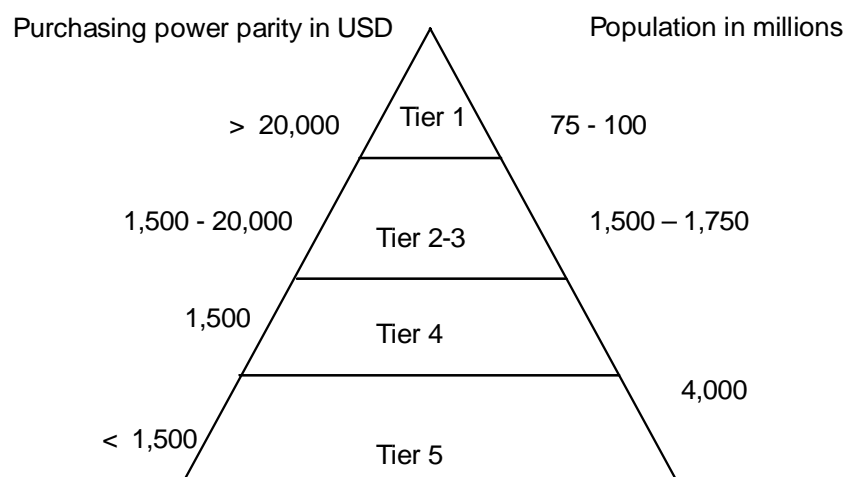
Gandhian Engineering

According to Dr. Mashelkar, President of Global Research Alliance, innovation is about doing things differently, making a big difference, making the impossible possible and the best manifestation can be through the example of Gandhiji and hence the term 'Gandhian Engineering,' that goes beyond simple inclusive growth. Innovation leaders convert problems into opportunities, grow small ideas into major businesses, and develop a strong hindsight, foresight and insight.

Gandhian Engineering is about: "Getting More from Less for More and More."

The engineering challenge is always to get more from less, for example, decades back, computer occupied one full room while today's laptop is even more powerful and occupies space of less than a square foot. Gandhian engineering says, if the laptop costs \$1000, not many people can afford it and hence, it needs to be thought through how laptop of \$100 can be made available without compromising on performance so that we start traversing at the bottom of the pyramid, yet profitably. Another example is that of an artificial foot. An artificial foot in the US can cost anywhere between USD 12,000 to 18,000 which means that people at bottom of the pyramid would require at least 15 years to buy an artificial foot. Now, the challenge is to make the USD 12,000 foot affordable at \$ 30 and yet 10 times better in terms of performance since the Indian foot needs to subsist in rugged conditions. The innovation of Jaipur foot is one such attempt to align with the changing paradigm.

The concept of 'Bottom of the Pyramid' pioneered by the management guru C. K. Prahalad establishes the economic pyramid depicting the distribution of wealth and capacity to generate incomes in the world. More than four billion people live at the bottom of pyramid on meagre income; however, by focusing on the bottom of pyramid consumers' capacity to consume, private-sector businesses can create a new market.

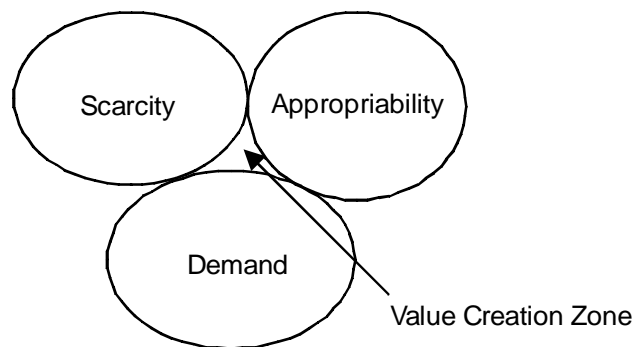


The Economic Pyramid (Source: C. K. Prahalad, The fortune at the bottom of pyramid)

If we take nine countries – India, China, Brazil, Mexico, Russia, Indonesia, Turkey, South Africa, and Thailand – collectively they are home to about 3 billion people, representing 70 percent of the developing world population and combined GDP of USD 12.5 trillion—certainly not a market to be ignored! Moreover, with cell phones and televisions, the bottom of pyramid consumer has unprecedented access to information as well as opportunities to engage in a dialogue with the larger community. Both current market size and growth rates bear testimony to the fact that the bottom of the pyramid market is a critical factor in worldwide wireless growth and the proliferation of wireless devices from Grameen Phone in Bangladesh to Telefonica in Brazil indicate the budding opportunities for business. The critical requirement is the ability to invent ways that take into account the variability in cash flows of bottom of pyramid consumers that makes it difficult for them to access the traditional market for goods and services oriented toward the top of the pyramid. The bottom of pyramid as a market provides a new growth opportunity for the private sector and a forum for innovations although old and tired solutions cannot create markets at the bottom of pyramid.

Each firm possesses a unique bundle of resources – tangible and intangible assets and organizational capability to make use of those assets. A firm can develop competencies from these resources and creative augmentations can translate as sources of competitive advantage. Typically, the dynamic interplay of the three fundamental market forces viz. scarcity, appropriability and demand, determines the value of a resource or a capability. The resources are more valuable when they are critical for meeting a customer’s need better than other alternatives, are scarce, drive a key portion of the overall profits and are durable or sustainable over time. In other words, the resources that contribute to competitive superiority are the most valuable ones.

What makes a resource valuable?



Innovator is one who looks at something that everyone sees, but sees something that no one has seen. Many have seen the whole family of 4 or 5 in India riding a two wheeler but when Ratan Tata saw it, he wanted to change this and that is how USD 2000 Nano car was born. Nano is a transformational innovation that has not only innovation and passion but also compassion, an

excellent example of Gandhian Engineering. Bajaj Auto also subsequently announced a small car project to be developed in tripartite joint venture agreement of Bajaj, Renault and Nissan. Bajaj small car intends to utilize 70-80 percent of parts from its two and three wheelers with a design focused on delivering fuel economy. Thus, innovation at bottom of the pyramid markets can reverse the flow of concepts, ideas, and methods. For an MNC that aims to stay ahead of the curve, experimenting at bottom of pyramid markets is increasingly critical and no longer an option.

Creativity Techniques

Although creative activity may be present in most decision making situations, the potential contribution of explicit creativity techniques often remains unexplored. Creativity techniques have the potential to provide an unusual solution that is required by complex organizations and complex technology. There are several techniques for exploiting human creativity. However, they can be structured into four main categories:

Free Association: Brainstorming, Synectics, Black box technique

Forced Relationship: Catalogue technique, focused object technique

Analytical: Attribute listing, Grid analysis

Eclectic Approach: Combinations or extensions of other techniques

Creativity then, is the capacity to imagine new, useful and viable solutions to problems. It is a drive or initiative to see things in a different light or in a form other than they seem.

“When a low probability line of thought leads to an effective idea, there is a ‘eureka’ moment and at once the low probability approach acquires the highest probability.”

- Edward de Bono

It has been argued that in order to enhance creativity in business, three components are needed viz. expertise, creative thinking and motivation (Source: Amabile T., Creativity and role of the leader, HBS, 2008). Further, creativity is also seen as an important element in the recombination of elements to produce new technologies and products, and consequently, economic growth.

Innovation Models

Early models viewed innovation as a linear sequence of functional activities and the two versions commonly promoted were ‘technology push’ and ‘market pull.’ However, these models faced numerous criticisms since they ignore many feedbacks and loops that occur between the different stages of the process. Much recent work recognises the limits of linear models and tries to build more complexity and interaction into the frameworks since most innovation is messy, involves false starts, dead ends and out of sequence jumps (Tidd et al., 2009). The current

generation of innovation concept sees innovation as a multi-actor process which requires high levels of integration at both intra and inter-firm level and which is increasingly facilitated by IT-based networking. Another similar taxonomical approach subtly describes the models of innovation for the knowledge economy as science-based, user-based and integration-oriented. The scientific approaches seem to conquer new ground all the time and are significant at the upstream stages wherein they are of direct value in developing process and product innovations. The user-based innovation implies that the user is motivated to find a solution that fits exactly with his or her specific needs and circumstances. Integration-oriented innovations are more close to the current, complex business scenario in which modularity is both a solution to growing complexity and a new method for management of innovation.

The influential work of Clayton Christensen (Source: *The Innovator's Solution*, HBS Press, 2003) focuses on two distinctive categories viz. sustaining and disruptive, based on the circumstances of innovation. In sustaining circumstances when the race entails making better products that can be sold for more money to attractive customers, evidence shows that the incumbents are likely to prevail, while in disruptive circumstances when the challenge is to commercialize a simpler, more convenient product that sells for less money and appeals to a new or unattractive customer set, the entrants are likely to beat the incumbents. A sustaining innovation targets demanding, high-end customers with better performance than what was previously available. Disruptive innovations, in contrast, do not attempt to bring better products to established customers in existing markets. Rather, they disrupt and redefine that trajectory by introducing products and services that are not as good as currently available products. However, disruptive technologies offer other benefits – they are simpler, more convenient, and result in to less expensive products that appeal to new or less-demanding customers. Since the processes start coalescing within a group that is confronted repeatedly with doing the same task, the engine that propels accomplishment in well managed companies gradually becomes less dependent on the capabilities of individual people, and becomes instead embedded in processes. Furthermore, the ability to create successful disruptive growth businesses can become ensconced in a process as well that can be termed as 'disruptive growth engine.' Thus, a disruptive business model that can generate attractive profits at the discount prices required to win business at the low end is an extraordinarily valuable growth asset.

Corporate Experiences

Google a fastest growing company ever, has recorded almost nil attrition rates in India since 2004. The secret behind this is innovative working environment which lets great minds think indigenously. In fact, 20% of the time is reserved for innovative pursuits and there is Google news created by the principal scientists of Google to enable employees to pursue innovation.

General Electric files more US patents than almost any other US firm year after year. It is one of the world largest companies with revenue of USD 180 billion and leading producer of items

from light bulbs and dishwashers to locomotives and power plants. The famed former CEO, Jack Welch said, GE is a place where people have freedom to be creative, a place that brings out the best in everybody.

Sony is the leading company in consumer electronics, introducing some 1000 products each year; 800 of those products are new versions of old products while 200 are totally new. When Walkman was introduced in 1979, thousands of companies around the world started making and selling pocket-size audio cassette players. Sony managed to maintain its leadership by continuously introducing upgraded models of Walkman at a phenomenal rate - between 1979 and 1992 it had introduced 227 new models of Walkman, that is, about one new model every three weeks.

Leadership for Creativity and Innovation

Leaders can influence levels of motivation by shaping technological development climate. Doing so, this climate can have a significant impact on the attitudes of employees, technical staff and managers towards innovation. If a strategic leader is able to communicate and create a positive consensus around objectives, then there is increased likelihood to attain better motivation levels and development. Strategic leadership contributes to increase innovative efforts and innovation with positive results. Similarly, involvement in team work provides a strong positive relationship with higher motivation to innovative efforts. Also, evidence shows that successful leaders of business innovation score higher on dimensions of transformational leadership. According to Burns (Source: Leadership, Harper & Row, New York), transforming leadership occurs when one or more persons are engaged in such a way that leaders and followers raise one another to higher levels of motivation and morality. Transformational leaders achieve superior results by operating in four Is, namely, idealized influence, inspirational motivation, intellectual stimulation and individualized consideration.

Future Trends

Wealth producing resources of any society in the future shall be driven by knowledge and knowledge in turn depends on innovation which stems from creativity. The progress of business through the paradigms of creativity and innovation is taking place at an unprecedented speed and the rate of learning by business has to be greater than the rate of change. Hence, individuals, groups, institutions and business enterprises have to try and ingrain the key principles of creativity and innovation in business and personal lives and survive in the whirlwinds of change, cold competition and collaborations of new, may be weird, unheard forms of partnerships and organizations.



SECTION – 1(A)

Proceedings of Seminar

‘Creativity and Innovation in Business’

On

12.02.2011

At

Thorale Bajirao Peshwe Sabhagruha

VPM Campus

Thane

SESSIONS

Time	Activity	Responsibility
10.00 am - 10.05 am	Lighting the Lamp	
10.05 am - 10.10 am	Welcome Address	Dr. P. M. Kelkar - Director DR VN BRIMS
10.10 am - 10.20 am	Preamble	Dr. Guruprasad Murthy - Director General, DR VN BRIMS
10.20 am - 10.30 am	Importance of Creativity and Innovation	Dr. Vijay Bedekar - Chairman, VPM
10.30 am - 11.15 am	Keynote Address	Shri. S. P. Agarwal - President BMA
11. 15 am - 11.30 am	Tea/Coffee Break	
11.30 am - 12.15 pm	Chief Guest's Address	Mr. Raghuraman - Editor, DNA
12.15 pm - 1.00 pm	Innovation & Business Challenges	Dr. K. K. Saxena - CEO, Anuvi Chemicals
1.00 pm - 1.45 pm	Lunch	
1.45 pm - 2. 30 pm	Creativity & Innovation in Accounting.	Dr. Vishnu Kanhere - Practising CA.
2.30 pm - 3.30 pm	Tata Swach – Invention blooming into an innovation	Dr. Debabrata Rautaray -Tata Chemicals Innovation Centre.
3. 30 pm - 3.50 pm	Tea/Coffee Break	
3.50 pm - 4.30 pm	Open forum and Discussion	
4.30 pm	Vote of Thanks	

Dr. P. M. Kelkar

Welcome Address

"Good Morning and Welcome to you all! It gives me a great pleasure to welcome illustrious personalities like Mr. S. P. Agarwal, President of the Bombay Management Association and our keynote speaker; our ever supportive Chairman Dr. Vijay Bedekar; Director General Dr. Guruprasad Murthy; Our Chief Guest Mr. N. Raghuraman, Editor, DNA and Dainik Bhaskar; Dr. Saxena, CEO and Owner of Anuvi Chemicals (as well as Mrs. Saxena); speakers of the afternoon session Dr. Debabrata Rautaray of Tata Chemicals Innovation Centre; Dr. Vishnu Kanhere our Governing Body Member and Practicing Chartered Accountant, Dr. Shyam Asolekar, Professor of Environmental Sciences at IIT Mumbai,

And Shri B. D. More, Executive Director BMA, Members of DR VN BRIMS Governing Board and VPM Managing Committee, Invitees, Principals of colleges on the campus, Industry Delegates, BMA members, our Visiting Lecturers, Members of the press, teaching and non-teaching staff and most important all our students!

Over the past 6 years, our institute has been organizing annual seminars on contemporary issues that provide insights to subjects related to the MMS or PGDM degree programs in order to give our students, local academic and industry personnel an exposure to the real world of business. This list includes thematic seminars like a) Corporate Social Governance in 2006 b) Challenges for Indian Multinationals in 2006, c) Transforming India-A Paradigm Shift in 2007, d) Vision 2050-India A Super Economic Power in 2008, e) Consolidation- The New Business Mantra in 2009, f) Global Meltdown- The Lessons To Be Learnt in 2010. Proceedings of these

seminars have been collected, edited and bound into 5 Research Volumes with ISSN 0976-2159.

Entrepreneurs like N.R. Narayana Murthy, Ajay Piramal, and business leaders like Nitin Paranjape, Deepak Ghaisas, Shrinivas Joshi, Rajni Patel, Ashwin Dani, Keshab Nandi, Ram Mallar, and Vikas Shirodkar have addressed our students. Yearly seminars are preceded by the workshops and this year the 'Creativity and Innovation in Business' workshop was arranged on 16th October 2010 wherein 6 groups of over 50 students made excellent presentations on this topic. Today, we are lucky to have yet another galaxy of business leaders like Mr. Agarwal, Mr. N. Raghuraman, Dr. Rautaray, and Dr. Kanhere and entrepreneurs like Dr. K. K. Saxena address us on this ever green topic. It is important to note that today's seminar is jointly organized by us with the Bombay Management Association (BMA) and at the outset we thank BMA for this kind gesture.

Creativity and Innovation is such a large subject that 1 day is not sufficient to cover all the aspects and hence, we have limited its application only to areas of business. One cannot discuss creativity without mention of a Guru like Edward De Bono who gave the simpler meaning to the word creativity and propagated that anyone can learn and develop creativity through training and practice. Theodore Levitt in his famous quote has stated that 'Creativity is thinking up new things while Innovation is doing new things'.

Creativity involves the production of novel ideas while innovation refers to the successful implementation of creative ideas by an organization. So creativity is a technique while innovation is putting that technique into practice. Our prologue published last year on this subject

includes several examples of international innovative companies like Nokia, Apple Computer, Sony, BMW, Google, Toyota, Microsoft, IBM, HP, Wal-Mart, Nintendo, Research in Motion, General Electric etc. Unprecedented Innovations have taken place in last 15 years in the communication, computer and electronics industry which has changed way we live. It is said, when the things go digital, boundaries are lost. Several products of Sony and Apple stand to prove this point.

To the above list, we can add many automobile, electronics, pharma, IT and service sector companies in India that have done exceedingly well in product, service, business methods innovations. We have come a long way from the time when the head of US patents Office in 1899 said and I quote 'whatever could be invented has been invented'.

I was in R & D of 3 top MNCs and was paid to generate new ideas, processes and products. And let me tell you that for any company, innovation is a serious business. During the Oct. workshop, I did mention that how Johnson & Johnson, number one healthcare in the company in the world arranged a worldwide Innovation Seminar for top 800 executives aimed at sustaining the goal of double-digit growth & deployed 37 innovation tools for employees to create ideas and develop innovative products and processes.

Innovation must be both new to the industry and generate wealth for the company. While innovation is often equated with the new product development, it occurs across the business. It takes place in products and services for end users, in production processes, in business systems like the way company goes to market, relationships between the company

and suppliers, trade customers, partners etc. It occurs in management methods like the way a company governs itself or raises capital from market.

In J & J, they divide innovation into three broad classes based on how impactful they are and how much wealth they create. Transformational innovation involves creating new markets and/or business that fundamentally changes the industry structure. Substantial innovation changes the balance of power among competitors by altering market demand, often by introducing a new generation product/service. Incremental innovations are collectively vital but individually small innovations that are often the result of continuous improvement efforts. It is easy then to see that the transformational innovation creates the largest amount of wealth.

Sustaining top performance is a key challenge for every business leader. Competitive advantage is more and more fleeting and success depends increasingly on a continuous flow of innovative ideas that can open up new opportunities. The challenge is particularly acute for large and decentralized organizations like J & J. For the past 126 years, how did they plan to avoid the fate of many other blue chip companies that have lost their edge and fallen by the way side?

In J & J, all key business issues were addressed through FrameworkS9 process designed by McKinsey Consultants. In order to take companywide innovation campaign to the next higher level, they addressed 5 key questions and formulated strategies to address them. These 5 questions were: 1) Why it is important for any company to rethink its approach to innovation? 2) What role does innovation play in driving the business? 3) What should be our innovation

goals? 4) Where can we focus to be even more successful innovators? and 5) How can one jumpstart the process of becoming more innovative?

In addition to the 3 types of innovations described above, Clayton Christensen in 2003 defined innovations in 2 more categories based on circumstances in which end products are used. Disruptive innovations result when totally changed products are sold for less money to the new customers. Sustaining innovations result when modified existing products are sold at higher cost to demanding, high-end consumers.

Today's seminar is aimed to understand experts views on the subject and learn how they have developed innovative products/ services in their business, what kind of business methods, models or people practices they have adopted and how they have created an environment in their companies for employees to be creative and innovative.

As per our practice, it is customary that we announce the topic of the next year's seminar today. I am happy to inform you that the next year's seminar will be based on the very relevant theme 'Management of Micro, Small and Medium Enterprises'. As you may know, 45% of industrial output and 40% of exports today comes from MSMEs and they have been growing much faster than the large corporations. Though the majority of large industries have left Mumbai for greener pastures, there are many small and medium scale product and service industries today in Mumbai-Thane region which are represented by their associations like IMC, TMA, TBIA, TISSA etc. Our seminar plans to address management, financial, marketing, IT, tax and legal, labour, environmental and IPR issues faced by them."

Mr. Raghuraman

Chief Guest's Address

Mr. Raghuraman, the editor of DNA (one of the largest subscribed daily newspaper) was the chief guest for this year's seminar. He narrated some incidents of his life which had made him realize that he was passionate about writing articles in news papers and working for media industry. His great thoughts can be summarized as follows.

According to him, to survive in any field one needs to develop creative and innovative mind. This is the minimal need from any formal management training to get success in any business. A brilliant example stated by him was that a normal vegetable vendor on a road knows all management techniques taught in best management schools in the country without taking any kind of training. The reason behind this is that he is focused on his business, as only this business brings bread and butter for his family. The speaker shared one incident from his life; he said that, when they had brought their first refrigerator they used to keep all leftover food in the fridge and it used to give a foul smell but his grandmother suggested that keeping a charcoal in the fridge would absorb the foul smell. This was the creative idea which needed no training but required presence of mind.

One of his friends wanted to celebrate his daughter's wedding ceremony in a peculiar manner and for the same he insisted to the speaker to come up with some innovative ideas. Mr. Raghuraman suggested him to create a wedding card consisting his family's dynasty so that nobody would throw away the card. Also they created

Dr. K. K. Saxena

Innovation & Business Challenges

The CEO of Anuvi Chemicals, Mr. K.K.Saxena mainly focused on key elements in business success like integrity, continuous improvement, innovation, team work, individual respect and responsibility. The thoughts he shared regarding innovation can be summarized as follows.

An organization has to be alert while taking any step regarding business, giving thought to the fact that there are threats to survival in the market, such as entry of global players, borderless economy, advances in the information technology etc. There are many new challenges for industrial world like environmental issues, consumer activism, governmental and institutional regulations, work force diversity and ever changing customer expectations.

He added, research and development is not done in laboratory. Laboratory is just to confirm whether our findings are correct or wrong. Innovation is nothing but the result of creative thought process.

There are three levels of innovation, **Ingenuity innovation** involving smart thinking and smarter execution, **Sustained innovation** showing improvements to existing product/market and **Disruptive innovation** involving new product, new business and new market ideology arising from disruption. Any disruption can be taken as an opportunity to innovate something out of it. Natural disasters like an earthquake and after measures taken to reduce its consequences can be the good example of disruption innovation.

An innovation is neither singular nor linear but systematic. Innovation can be of various types like Business model innovation,

cultural innovation, technology innovation, marketing innovation and service innovation. In Business model innovation, business resources must be valuable, rare and difficult to imitate. There should not be any strategic substitutes. In Cultural innovation, the main objective is encouraging new ideas. Technology innovation should focus on environment eco friendly products. It involves development of a new product and new application of the same product.

Current directions of business:

Large companies are outsourcing manufacturing facilities; technology development is being segmented, after sales services are being franchised, democratization of marketing is taking place. Future of business depends on speed of cultural changes in the innovation. Future is coming so fast that we cannot predict it. We can only give quick response to it.

Contributed by

Janhavi Mhatre

Student - MMS I, 2010 - 12 Batch

INNOVATION AND BUSINESS CHALLENGES

DR. K.K. SAXENA

CORE VALUES

- Integrity
- Continuous improvement
- Innovation

CHALLENGES

- Hyper competition – threat of survival
- Shortened product life cycle
- Entry of global players
- Borderless economy
- Advances in Information Technology

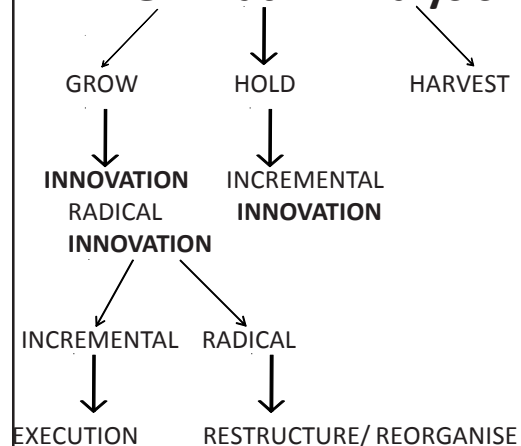
NEW CHALLENGES

- Environmental issues
- Consumer activism
- Governmental and institutional regulations
- Replacement of quality standards- ISI v/s ISO

NEW CHALLENGES

- Work force diversity
- Ever changing customer expectations
- Capturing customer mind set
- Changing business landscape

GE Matrix Analysis



CREATIVITY IS SKILL

INNOVATION IS A THOUGHT PROCESS

LEVELS OF INNOVATION

- INGENUITY : Smart thinking and smarter execution
- SUSTAINED INNOVATION : Improvements to existing product/market
- DISRUPTIVE INNOVATION : Radical innovation, new product, new business, new market

SYSTEMIC INNOVATION

- BUSINESS MODEL INNOVATION
- CULTURAL INNOVATION
- TECHNOLOGY INNOVATION
- MARKETING INNOVATION
- SERVICE INNOVATION

INNOVATION HAS TO BE DRIVEN

INNOVATIVE LEADERSHIP

SUSTAINABILITY OF BUSINESS

VISIONARY LEADERSHIP

- Optimist
- Must think beyond present
- Have power of intellect
- Will to deliver
- Persistent
- Vision to create synergy

VALUE INNOVATION

- Gives value added products
- Makes competition irrelevant
- Creates differentiation at low cost
- Creates and captures new demand
- Helps to create a better society

CULTURAL INNOVATION

- Encouraging new ideas
- Celebrating new ideas
- Encouraging team work
- Providing freedom to work

TECHNOLOGY INNOVATION

- Development of new products
- Development of new processes
- Development of new applications for same product

TECHNOLOGY INNOVATION

Focus on environment

- How to use new technologies to have eco-friendly products?
- How to use alternate technologies to reduce energy consumptions?
- How to use bio-technology and bio-engineering to reduce energy consumption?

MARKETING INNOVATION

- MNCs are looking at RURAL markets
- Banks are coming to your door steps
- High price durables are being sold in smaller cities
- Products developed in India are being sold in similar markets abroad

CURRENT DIRECTIONS OF BUSINESS

- Large companies are outsourcing manufacturing facilities
- Marketing model of supply and apply (Car painting) will be the order of the day
- Technology development is being segmented
- Competitors are joining hands for procuring raw materials
- After sales services are being franchised

CURRENT DIRECTIONS OF BUSINESS

- HR is undergoing tremendous changes
- Loyalty is not in vogue and new methods are being tried to retain valuable human asset
- Customers are looking value for money and hence the competition will remain as an important factor
- DEMOCRATISATION of marketing is taking place

FUTURE OF BUSINESS

Depends on
SPEED of CULTURAL CHANGE IN THE
ORGANISATION

FOCUS on INNOVATION and its analysis IS IT
REAL? Explore nature of potential market.

CAN WE WIN? Find out whether the
INNOVATION and Company
could be competitive.

IS IT WORTH DOING? Examine profit
potential

of INNOVATION

FUTURE OF BUSINESS

Managing Ethics

- ☞ Will improve society
- ☞ Will help maintaining a moral course in
turbulent times
- ☞ Will create team work
- ☞ Will create and improve a strong public image
and TRUST

CREATE - IIM

INSTITUTIONALISE INNOVATION MANAGEMENT

“The future is coming so fast,
we can’t possibly predict it,
we can only learn to respond quickly.”

STEVEN KERR

Dr. Vishnu Kanhere

Creativity & Innovation in Accounting

Dr. VISHNU KANHERE is a practicing Chartered Accountant, enlightened us on creativity and innovation in financial sector.

Most of us think that in financial sector there is very minimal scope for creativity and innovation. According to him there is wide scope in financial sector for creativity and innovation which is not recognized. In his valuable speech, he focused on various financial aspects in which creativity can be applied. They are discussed as follows:

a) Multidimensional Accounting

According to Dr. Kanhere, accounting is mainly done in 2 ways. First is according to the Income tax act and second one is according to the Companies Act. But as a part of creativity he suggested to develop concept of multidimensional accounting.

It refers to making customize balance sheet for different parties according to their requirements. E.g. Balance sheet for employees or Balance sheet for customers etc.

Customize balance sheet helps to take quick decisions since it elements irrelevant things from the statement.

b) World currency

This refers to designing single currency for the entire World. It means only one currency is used in the World for exchange. This helps in saving various costs in relation to currency exchange as well as it is convenient for different nations of the world.

c) Natural resource accounting

Currently accounting concept is not applied to natural resources. According to him, every country should measure the real values of natural resource which it possesses.

d) Giving visual representation to the balance sheet

For better understanding of balance sheet it should be converted to graphics. Visual

representation is easy to recall and could be understood logically. Thus, all the above concepts discussed by him, provides scope for creativity and innovation in financial sector.

Contributed by

Sarfaraj Dhankwala

Student - MMS I , 2010 - 12 Batch

Creativity & Innovation in Accounting

Lecture delivered on 12th February, 2011
at VNBRIMS, Thane



Dr. Vishnu Kanhere

B.Com (Hons), FCA, AICWA, FLS,CISA, CISM, CGEIT,
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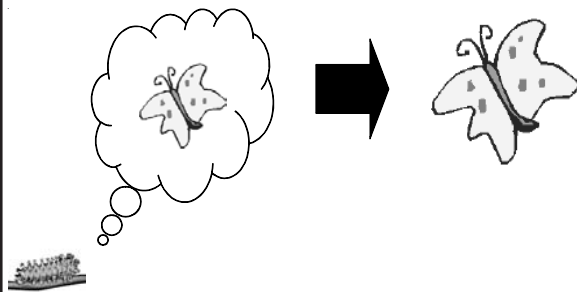
Creativity and Innovation

- ✓ Creativity – the ability to develop new ideas and to discover new ways of looking at problems and opportunities.
- ✓ Innovation – the ability to apply creative solutions to problems or opportunities to enhance or to enrich people's lives.

Key to Growth is Innovatic



Think , Act & Transform

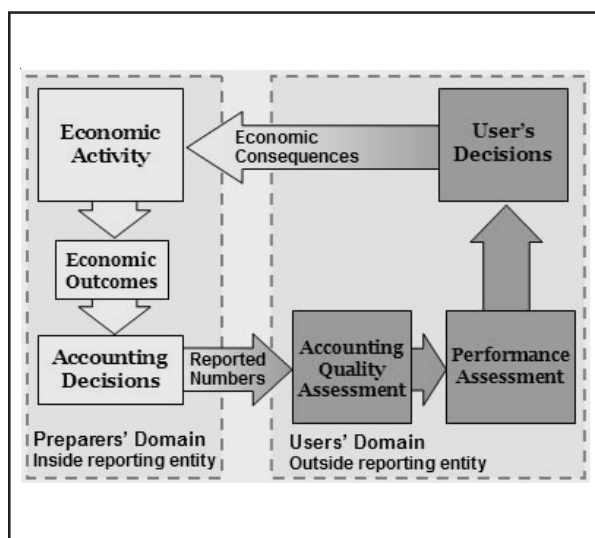


Is Creativity a Bad Word?

HIS 20 YEARS' EXPERIENCE AS A COOK
WILL SURELY HELP US MAKE HUGE PROFITS!



Especially in Accounting & Finance



What is Accounting

- Enumeration
- Measurement
- Recording
- Analysis
- Presentation
 - Internal for decision making
 - External for stakeholders

Primary Objective of Accounting

Economic Information in Monetary Terms for Objective Decision making.

Assess the state of affairs

Balance Sheet

Measure the performance

Income and expenditure Account

The Basis of Accounting

Users – Internal & External

Purpose – Enterprise Decisions
Economic/Policy Decisions

User Specific Qualities

Understandability

Decision Usefulness

(Relevance, Reliability, comparability, Consistency)

Constraints

Materiality, benefit should exceed costs.

Measurement Attributes

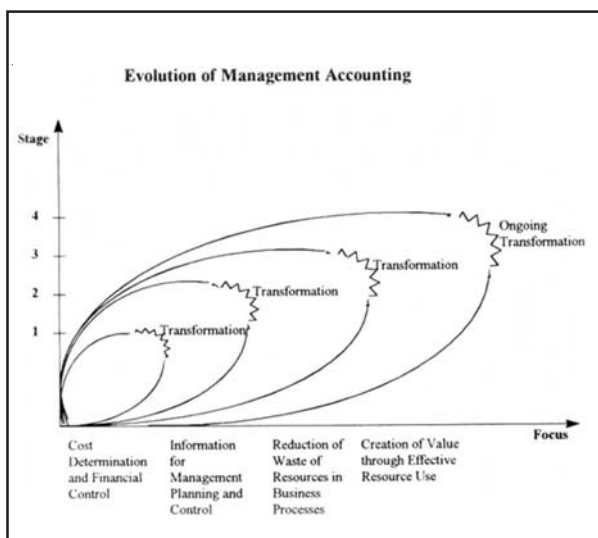
Historical cost

Current cost

Net Realizable Value

Current Market Value

Present value of future cash flows



Avenues for Innovation and Creativity – over the years

- Oral Accounts
- Written Accounts – now automated ERP
- Single Entry – Double Entry
- Financial Accounting,
- Cost Accounting
- Management Accounting
- Social Accounting

Avenues for Innovation and Creativity – over the years

- Changing concepts, assumptions
 - Inflation accounting, fair value reporting
- Better reporting
 - Balanced scorecard, triple bottom line
- Risk management
 - Accounting for risk
- Promoting financial literacy
 - Inclusive accounting

Avenues for Innovation and Creativity – the future

- Multi dimensional accounting
- World currency – common measure
- Triple bottom line
- Visual Accounting
- Measuring the Immeasurable

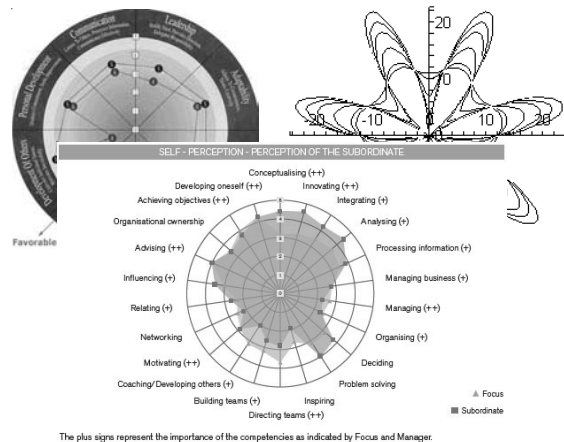
Multi dimensional accounting



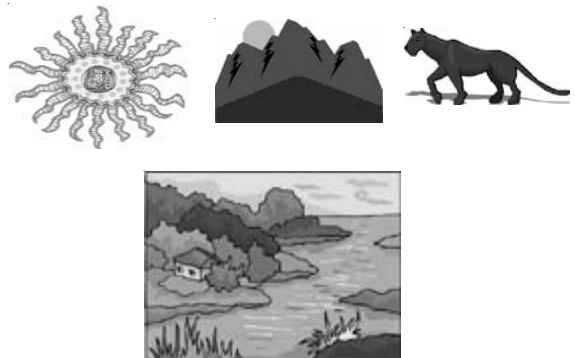
World Currency – e-cash



Visual Reporting



Measuring the Immeasurable



Not Accounting for Natural Resources

- No cost to natural inputs
- Overexploitation of Assets
- Imperceptible in short run – long term damage
- Basis for Survival
- Wrong Choice –
 - Centrally controlled economy
 - Market driven economy

Natural Resources Accounting Issues

- Difficult to capture assess and quantify
- Alternate services/inputs exist (substitution principle)
- Natural resources can revive
- No direct monetary cost measurable to the user
- No responsibility or debits or charge to user

Natural Resources Accounting Issues (Contd.)

- No market prices for natural resources
- True cost of transactions is not captured
- Results in erosion of capital due to under provision of costs (lack of amortization)

Thus by not accounting for natural resources a country could exhaust its mineral resources, cut down its forests, erode its soils, pollute its aquifers, and hunt its wild life and fisheries to extinction, but measured income would not be affected as these assets disappeared (Repetto, eal 1989)

The solution

The guiding principle of augmented economic accounts is to measure as much economic activity as is feasible, regardless of whether it takes place inside or outside the market place.

Methods

- Market pricing
- Productivity pricing
- Hedonic method
- Travel cost method
- Contingent choice method
- Estimation method
- damage cost method

NRA & Accrual System of Accounting

- Develop reliable methods for measuring and existing natural resources qualities.
- Develop techniques to value cost import of use of environmental sources and cost of depletion of natural resources
- Develop techniques to estimate soft value of environmental services that affect and improve quality of life.

Finance

- Reaching the unreached – microfinance, rural banking,
- Securitization – of assets, receivables, of entertainment?
- Derivatives, futures and options
- Innovative finance instruments – zero coupon bonds, index funds, convertible debentures
- Stock lending,
- Rediscovering barter

More Future Areas

- Government accounting
- Green GDP
- Balance sheet for Nations
- Gender budgeting
- Tax accounting.....

The Choice is between:

- Innovation
- Growth
- Development
- Obsolescence
- Marginalization
- Elimination



Create a Niche! Be different ! Lead the Pack



Highlight achievements, expertise and education

Focus on Quality



Be consistent

Dr. Debabrata Rautaray

Tata Swach – Invention, blooming into an Innovation

Dr. Debabrata Rautaray shared information on the recent product, 'Tata Swach' giving an overview of the 'Tata Group' and 'Tata Chemicals Ltd.', brief introduction of nanotechnology and its application in the product. The information he shared can be summarized as follows.

Tata Group has been a leading group with significant contribution in many sectors like materials (22%), energy (9%), chemicals (5%), engineering(24%), communications (24%), IT(9%), consumer products (8%). Its market is spread across 140 nations having 99 companies with over 3,74,000 employees under its roof. The contribution of Tata Chemicals Ltd. in chemical sector is 54% whereas in fertilizer sector is 46%. It has significant production chain consisting of products like soda ash, urea, food additives, bio carbonate, bio fuels, herbicide etc. Today it stands on the second position in the world for soda ash manufacturing and it is a leader in edible salt market as well. It has strongly focused on research and development increasing its thrust in new business segments like water and energy. Recently it has started its innovation center in Pune where 40 scientists are involved to make an innovation in the field of Bio- nanospace.

Nanotechnology has tremendous influence over bio field. Its major applications are stain resistant clothes, protective nano paint for cars, environment friendly paint that cleans air, immune targeted nano shells for integrated cancer imaging and therapy. Nanotechnology has been applied in 'Tata Swach' in the form of nano silver coated rice husk ash. Significance of this ash is, it is an ideal filtration medium, about 90% meso porous silica provides a tortuous

path to water flow and silica in rice husk ash provides negatively charged surface- ideal for bonding silver. Silver is known as one of the most efficient germicide. Thus anti bacterial activity of nano silver particles is the core idea of the product.

'Tata Swach' is tested for specific disease causing bacteria and virus like E. coli,

Salmonella typhi, Vibrio cholera, shigella. The product costs 10 P/litre for purification. Future plans for this innovation will focus on arsenic contamination, fluoride contamination.

Lastly, the speaker imparted a great thought that 'If you want to succeed, double your failure rate.'

Contributed by

Janhavi Mhatre

Student - MMS I, 2010 - 12 Batch

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Contributed by

Janhavi Mhatre

Student - MMS I, 2010 - 12 Batch

An Invention Blooming into an Innovation 




TATA swachh[®]
NANOTECH WATER PURIFIER™

Dr. Debabrata Rautaray
Tata Chemicals Innovation Centre, Pune


Dr. V. N. Bedekar Institute of Management Studies 6th Annual Seminar on
"Creativity and Innovation in Business -12 February 2011"

TATA CHEMICALS LIMITED


Structure of my Presentation 

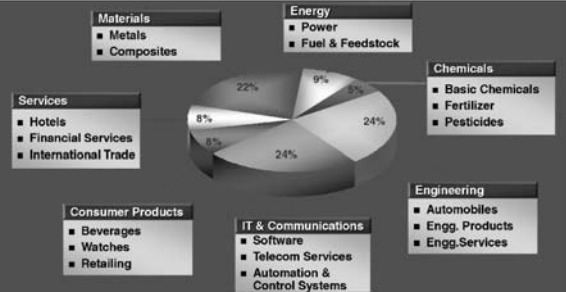
- *An Overview of the Tata Group & Tata Chemicals Ltd*
- *Brief introduction to Nano Technology & it's Potential*
- *Tata Swachh*
- *Invention vs Innovation*

TATA CHEMICALS LIMITED




An overview of the Tata Group

The Tata Group (Founded 1868) 





Sector	Sub-sectors	Percentage
Materials	Metals, Composites	22%
Energy	Power, Fuel & Feedstock	9%
Chemicals	Basic Chemicals, Fertilizer, Pesticides	24%
Engineering	Automobiles, Engg. Products, Engg. Services	24%
IT & Communications	Software, Telecom Services, Automation & Control Systems	8%
Consumer Products	Beverages, Watches, Retailing	8%
Services	Hotels, Financial Services, International Trade	8%

India's largest and most respected business group
Revenues: US\$80 bn

The Tata Group 

- 99 companies
- Operations in >50 countries across all six continents
- Markets across 140 nations
- Revenues equivalent to 3% of India's GDP
- Over 374,000 employees
- Strong presence in all major business sectors

TATA CHEMICALS LIMITED 



Revenue Split

Segment	Percentage
Chemicals	54%
Fertilisers	46%

the business segments >>

soda ash
urea
food additives
complex fertilisers
bicarbonate
stpp
cement
biofuels
fresh fruit
herbicides

Mithapur Salt pan

Tata Chemicals today is the >>

2nd largest soda ash manufacturer in the world

#1 soda ash player in Asia


Market leader in edible salt market

Most energy efficient urea manufacturer in India

IMACID-Morocco; GCIP-USA; Brnner-Mond, UK; British Salt-UK Kenya, Netherland

Presence in all three Agri input categories

The Road Ahead.....



- Strong focus on research and development
- Increase thrust in new business segments like water, energy and health
- Enhance presence in bio and nano technology
- Identify viable acquisition opportunities


Long Term 2007 - 2012

expansion
innovation
diversification
acquisition

Tata Chemicals Innovation Centre

1. Based in Pune
2. Focus on the Bio-Nano space
3. 40 scientists - going to 150 in 2 years time & ~500 in the longer-term
4. Current Focus Areas:
 - Nano Materials, Bio Materials & Advanced/Smart Materials
 - Bio Diesel & Bio Ethanol
 - Nutraceuticals
5. 20% Research into Blue Sky areas

Innovation driven vision for Tata Chemicals



With sustainability and wellness as the mantra and nanotech and biotech as the foundation -

Advanced materials

Nanomaterials, bio-terials, composites, smart materials

Nutraceuticals

Sweeteners, pre- and probiotics, functional foods

Energy/alternate fuels

Biofuels, solar energy, energy from H₂

Water

Clean water for the poor, water desalination

Specialty chemicals

Polymer intermediates, enzymes, functional molecules


Green chemistry

Greening current processes, carbon credits

Centre of Excellence in Nanobiotechnology

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Structure of my Presentation




- An Overview of the Tata Group & Tata Chemicals Ltd
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- Invention vs Innovation

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What is a Nanometer?




1



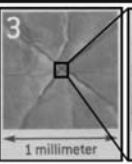
10 centimeters

2



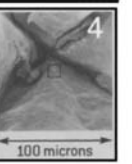
1 centimeter

3



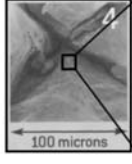
1 millimeter

4



100 microns

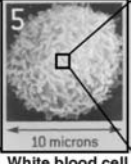
5



10 microns

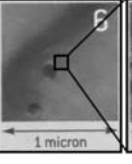
White blood cell

6



1 micron

7



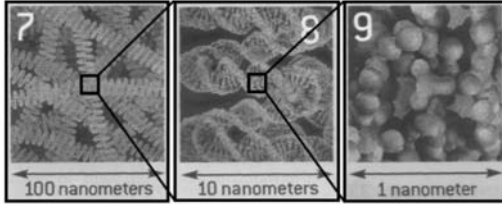
100 nanometers

DNA

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Source: Department of Biomedical Science and Engineering, Northeastern University

What is a Nanometer?



DNA

So what's so special about Nano?

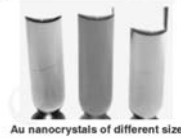
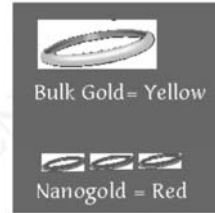
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Source: Department of Materials Science and Engineering, Northumbria University

Small Solids act different



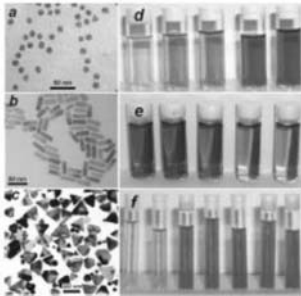
Not only are the shapes & structures of many nanosolids different from the bulk, but so are there properties. You think of the metal gold as a yellowish solid; a collection of nanometer sized pieces of gold might look more reddish.



Au nanocrystals of different sizes

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EXAMPLE OF SHAPE DEPENDANCE...



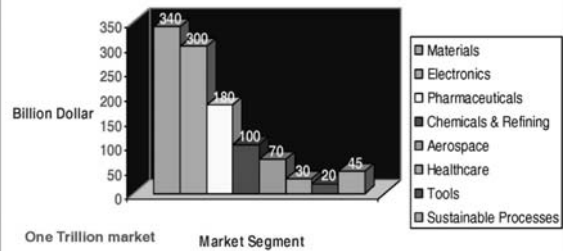
Au-Ag alloy with increase in Ag concentration

Au nano-rods with increase in aspect ratio of nano rods

Ag nano-triangles with increase in aspect ratio

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Nanotechnology Market Size Prediction - 2015



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Nano-Silver Consumer Products



- Food storage, paint, medical coatings, refrigerators, air filters, drywall, sports clothes, washing machine

- Fresher Longer Miracle Food storage



Source: The International Center for Technology Assessment report 2008

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Nanotechnology and Nanomaterials in Consumer Products



Paints, coatings, sporting goods, sunscreens, cosmetics, personal care products, stain-resistant clothing, food and food packaging, and light emitting diodes used in computers, cell phones, and digital cameras.



Source: The International Center for Technology Assessment report 2008

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Nanomaterials in Consumer Products: The Personal Care Industry Leading the Way



BIONOVA
PERSONAL CARE PROGRAMME
HAND SKIN TECH



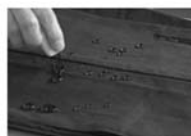
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Source: The International Center for Technology Assessment report 2009

Materials: Stain Resistant Clothes



- Nanofibers create cushion of air around fabric
 - 10 nm carbon whiskers bond with cotton
 - Acts like peach fuzz; many liquids roll off



Nano pants that refuse to stain;
Liquids bead up and roll off

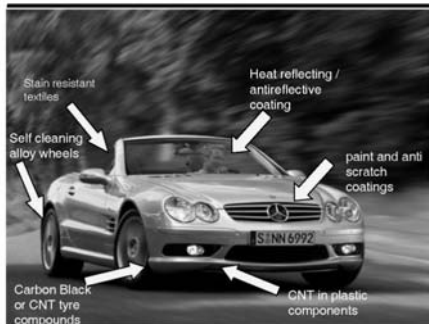


Nano-Care fabrics with water, cranberry juice,
vegetable oil, and mustard after 30 minutes
(left) and wiped off with wet paper towel (right)

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Source: www.nanoprojects.org

Protective nanopaint for cars



- Water and dirt repellent
- Resistant to chipping and scratches
- Brighter colors, enhanced gloss
- In the future, could change color and self-repair?

TATA CHEMICALS LIMITED nanotech network programme website

Environment: Paint That Cleans Air



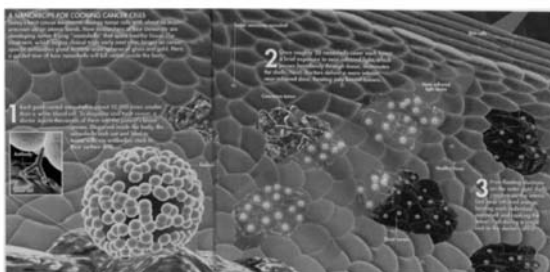
- Nanopaint on buildings could reduce pollution
 - When exposed to ultraviolet light, titanium dioxide (TiO₂) nanoparticles in paint break down organic and inorganic pollutants that wash off in the rain
 - Decompose air pollution particles like formaldehyde



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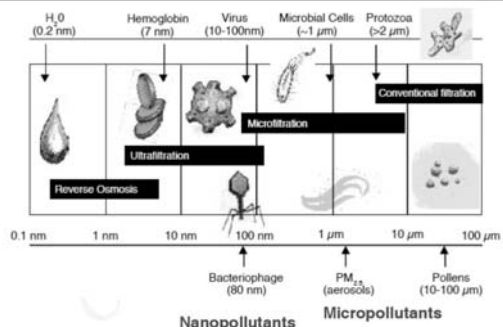
Source: www.nanoprojects.org

Immunotargeted Nanoshells for Integrated Cancer Imaging and Therapy



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Nanoscale Materials: Ultrafine water & Air contaminants?



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Structure of my Presentation



- *An Overview of the Tata Group & Tata Chemicals Ltd*
- *Brief introduction to Nano Technology & it's potential*
- *Tata Swach*
- *Invention vs. Innovation*

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Tata Swach Nanotech Water Purifier



- *The vision for Tata Swach is to reduce the incidence of water borne diseases by making safe drinking water accessible to the "have-nots"*
- *Tata Swach is an offline household water purification system which uses natural materials and cutting edge nanotechnology*
- *It can be used in houses without running water and electricity*
- *It is portable and easy for the consumer to buy & use. The bulb can be fitted into any existing water storage vessel*
- *It provides bacteria-free water of international standards, viz US EPA*
- *Harmful disease causing bacteria and virus result in rampant water borne diseases like typhoid, diarrhea, cholera, dysentery, etc*

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Drinking Water Purification



Methods in Drinking Water Disinfection

- Sedimentation
- Filtration
 - Microfiltration
 - Ultrafiltration
 - Nanofiltration/ Reverse Osmosis
- Disinfection
 - Chemical
 - Halogens
 - Ozone
 - Noble Metals
 - Physical
 - UV irradiation
 - Heat

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Standards - USEPA



What is USEPA?

USEPA standard

Organism	Influent Challenge	Minimum Required Reduction	
		Log	%
Bacteria: Escherichia coli, or Raoultella terrigena, or Bacillus atrophaeus	≥ 10 ⁶ /mL	6	99.9999
Virus: MS2 and fr coliphages	≥ 10 ⁷ /L	4	99.99
Cyst: Cryptosporidium parvum oocysts	≥ 5 x 10 ⁴ /L	3	99.9

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Perfecting an existing technology



Focus on product development was on getting the technology correct

RHA + cement + pebbles

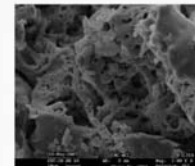
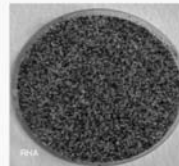


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Why are we using rice husk ash ?



- ➔ It is an abundantly available naturally occurring agri byproduct
- ➔ It is an ideal filtration medium
 - ➔ About 90% mesoporous silica provides a highly tortuous path to water flow
 - ➔ Large internal surface area
- ➔ The silica in rice husk ash has a negatively charged surface which is ideal for bonding silver



TATA CHEMICALS LIMITED



SECTION I 1(B)

**Proceedings of Workshop-
'Creativity and Innovation in
Business'**

On

16th October 2010

At

**Panini Sabhagruha
VPM Campus, Thane**

Work Shop Schedule

Dr. V. N. BEDEKAR INSTITUTE OF MANAGEMENT STUDIES

(Dr. V. N. BRIMS)

AN ISO 9001:2008 CERTIFIED INSTITUTE

WORKSHOP ON CREATIVITY & INNOVATION IN BUSINESS

ON SATURDAY, 16th OCTOBER, 2010

Venue: Panini Sabhagraha

<i>ACTIVITIES</i>	<i>TIME</i>
Lighting of the lamp + Felicitation	10.00 am to 10.10 am
Welcome Address- Dr PM Kelkar- Director Dr VNBRIMS	10.10 am to 10.20 am
Opening Note (MMS Students)	10.20 am to 10.30 am
Introduction to Guest Speaker” Mr. Joel Pannikot “	10.30 am to 10.35 am
Guest’s Speech “Bloomberg Technology in Management”Including Q & A.	10.35 am to 11.10 am
Tea / coffee	11.10 am to 11.25 am
Presentation by Dr. Guruprasad Murthy - Director-General DR VNBRIMS	11.30 am to 12.00 noon
Felicitation of winners of MMSI and PGDM in Intercollegiate event organized by Lala Lajpat Rai Institute of Management studies.	12.00 noon to 12.15 pm
Creativity and Innovation in Business from Finance’s Perspective including Q & A	12.15 pm to 12.50 pm
Presentation by E cell Members including Q & A.	12.50 pm to 1.25 pm
Lunch	1.30 pm to 2.30 pm
Creativity and Innovation in Business from HR Perspective including Q & A	2.30 pm to 3.05 pm

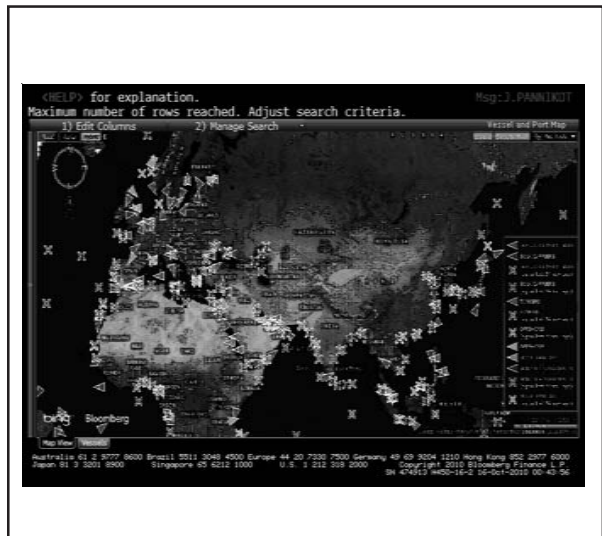
Creativity and Innovation in Business from Marketing's Perspective including Q & A	3.05 pm to 3.40 pm
Creativity and Innovation in Business from IT's Perspective including Q & A	3.40 pm to 4.15 pm
Tea / coffee	4.15 pm to 4.30 pm
Creativity and Innovation in Business from Operation's Perspective including Q & A	4.30 pm to 5.00 pm
Summary	5.00 pm to 5.10 pm
Closing Note (MMS Students)	5.10 pm to 5.15 pm
Vote of Thanks	5.15 pm

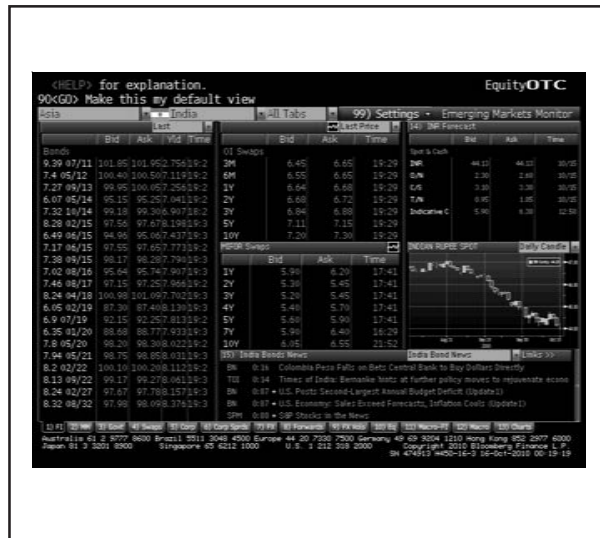
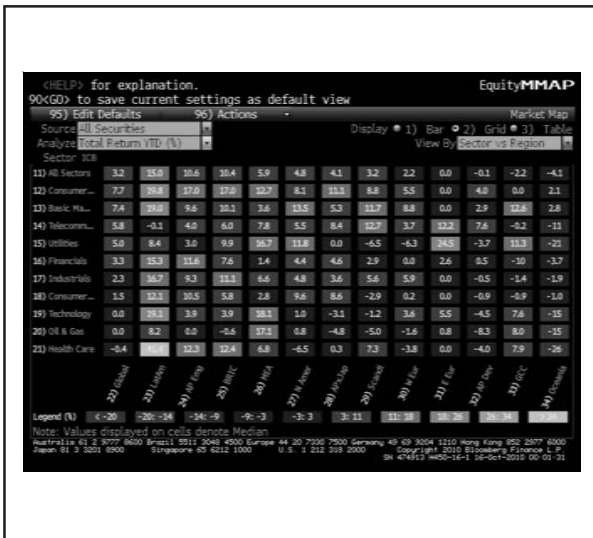
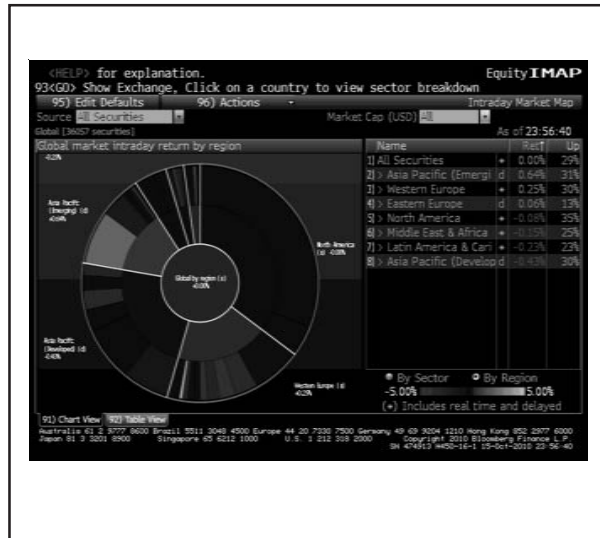
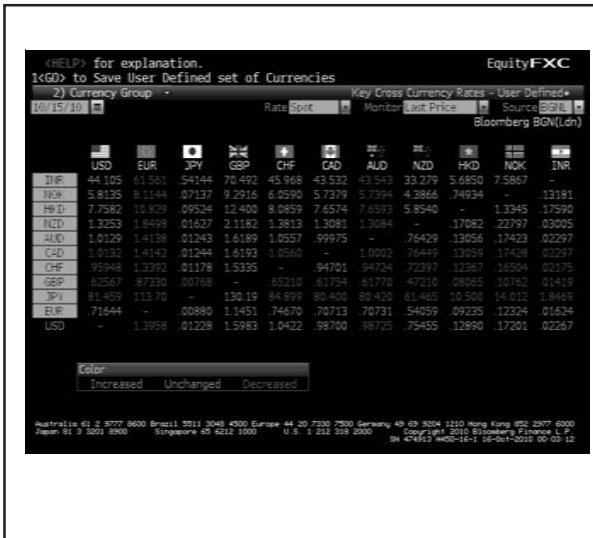
Mr. Joel Pannikot

The Bloomberg Way - A Presentation

The **Bloomberg** Way

Naam to suna hi hoga!






Who are we?

- The Bloomberg Story
- The Company
- The Timing
- The Impact

What does it mean to you?

Dr. Guruprasad Murthy
Professor-Director-General
DR VN BRIMS

Creativity & Innovation in Business


VPM's (Thane), India
DR V N Bedekar Institute of Management Studies

CREATIVITY & INNOVATION
IN
BUSINESS

PRESENTATION
BY

Dr. Guruprasad Murthy
Professor-Director-General, DR VN BRIMS
Saturday, 16th Oct, 2010

Creativity

*Creativity can be enhanced
in business through:*

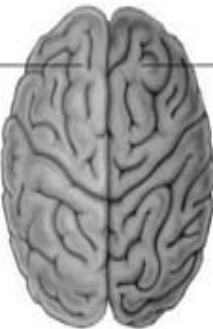
- ✓ *Expertise*
- ✓ *Creative thinking*
- ✓ *Motivation*

Innovation

- *Doing new things.*
- *Introduction and implementation of new ideas, goods, services and practices that are intended to be useful.*
- *Combines factors in a new way.*
- *Requires people to think in different ways.*

THE HUMAN BRAIN

L R

Evaluation Logic Reasoning Rationale Analysis Calculation Realism		Creativity Images Colour Emotion Holism Comprehension Intuition Recognition
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IN RETROSPECT



"There is no likelihood man can ever tap the power of the atom."

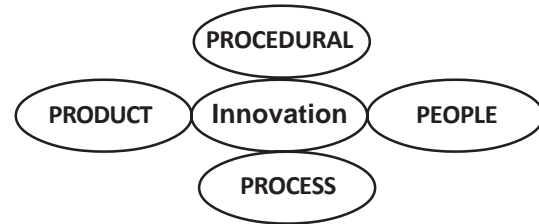
– Robert Milikan,
Nobel Prizewinner, Physics,
1920



"Who the hell wants to hear actors talk?"

– Harry Warner,
Warner Brothers
Pictures, 1927

FOUR P'S OF INNOVATION



Google TOYOTA INDUSTRY EXPERIENCE

Industries that have displayed excellence in managing innovation have assumed market leadership, transformed into triumphant organizations and brought about transformation of societies and nations.

NOKIA

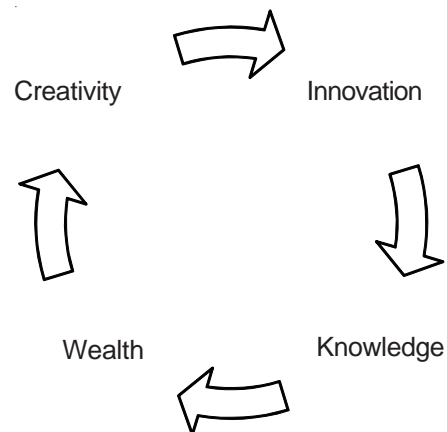


IBM

Microsoft

Walmart

VIRTUOUS CYCLE



- A good inference on creativity and innovation can be drawn from 3M's product called "post it".

3M

- Making it a commercial proposition was the job of innovation – different sizes, shapes and colours of "post it" is innovation.



- The theme in 3M for instance is never kill an idea.



- ✎ General Electric files more US patents than almost any other US firm year after year.



- ✎ Sony was a recognised world leader in consumer electronics.

SONY

- ✎ Hewlett Packard continues to launch successful products at a rate few competitors can match.



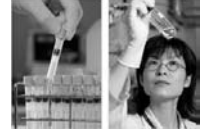
CORPORATE TRENDS IN R&D:

THE FUTURE

- Companies can get more out of their research by linking it more closely to market needs and customer requirements rather than by increasing spending.
- The global network model is the wave of the future. This implies supporting technology core groups in each major market, Europe, US and Japan, and managing in a coordinated manner.

COUNTRY EXPERIENCE JAPAN'S SUCCESS

- Depended not only on physical and cost productivity.
- Innovation and Investment in R&D are key factors.
- Invested a hundred times more money during 1950s in importing licenses and technology than it did in exporting them.
- Ability to acquire, create and utilize new knowledge was the key strength of Japan.



CORPORATE EXPERIENCES – INDIA

HOW SUCCESS BREEDS FAILURE?

- HMT was a leader in the watch market. It was a very successful company. It failed to recognise the change in watch market from mechanical to quartz technology. Its major revenue came from mechanical watches. Titan saw the changes and captured HMT's market by re-defining the product. Titan had a 7C market against less than 1C of HMT in the mid 1990's.
- **Message** – Innovation is continuous process.



CORPORATE EXPERIENCES – INDIA

JUST-IN-TIME – TOYOTA

The Just-In-Time system was seen by Mr. Taichi Ohno in a super market. He saw the efficient system – right quantities, right time, right place, right person, right quality and right price. He applied this to the factory and today worldwide the Toyota outsourcing operation is a role model for many.



Example – Hero Honda in India.

CORPORATE EXPERIENCES – INDIA

INNOVATIVE NETWORKING

FRIENDS



FOES

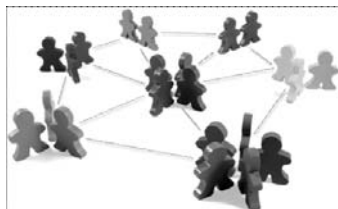


Legend:

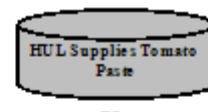
G = Godrej

H = HUL

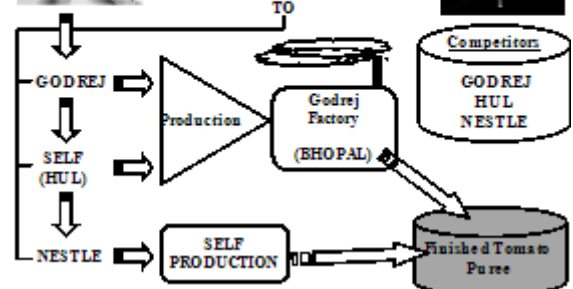
N = Nestle



FRIENDS



FOES



- India is well positioned to compete, e.g., Bollywood which makes over 900 films a year.
- India's video game industry is projected to grow tenfold to \$500 million by 2015.
- India's animation industry is likely to grow from \$300 million to more than a billion dollars by 2010.
- India's graphic design and product design industries are seeing extraordinary growth.

The World's Most Innovative Companies

(Source: Business Week, 2009)

Rank (2009)	Company	Particulars
1	Apple	iPhone, iPod, iPad
2	Google	Google Voice, Google Search, YouTube
3	Toyota	Automotive industry – Corolla, Prius, Scion brands
4	Microsoft	Windows Vista, Windows XP, SQL Server, MSN
5	Nintendo	Interactive entertainment products - Video Games

According to Dr. Mashelkar, President of Global Research Alliance

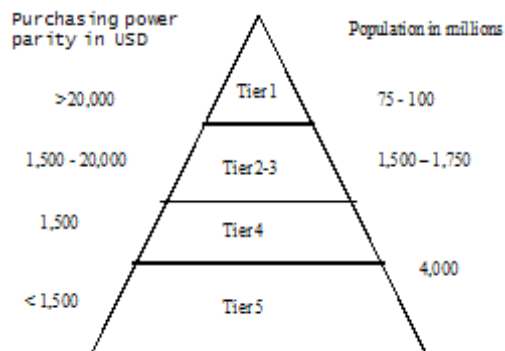
Innovation is:

- Doing things differently,
- Making a big difference,
- Making the impossible possible,



GANDHIAN ENGINEERING

- Going beyond simple inclusive growth,
- Converting problems into opportunities,
- Growing small ideas into major businesses,
- Developing a strong hindsight, foresight and insight.

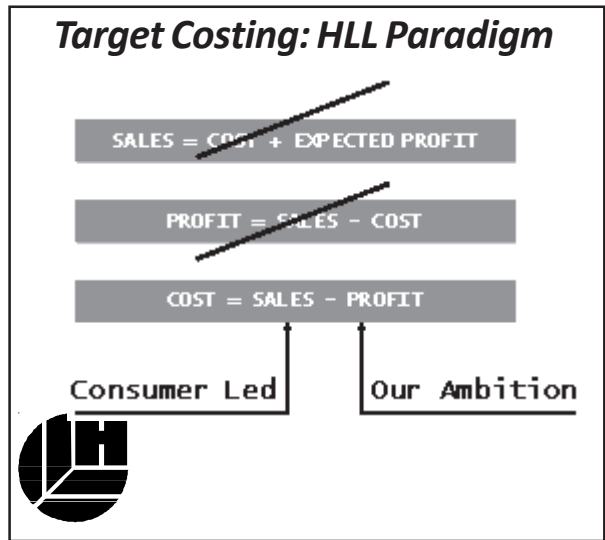
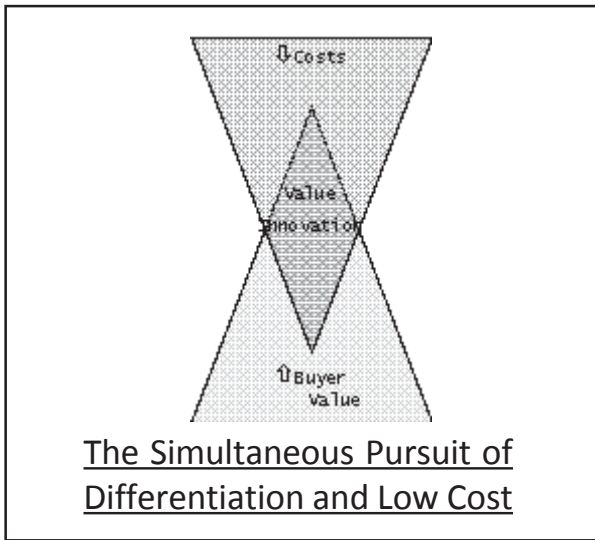


The Economic Pyramid

(Source: C. K. Prahalad, The Fortune at the Bottom of Pyramid)

Red Ocean Versus Blue Ocean Strategy

Red Ocean Strategy	Blue Ocean Strategy
Compete in existing market space.	Create uncontested market space.
Beat the competition.	Make the competition irrelevant.
Exploit existing demand.	Create and capture new demand.
Make the value-cost trade-off.	Break the value-cost trade-off.
Align the whole system of a firm's activities with its strategic choice of differentiation or low cost.	Align the whole system of a firm's activities in pursuit of differentiation and low cost.



DREAMS

- ✓ Dreams have been a great source of new ideas which offer innovative solutions to problems being studied when a person is awake.
- ✓ Many scientists, inventors and technologists have literally dreamt up solutions which they could not arrive at "in the waking state".

Rate of learning must be greater than the rate of change in the environment

$$L \geq IV$$

Future

USA	INDIA	CHINA	USA & INDIA

'India's economy growth people-centric' Key Factor, Mumbai consensus

"The US and India are two world powers driven not by their desire to dominate, but by their desire to innovate... In 2040, the discussion will be less about the Washington consensus and the Beijing consensus than about the Mumbai consensus, a developing state driven not by mercantilist capitalism or exports but a people-centric focus globally".

- Lawrence H Summers, Director, National Economic Council, US

THE TOI, 16 OCTOBER, 2010

Written By-

Ms Gitanjali Kapoor
Assistant Professor
DR VN BRIMS

Ms Simpi Khandelwal
Assistant Professor
DR VN BRIMS

Creativity and Innovation in Finance



Students began with concept of ETF that ETF is one of the investment vehicle in which Gold ETF is an innovative instrument that represents an ownership of gold assets, there is no physical delivery, only contract. Its denominations is 1gm/0.5gm and Purity 99.5% or higher. The fund is designed to seek returns corresponding to the returns provided by physical gold.

In India, It was first launched in the year 2007 by a company called Benchmark Asset Management. Gold ETF offers bundle of benefits like transparent pricing , liquidity, 24 carat gold approved by LBMA (London Bullion Market Association) , innovative platform for investment, buying gold with out holding gold, no Possession Cost, inflation Hedge - Purchasing power intact. It also opens the opportunity for government to increase its reserves. Students represent its working which is easy to understand even to layman.

Next area in which students focused was Forensic Accounting; it is the practice of utilizing accounting, auditing, and investigative skills to determine where fraud has occurred. Students started the topic reflecting the view of old times of Kautilya, Birbal and Tenali Rama.



Forensic accounting tries to find out whether criminal matters have occurred, it tries

to factually present economic facts. It also aims at quantifying damages sustained by parties involved in legal disputes. It investigates financial frauds and legal disputes caused by them. Investigative and lactation services are the two main areas of Forensic Accounting. Forensic accounting system is equipped to handle assessment of Loss, asset value computation, claim and dispute settlement, professional and ethical negligence, crime investigation, loss of goodwill, sales and profit, investigation of unfair and unethical malpractices.

Students also discussed some real life cases of forensic accounting.

Thus it was concluded that Forensic Accounting is an Innovative measure that can be used to detect frauds and safeguard organization by Investigating frauds and Recommending procedures.

Creativity and Innovation in Finance



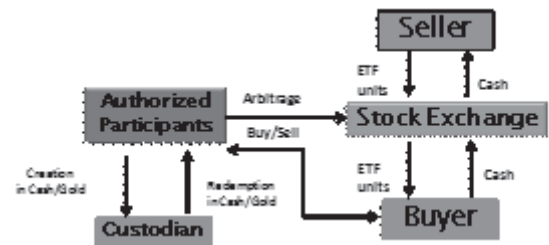
Presented by
Sanket Vaidya, Hitesh Tolani,
Swati Khasselwal, Prashant Vadnere
 MMS II, 2009 - 11 Batch



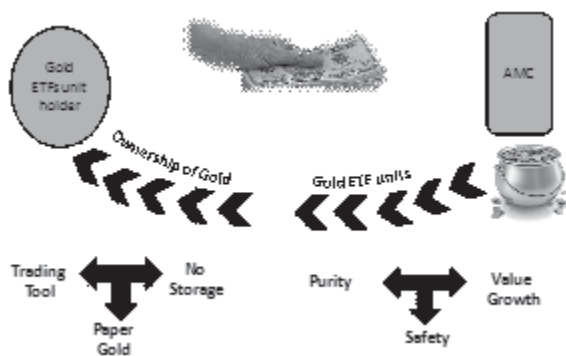
Primary Market



Secondary Market



Bundle of Benefits



Availability of Funds without Cost

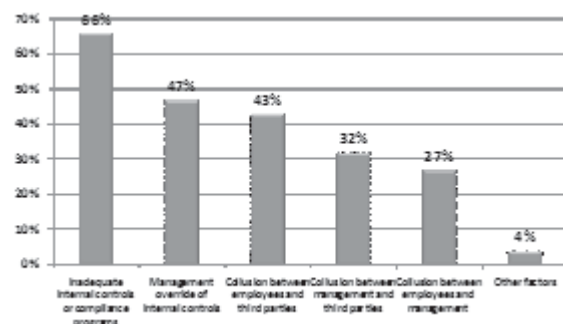


What is Forensic Accounting?

► Ask Enron, Worldcom, Satyam and many more!!



Major Causes of Fraud in Business



Lakshmi Subharaman
Student MMS I,
2010-12 Batch

Creativity and Innovation: Entrepreneurship Cell

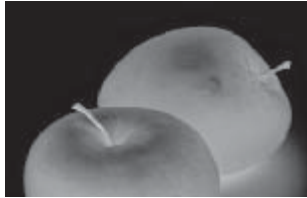
Entrepreneurship Cell (E-genesis) of Dr. V N BRIMS had their share of creativity and innovation by creatively displaying 25 important discoveries by man that shaped the world in a workshop that was held outside the auditorium so that all the students of the campus can have a look at it.

They presented on 5 different entrepreneurs who dared to think different and started their ventures in a way which people couldn't have imagined. The ventures included 'Phokatcopy' where an IIT graduate of merely 23yrs of age Mr. Harsh Narang started a venture to promote big brands through the photocopies that people take through his associates. The business is active through its website www.phokatcopy.com. The next venture which was talked about was, hiring luxury brand of bags for a day, for people who cannot afford it to buy. 'Bag4aday' the business by Ms. Cookie Singh, runs primarily through its website i.e. www.bag4aday.com. The other entrepreneurial venture talked about how a small village boy who hails from IIM A, Mr. Kaushaledra Kumar instead of getting into an MNC chose a different path and started selling vegetables with a vision of making Bihar a vegetable hub for the country and started selling vegetables in air conditioned pushcart. The presentation also talked about an international venture ie by Mr. Gary Dahl, a California based ad man, who made millions of dollars by selling Rosarito Beach Stones which were called 'Pet Rock' which replaces the pet that one usually has. The cell also talked about a venture with the name of

'Happily Unmarried' started by two friends Rajat Tuli and Rahul Anand which has its presence in all the metro cities in India and headquarter in Goa. The USP is the creativity they have put in for every product they sell for e.g. a card holder is being given a shape of a shopping trolley which makes it more attractive and funny too. The different products could be seen on their website www.happilyunmarried.com

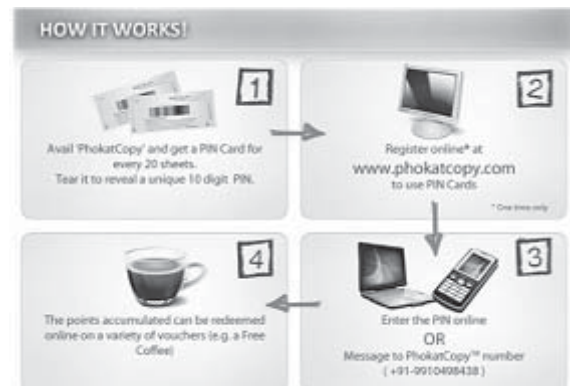
Finally the E Cell presented an idea that they wanted to implement as a business venture by the name Crazy Balloons which was to develop new and innovative ways of using balloons on festivals, parties, marriages, gifts by giving them different shapes. The idea was presented as a business plan which was well appreciated by the chief guest from Bloomberg Corporation.

Creativity and Innovation in Entrepreneurship



Presented by
Samrat Tiwari, Mayank Jain, Dinesh yadav,
Heena Singh, Ishita Nigam, Laksmi Subharaman
MMS & PGDM Students

The Process



Uniqueness

Ice – Cooled vegetable Push Cart



cRaZy bAlloOnS

- Concept : Using balloons for decorations and as gifts for your loved ones on all the possible occasions.
- Vision : Replace flowers by balloons
- Tagline : *Lets get it ballooned...*



Lt. Col. V V Raman(Retd.)
*Assistant Professor,
DR VN BRIMS*

Ms. Sanskruti Kadam
*Assistant Professor,
DR VN BRIMS*

Creativity and Innovation in Human Resource

The workshop on Creativity and Innovation was conducted by Dr.V.N.Bedekar Institute of Management Studies on 16th October, 2010. It provided an insight on various innovative and creative practices in different functions of Management. Our HR group's focus was mainly on Retention, HR going green, Team Building & Problem Solving and finally on HR Software.

Retention

The presentation threw light on the innovative retention strategy practiced in Microsoft which was explained through a case. Further, the presentation also gave an insight into different strategies applied in different companies namely Coca-cola, Godrej, Raymond, concept of HR branding in McDonald's and also the HABA event conducted in GE.

HR Going Green

Employers and staff leaders committed to green human resource appreciate, accept and adopt their company's accountability towards Social Responsibility, Community Involvement, Environmental Stewardship, Sustainability. Green Workforce involves green initiatives adopted by companies across industries for its employees. It includes flexible work options like Telecommute, Flexible Work Hours, Compressed Work Weeks or Goal-oriented Employment. Strategies that organizations follow are Recruitment advertising, Interviews, Awards, Annual report.

Following are some of the examples

- Mc Donald and the activist group Greenpeace came together to fight the issue of deforestation of Amazon forest by a legion of soy farmers. GE unveiled a contest in the year 2006, for college goers where they were required to design an environment project on the back of the budget pegged at \$25000. The contest was named as “Ecoimagination Challenge”.
- Taleo management solution is a leader in providing on demand talent management solutions. Taleo has jettisoned manual paper process and has shifted to automated e-recruiting. Taleo has helped many organizations to boost their recruitment efficiency, reduce cost and save trees.

Innovation in Team Building and Problem Solving

In order to retain the best talent and keep them motivated, many organizations are initiating unique and innovative team building and problem solving exercises.

Team Building Exercises

- **Teaming up**

People Centricity Fiesta a weeklong event focuses on the HR practices and educates its associates through games, fun and events. Another practice is the Mock Press Conference where the associates are given a theme or product. Intelligroup follows the same.

- **The Tie That Binds**

Newgen Software practices this exercise where the team members identify list of

problems which is hampering their productivity. Tools are used to solve the problems and to measure the success of results. They believe that singing a morning prayer ‘hum ko mann ki shakti dena’ gives them a sense of direction and ownership towards their goals.

- **Bonding with the Best**

One of TERI’s (The Energy and Resource Institute) unique team building initiative is the ‘Vision Retreat’. Small teams are created with a broad theme and they brainstorm, eat together, have fun and by the end of the day come up with very innovative ideas. Mc Donalds follows this technique.

- **Problem Solving with SCAMPER**

The SCAMPER technique uses a set of directed questions which you answer about your probortunity in order to come up with new ideas. The stimulus comes from forcing yourself to answer questions which you would not normally pose.

S – Substitute: Think about substituting part of your product/process for something else.

C – Combine: Think about combining two or more parts of your probortunity to achieve a different product/process or to enhance synergy

A – Adapt: Think about which parts of the product/process could be adapted to remove the probortunity.

M – Modify: Think about changing part or all of the current situation, or to distort it in an unusual way.

P – Put to other purposes: Think of how you

might be able to put your current solution/ product/process to other purposes.

- E – Eliminate: Think of what might happen if you eliminated various parts of the product/process/probortunity.
- R – Rearrange/Reverse: Think of what you would do if part of your probortunity/ product/process worked in reverse or done in a different order.

Benefits:

These practices generate better synergy, free flow of creativity among employees, motivate them, and improve group dynamics. It enhances employee empowerment.

Innovation in Software used in HR

Data Talent

e-Thority is an US based company has designed DataTalent software which is a workforce performance engine designed to help HR deliver intuitive workforce analytics, reporting and benchmarking of key metrics to stakeholders and to meet and exceed corporate business objectives .It gives graphical representation of the desired data of Pdf, Text or PPT. The users of this software are HP and Siemens

Jobvite – Recruiting Software

The only social recruiting and applicant tracking solution that makes it easy for everyone to work together on hiring. It improves the speed and quality of talent acquisition, create a great candidate experience, increase referral and social network hires. Users can

manage every stage of hiring – applicant tracking, sourcing, career site, employee referral, reporting, and candidate relationship management with viral distribution through LinkedIn, Facebook, Twitter as well as email. Users of this software are very known brands like Zynga, Twitter, Starbucks Coffee.

Sonar 6

Sonar 6 was founded in 2006 based on the idea that performance management should be simple and rewarding. This software is winner of – “Top HR product”, in 2007, It is the only graphic based performance management system. It has various functions like Goal setting, self rating, 360 reviews, development plans, and reports. Because Sonar6 performance reviews are done online, it is easy to share completed reviews with staff, managers or HR. The users of Sonar6 are CMC Ltd , L’oreal USA , Coca Cola ,

Conclusion:

“Attraction, motivation and retention” define the essence of HR deliverables. As the economy booms and industries mature – age old personnel management fundamentals do not remain applicable. Creativity and innovation by HR function can make a big difference in how an employee can actually be attracted, motivated and retained. Human Resource leader should follow creative practices which would help to develop the employer as well as employee.

Creativity & Innovation in Human Resources



Presented by
Vishakha Shivalkar, Safiya Sheikh,
Mitalee Gaikwad, Rutuij Pathak
MMS Students

Our Focus



Innovation
in Retention

HR Going
Green

Innovation
in Team
Building

New HR
Software



HR Branding of McDonalds



- Redefining the term “ McJob ”
- Advertising Campaign “ My First Job ”
- “ Mc Donald People Project ”
- My McJob Campaign

HR Going Green



Green Workforce

- Green Initiatives
- Cost Saving Tools like
 - Telecommuting
 - Flexible Work Timing
- Green Employment
 - Bio Mass Gasification
 - Solar Thermal Heaters
 - Bio Fuel Industry



Google



Priyanka Mathews

*Student, MMS II,
2009 - 11 Batch*

Guided By –

Ms Sonal Dabke

*Assistant Professor
DR VN BRIMS*

Ms Seema Agarwal

*Assistant Professor
DR VN BRIMS*

Creativity & Innovation in Marketing Management

Innovation in marketing isn't about playing the game, it's about changing the game; getting into creating not just one scoring opportunity but the chance for long-term success. Thus when we create strengths with respect to the market, we in turn create weaknesses for our competitors. It is like competing in terms that the competitors weren't designed to match. Creativity on the other hand challenges and inspires to forget the box or to dare and do something never attempted before. This article is an attempt to list out the innovations and creative ventures that keep the market leaders ahead of the game.

There are a lot of marketing people out there doing their job, and doing it good. Over the years marketing has seen changes brought about by companies who believe in the spirit of innovation. These path breaking activities by companies are not confined to any particular branch in marketing. Innovations in the past couple of years in the fields of product development, packaging, promotions & distribution, deserves a mention and most importantly, applause.

Innovation in Product Development:

A product innovation is what distinguishes a leader from a follower. Creativity and innovation in developing a product is not merely in what it looks like, feels or how it works. It is in coming out with a product that satisfies the gap between what a customer longs for and what he gets. Keeping this in mind, companies have started to sculpt out products to particularly serve a need of the customer. Take for instance, rural India's need for a refrigerator.

In this case, companies would find that the absence of electricity or unavailability of services, act as hindrances in bringing an urban model of refrigerator to the villages. So, in order to rectify this problem, Godrej introduced the 'Chotu Kool' which doesn't run on electricity and needs very minimal maintenance. The same thought was applied behind bringing ATMs to rural areas. The Vortex ATM, a gramatellar model ATM that works on solar power and needs very low servicing, is being introduced in rural India to increase the penetration of ATMs in these regions. Many more product developments have come to the limelight, which are worth mentioning like the Poken device, which poses to be the future of business cards for communication, the Terrafugia car, which boasts of having a flight mode when there is a need to avoid traffic.



Innovation & Creativity in Packaging Techniques:

Today packaging of any product serves a role ranging from the equipment for transportation, storage, preservation, identification and packaging to the key role in brand promotion and management. Packaging is of great importance in the final choice the consumer will make, because it directly involves convenience, appeal, information and branding. A great example of packaging being used in order to attract their target audience is the Kinder Joy packs from Ferrero Rocher. The

small egg shaped packs were aimed at bringing together two main alluring factors for children- sweetmeat and surprise toys, in one pack. Another excellence shown in packaging was by Maggi Pichkoo. With this the brand has moved out of the traditional glass bottle into a doypack. This new packaging for ketchup increased the utility value of the pack.



Brands are ready to go that extra mile to keep them away from the competition. To combat the tough competition posed by Dominos on their value proposition of timely delivery, Pizza Hut has introduced the Hot Spot packs to bet on their value proposition of quality delivery. Many more attempts like the Bru aroma lock packs, the Pure Magic canister packs; have gone that extra mile to differentiate the product from the clutter. A certain designer has managed to create a technology for storing milk in indicator boxes which turns orange as the acidity of the milk rises. So the next time we say that a book is not judged by the cover, be sure to exclude marketing from this statement.

Pricing Innovations:

The moment you make a mistake in pricing, you are eating into your reputation or your profits. By adopting innovative pricing strategies, marketers have creatively increased the likability of their products. There are many such examples today across sectors. *Tata*

DoCoMo is one such name. The company has brought about disruptive innovation in the Indian Telecom Industry. Tata Docomo has always been in the forefront with various attractive pricing schemes like pay per second billing on calls, pay per call etc and now they have newly introduced the *pay per site* plan. By subscribing to this plan the customer can now be free from monthly rentals and be free to use their favorite site without paying extra charges. *This surely has given Docomo an edge over the other mobile network providers.* Many would argue that a vanilla interest option suits the customer best but Standard Chartered Bank's '*HomeSaver Loan*' has something else to say. With every HomeSaver, you get a current account into which you have to put your usual savings, from other accounts. Depending on the savings you put, your home loan interest is calculated, on the principal outstanding minus the savings deposited in your HomeSaver Account every month, over and above your EMI. Thus, saving on the interest and reducing the tenure, at the same time



Innovative Promotions:

Apart from just advertising your brand, it is important to make a big deal about it. So, effectively promoting a brand becomes imperative. Lays, launched the mother of all customer engagement programs, '*Give Us Your Dillicious Flavour*'. This innovative large scale co-creation campaign launched in October

2009, gave the consumers an opportunity to co-create the flavour they like on Lays potato chips. The four winners from 1.3 million entries were selected and put on a public poll, out of which one flavor got selected and that flavour got added to the Lays product line. With 1.3 million flavour ideas and over 4.7 million votes, this first-of-its-kind campaign was a big hit.

IBM's latest "smart billboard" that changes its color based on who is standing in front of it using colored LEDs and a camera was another great promotional technique. The name of the campaign was 'The smarter planet campaign', for which such colour sensitive billboards were placed outside retail outlets and it was a perfect demonstration of how colour in the retail industry can have massive implications for shipping, inventory, and ultimately, sales.

Creativity in Advertising:

On the occasion of Diwali, Tanishq came out with an extremely creative cover promotion in the leading magazine, Femina. A mirror was put on the cover and below it was one of the Aleya showstoppers. So when a woman looked on to the cover page, she could see herself looking like a cover girl, wearing gorgeous Tanishq jewellery. This innovation worked at two levels. It completely cut the clutter in the crowded Diwali season and stood out amongst the plethora of similar advertising. This ad campaign gave women an opportunity to 'try' on the jewellery and see how they look.

Ad campaigns can be used very creatively for different purposes and is considered to be successful if the purpose is served. A campaign was launched by Blackberry phones powered by Vodafone, where the purpose was to reposition the phone as the one that can be

used by people in all age groups and not only executives. The first phase of the campaign was with Vodafone and had an ad with a quirky score- The Blackberry Boys, which was followed by ads of Blackberry alone.

The German automaker, Volkswagen has prided itself in doing things differently, and it sought to make that point with a 'talking' advertisement in a mainstream newspaper to launch its new sedan, Vento. When the reader opens the page, a black instrument pasted on the left-side starts playing the audio version of the advertisement and when the reader turns the page, the audio device stops playing automatically. This was an ad heralding the print-audio integration. The device came up with a cost of Rs. 40 per newspaper, but the bang that the ad created was worth much more.



Innovation in Distribution:

It is said that the test of any product is at its retail level. But what happens if the product fails to even reach that level... If the product itself doesn't reach at the right place in the right time then it really doesn't matter how brilliant the product actually is. To ensure the avoidance of such a paradox, companies make sure that their distribution systems are flawless. Let's look at some distinctive distribution systems followed by some companies.

Tata Nano was publicized as the lowest priced car, and the prime priority of the company was to maintain this claim. So in order to reduce the cost and to make it available at remote places within the given period, they came up with the CKD strategy. Here, CKD means *Complete Knock Down kits*, which were sent to the distributor and the final car was assembled at the distributors end. This system was also imitated by Nissan in their ventures.

Parle, to gauge the availability of their new snack-Hippo, has started a forum on Twitter, where people are asked to name a locality, where they were not able to spot a Hippo. This endeavor proved to be quite successful to get reviews from people on the product and also to ensure the availability of the product where demand exists.

A Volkswagen plant in Dresden, Germany has been built as a see through set up and also has a resort adjoining the plant. Only when one searches for a logical explanation for this, can the simple brilliance of the idea unfold. A customer with his family who walks in to buy a car at the plant is welcome for a fully sponsored stay at the resort during which he can witness his car being manufactured. The process of sale is carried out at the plant after which the customer can drive away in his car. This type of experimental marketing surely worked in a number of ways- first, to reduce distribution costs, then, to increase customer involvement with the brand, and finally, to stand out in a very different way.

Innovation in marketing is like a horizon; every time we think we have reached a pinnacle, we find a whole new world waiting to be explored.

Creativity & Innovation in Marketing Management



Presented by
**Avinash Nair, Pooja Redkar, Priyanka Mathews,
 Anand Iyer, Ashika Chaudhari**
 MMS II, 2009 - 11 Batch

Serving an ACE



- A “Master stroke” in Segmentation
- India’s 1st Mini-truck-Tata Ace



MAGGI PiCHKU

- An easy to handle, squeezable pack ,Easy to store, have a long shelf life
- Utility factor
- Easy to carry while travelling



The Smart Home Plan

- Standard Chartered Home Saver
- HSBC Smart Home
 - A current Account
 - Repay loan sooner
 - Decide the quantum of interest



Ms Sarita Sali,
Assistant Professor
DR VN BRIMS

Presentations on Creativity and Innovation in Business in Operations

“Creative activity could be described as a type of learning process where teacher and pupil are located in the same individual.”

— Arthur Koestler

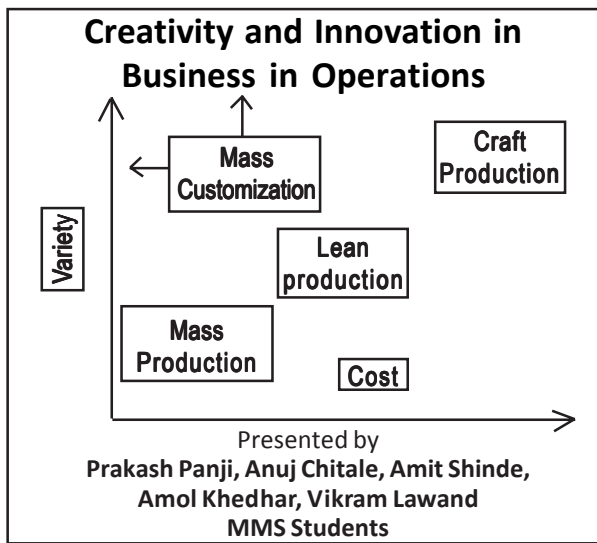
This is indeed a true statement said by great author Mr. Arthur Koestler. **Creativity** refers to the phenomenon whereby a person creates something new (a product, a solution, a work of art etc.) that has some kind of value. Creativity necessarily involves the destruction of old - and sometimes comfortable and perfectly good - ways of doing business. But for companies willing to take the risk - and for leaders committed to building innovative cultures - the first requirement is to understand the creative process, and the second is to commit to policies that support the creative process.

In the workshop our students covered the various aspects of creativity and innovation in operations field. They initiated the presentation stating “Evolution of production system.” They focused on how mass customization evolved from lean production which had its root in craft production. They also explained that different companies go for different mass customization strategy. In today’s era the company is focusing on putting the “Custom” back in “Customer.” Very briefly they explained the importance of “Customer Sensitivity in Operations.” They also talked about a radical change in Operations ie. Complete shift from manufacturer to customer

oriented business. Secondly they touched upon a very recent concept “Nanotechnology.” Also the applications of Nanotechnology, a very new concept in diversified areas of business i.e. manufacturing, medicines, textiles, Aerospace, Defense etc. They focused on cost benefit analysis the company gets by adopting

Nanotechnology. The presentation was concluded with a deeper insight of innovation in diversified areas of operations. “There is no doubt that creativity is the most important human resource of all. Without creativity, there would be no progress, and we would be forever repeating the same patterns.”

— Edward de Bono



Ms Suman Mathur
Assistant Professor
DR VN BRIMS

Creativity & innovation in Information Technology

According to Mr. Nandan Nilekani , Chairman UID –

“With technological development, as the paper work reduces, the cost of technology also goes down and capability goes up. Once you make everything electronic, the prices drop. It is when number of people makes use of technology.”

Unique Identification - an innovative technology driven approach (initiative by Government of India) to keep track of millions of Indians, who are excluded from access to public distribution system (PDS). The brand name of the UID project is – **“AADHAR”**, which means **‘support’** or **‘foundation’**. UID schema of 16 digits is completely secured. Out of 16 only 12 digits will be accessible for common man and last 4 digits will only be accessed by authorities. The main goals and objectives of the project are –

- ✓ Centralizing and linking identification of individual resident
- ✓ To reduce corruption
- ✓ Replacement of other cards like –Ration card, Voter ID et. al.
- ✓ An opportunity to the authorities /organizations to *‘know your customer’*(KYC)
- ✓ An effort to achieve social equality and economic growth

One third population of India is below poverty line, therefore introducing UID aims, to provide identification to poor and shelterless people, so that they can open bank accounts and get

benefit of public distribution system. Governments in many countries (such as US, UK) have successfully implemented National Identity Card Number, which provides – citizenship (permanent/temporary), citizens information with the services of work area, taxation, government benefits, health services et.al.

It's an initiative taken by Government of India to bring every individual on a same

platform, with a common identification. This Identification link can be used for obtaining driving license, ration card, voter-id, PAN card, passport, NREGA job card, bank account, insurance card, post office number, landline/ mobile phone connection and so on. The following slides will give an idea of UID technology, revenue expenses structure and framework of the project.



SECTION - 2
Articles and Papers

Lt. Col (Retd.) Venkat Raman
Assistant Professor, DR VN BRIMS

Innovation - A Key Factor Driving The Indian Economy

Abstract

This paper discusses the impact of innovation as a key factor in driving India's economic progress in today's market driven global scenario. It also discusses the role of innovation in development and uses examples from India that illustrate how our country has facilitated innovation to transform how people live, work, and overcome problems by drawing upon critical resources. It seeks to identify the sources of India's exceptional recent economic performance, India's strengths in innovation, and the challenges India faces as it seeks to modernize its innovation system to become more competitive internationally as well as address the challenges of human development for its growing population.

Introduction

Innovation is the key to transforming people's lives. Scientific research and novel technologies deliver real benefits only when innovators appropriately apply them to improve the lives of ordinary people. Making technology accessible to a wider Indian public involves the inclusion of new approaches, the adapting of new ideas, and transfer of these approaches from the technological genre of India's elite scientific and technical institutions to the broader public.

What is Innovation

Innovation

Innovation is the creation of new intellectual assets. This is of two main kinds:

- **Process innovation:** This relates to improvements in production processes, the more efficient use of scarce resources to produce a given quantity of output ; leading to improvements in productive and technological efficiency
- **Product innovation:** This is the emergence of new products which better satisfy our ever-increasing needs and wants and thus leading to improvements in the dynamic efficiency of markets in providing goods and services

In international markets a firm's competitive edge is determined by the success of strategies designed to find viable innovations that give it what is often called 'first mover advantage in a market'.

Successful innovation is a stimulus to long-run growth because:

- It acts as a catalyst to generate higher rates of investment in fixed capital and this creates increased investment in human capital which helps to shift out the production possibility frontier
- It can act as a catalyst to faster productivity growth, because of its impact on technological progress
- Innovation also creates a demand for new products from consumers; for example in industries where existing products are nearing the end of their product life-cycle

Trend economic growth and Innovation

Trend economic growth refers to the smooth path of long run national output. Measuring the trend rate of growth requires a long-run series of macroeconomic data, perhaps of 20 years or more in order to identify the different stages of the economic cycle and then calculate average growth rates. It can also be explained as an estimate of how fast the economy can reasonably be expected to grow over a number of years without creating an unsustainable increase in inflationary pressure. Many factors influence the rate of economic growth. Some factors, such as changes in consumer and business confidence, aggregate demand conditions in the country's trading partners, and monetary and fiscal policies, tend to have a mainly temporary effect on growth. Other factors, such as the rates of population and productivity growth, have more enduring effects, and help to determine the economy's average growth rate over long periods of time. Endogenous growth economists believe that improvements in productivity can be linked directly to a quicker pace of innovation and extra investment in human capital. They stress the need for government and private sector institutions to successfully nurture innovation and provide the right incentives for individuals and businesses to be inventive.

Why is innovation important for India

India is a rising economic power and an increasingly important locus of innovation. Spurred by competition unleashed by liberalization from stifling regulations, India's private-sector firms are fast improving the quality of their products and services and are rapidly expanding their global presence. India

is thus emerging as a force to reckon with as regards innovation of high-tech products and services, but it can do much more to reach its full innovation potential, especially by bringing the benefits of innovation to the poor, according to a World Bank report. Examples of India's innovation in high tech products and services are

- (a) According to a report by Accenture, a global IT firm, a large number of the chips that are used for flat panel TVs, camcorders, PC graphics cards and other specific applications in high tech are not only manufactured in large semiconductor fabrication units in India, but are also designed, developed and tested there by innovation-only companies.
- (b) Also, most of the applications that are used by mobile operating systems like Android, OVI and others are being created by Indian software entrepreneurs and sold in the international market.

Although the country is emerging as a top global innovator in sectors like biotechnology and IT, less than 3% of its workforce is in the modern private sector, while roughly 90% remains in the informal sector. According to the report, India would especially benefit from nurturing more inclusive innovation. This could be achieved by promoting more formal R&D efforts for the poor and more creative efforts at the grassroots level by them. Improving informal enterprises' ability to better use existing knowledge could also be helpful. Verily, fortune lies at the bottom of the pyramid.

Moreover, India is slowly changing from a locus of low cost contract research and reverse engineering to a global centre of high-value,

indigenously generated innovation. It has provided a major spur to growth in the last decade. Innovation is also moving to the centre-stage in economic policy. Innovation is becoming increasingly international, with multinational enterprises playing a key role in its geographical location, and emerging economies participating and innovating intensively.

In the context of India as an emerging power, innovation can provide a channel to both, increase growth and reduce poverty. By applying knowledge in new ways to production processes, more, better, or previously unavailable products can be produced at prices that all Indians can afford. One of the best examples of this is the e-Pad with Android O.S. marketed by Amplify Mind-ware Group that recently signed an Memorandum of understanding with Enhance Education to provide 1 lakh e-pads to students all over the country over the next two years at a price of just Rs 3000.

India's new dynamism, and hence these new opportunities for bilateral collaboration, are widely seen to have begun with the policies of economic liberalization, started in the early 1990s and supported by successive national governments. According to Mr Montek Singh Ahluwalia, the deputy chairman of the Indian Planning Commission, and one of the members in the team that kick started India's economic reforms, "India's economic liberalization reflects the premise that the private sector is the critical driver of growth".

We all know that new products, brands and designs appear almost every day in the market and that they are as a result of continuous

human innovation and creativity. However, we must not forget that MSMEs (Micro, Small and Medium Enterprises) are often the driving force behind such innovation. To highlight this, the fifth India Global Summit on MSMEs 2008 was held in New Delhi from 18-19 March 2008 and organized by the Confederation of Indian Industry (CII), the Ministry of Micro, Small and Medium Enterprises, Government of India, in association with SIDBI. The theme was on transforming micro, small and medium enterprises (MSMEs) into world class entities. Speaking at the occasion, Mr. Jawahar Sircar, Additional Secretary and Development Commissioner (MSME), Ministry of Micro, Small and Medium Enterprises (MSMEs), said that MSMEs are a vital part of the Indian economy contributing over 45% of the country's industrial production and around 40% of the total exports. Thirteen million MSMEs in India employ over 31 million people.

Mr Harsh Manglik, Chairman and Geography Managing Director, Accenture India, speaking at the Confederation of Indian Industries (CII) National Conference on MNCs in India in November 2009 expressed the view that "In order to climb the competitiveness ladder, it is crucial for India to broaden its skills base beyond a few centers of excellence and foster innovation on a national scale. MNCs will have a critical role to play to sustain high economic growth in the future, both in terms of driving inward investment and through the potential positive effects they have on education, skills and innovation."

According to a joint India Innovation Survey by CII and Boston Consulting Group (BCG) India Inc is assigning strategic priority

to innovation. Around 91 per cent of the Senior Executives put innovation among the top 3 strategic priorities. A majority 89 per cent of the respondents said the importance of innovation has increased significantly over the last 10 years and 39 per cent of them felt that innovation has become critical to their organisation. Only 7 per cent felt the importance of innovation has increased only marginally and 4 per cent felt that its importance has remained the same. Of the respondents, 74 per cent of the companies are planning to increase the funds invested in innovation. However, 60 per cent of them were not satisfied with the returns. The biggest drawback as revealed by the survey is a gap between creating an innovation strategy and managing innovation as a business process.

The challenges ahead

Innovators face problems and challenges mainly in the areas of financial assistance and marketing of their innovation. In other words, it involves:

- Securing the right kind of finance is the key to delivering innovation. Prevailing asymmetry between inventors and investors is required to be bridged. Financing systems for backing up early-stage innovations with risk capital are required. Also, provisions for exiting non-profitable innovations also need to be made.
- A proper system to encourage more facilitators like Angel Investors and Venture Capitalists to finance start-ups should be formulated by the policy makers
- Innovations created at the expense of

considerable investment of resources, demand a matching Intellectual Property Rights (IPR) regime.

- The legal framework for protecting IPR is in place but the infrastructure for capturing and protecting IPR is still evolving in India.
- New approaches, programmes and policies are essential for unleashing India's innovation potential.

Competitive innovation cluster has emerged as a successful global concept, in which academia, research and industry partner under viable and equitable pattern, are the way forward.

Why do innovations fail sometimes?

Innovations that fail are often potentially good ideas but have been rejected or postponed due to budgetary constraints, lack of skills or poor fit with current goals. Failures should be identified and screened out as early in the process as possible. Early screening avoids unsuitable ideas devouring scarce resources that are needed to progress more beneficial ones. While learning is important, high failure rates throughout the innovation process are wasteful.

The causes of failure have been widely researched and can vary considerably. Some causes will be external and others will be internal. Internal causes of failure relate to those associated with the innovation process itself. Common causes of failure within the innovation process in most organisations can be divided into five types:

- Poor goal definition

- Poor alignment of actions to goals
- Poor participation in teams
- Poor monitoring of results
- Poor communication and access to information

Gaining full benefits of innovation requires an effective and efficient framework across a wide range of policy areas, calling for an integrated approach and cooperation between business, governments and society.

Bringing innovative ideas to market involves complex inter-linkages among the members of industry, academia, and the government within multiple overlapping innovation ecosystems that are overlapping. This approach emphasizes the importance of creating and improving institutions to connect together the different parts of a nation's innovation system.

In order to unleash our full innovative potential, we need to put in place a National Innovation policy, which encourages competition among enterprises, greater diffusion of knowledge and increased support to early stage technology development initiatives and grassroots level innovators. There is a need to foster increased collaboration among R&D institutes, universities and private sector enterprises and leverage upon their cumulative strengths in designing and implementing various innovation programmes. There is also a need for an appropriate legislative framework for incentivising the innovators and commercialization of public funded R&D, where the government, the recipient(s) of funds, the inventor, as well as

the public benefit from the protection and commercialization of intellectual property.

Conclusion

There is a vast untapped potential in India for wealth creation by increasing the levels of innovation content in the entire economic development activities of the country. Innovation will also be a key for sustainability- the ability to meet developmental objectives while ensuring sustainable use of natural resources. India's key strength is its knowledge economy coupled with a young creative workforce that has the ability to think out of the box. This, we feel will be a key factor as brought out in the paper that will drive our economy forward.

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Innovative Approach in Information Technology

Abstract

Innovation is a key for sustainable growth. In ICT, innovation includes new and unique applications of technology one of them being Cloud Computing. Cloud Computing is predicted as a cost effective viable alternative to traditional computing. It uses large number of computer hardware in a single channel and handles multitier activities as per the demand of the user with secured platform. It's an Open Source Platform that provides advanced solutions to build private, public, hybrid and community cloud. Cloud computing helps businesses to become live and interconnected by providing anytime, anywhere services. Cloud computing is viewed as an economic model for sustainable growth in ICT.

Key words: Innovation, Cloud Computing, Open Source, Traditional Computing, ICT

Introduction

“Innovation and competitiveness have a dynamic, mutual relationship. Innovation thrives in a competitive environment and in turn, plays a key role in the achievement of such an environment. Innovation generates economic value, new jobs in the economy and cultures of entrepreneurship. By virtue of its relationship with competitiveness, Innovation emerges as a factor in promoting economic growth.”

Source: A report on Innovation in India published by National Knowledge Commission of India

INNOVATION word is derived from Latin word ‘*INNOVATIO*’, which means renewal or altered. In general the definition of Innovation can be defined as – applying ideas / concepts into practice, that have never been practiced. The practice that can be named as innovation is a debatable issue. Many management practitioners have given their views on Innovation.

Gallup stated an equation for significant Innovation -

“strengths development + engagement = innovation”

Some views/ideas are given below:

<p>¹Prof. Vijay Govindarajan (Tuck School of Business)</p>	<p>Innovation means executing the idea — converting the idea into a successful business, like Apple’s ipod or Jet engines. According to him, success is an enemy of innovation because, of ‘Performance Engines’. The organizations are constructed for efficiency and accountability, delivering consistent and reliable services. The method of ‘Performance Engines’ is to make every task, every activity and every process as repeatable and predictable as possible. But innovation is exactly the opposite. Each Innovation initiative is non routine and uncertain. To justify this statement, he defines example of TATA NANO –They targeted the two-wheeler market and wanted to convert into four wheelers. But initial sales result shows that it’s the second or third car option for the people. It is an optional. There is no significant difference seen in the sales of two wheeler market after the launch of TATA NANO. Market will take at least 10-20 years to accept this innovation. So Innovation is a challenge, one has to understand unknown/ hidden aspects and to know why it is important.</p>
<p>²National Knowledge Commission (NKC), Government of India</p>	<p>NKC defines innovation as a key aspect of economic growth. It’s a process to create a value to any commercial activity by introducing new goods, services and effective processes. It helps to facilitate competition, improvement in market share and reduction in cost. To succeed in innovative approach, NKC defines an Innovative strategy comprising of – high concentration on business area, identifying factors influencing innovation, timeframe and breakthrough policies.</p>
<p>³Azim H. Premji (Chairman Wipro)</p>	<p>Azim Premji cited in an interview “Creativity is about thinking new things, while innovation is about doing new things. It is about ideas vs. actions.” In technology, a Structured Innovation plays an important role to provide people fast, accurate, affordable and flexible products and services. Change is a key factor in Innovation, therefore that change should satisfy customer needs, satisfaction and value to business and value for money.</p>

¹ Source : CNBC TV18 Interview on Talking Innovation

² Source : www.knowledgecommission.gov.in

³ Source: Interviews by Azim Premji on Structured Innovation

<p>⁴The New Age of Innovation</p>	<p>This book prescribes how innovation can be practically applied in a successful manner. According to the author, before applying any innovative approach, one has to study the ground reality. Two ideas have been stated by the authors, firstly, Value Creation and Diversification. “All firms will access resources from a wide variety of other big and small firms— a global ecosystem,” defined Prahalad and Krishnan. The companies’ should focus on gaining access to resources, not necessarily owning them. They emphasize that business model should include the best / innovative ICT practices which brings flexibility and increases efficiency. According to them, innovation is not only related to inventing but also commercializing innovations. Author cited that if managers do not adopt the new innovative approach, they may be left behind in competitive World.</p>
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Information Communication & Technology (ICT) – An overview on Innovation

ICT industry has shown a remarkable growth. One tenth of Indian GDP is formed by ICT. As has been stated above, change is a form of innovation. Innovation in ICT is focused on customized value added services in all functional areas, from software to hardware. There are two aspects involved in ICT, one is technology and other is communication. Altogether ICT has increased users penetration. The objective of ICT is to provide right information at right time to right user. Following figures shows ICT growth in India by 2010:

- ICT revenue rose to USD 64 billion
- GDP contribution by ICT has increased from 1.2% to 6.1%
- Exports contribution has increased to 20%

- 45% urban jobs generated
- 70% workers belong to young generation and 30% women employed in this sector
- 51% share in the offshore market
- Indian Government has also taken initiative by -
- establishing IT research academy
- target to provide training to 10 million people by 2020
- establishing knowledge network

This continuous development has resulted in extraordinary growth. Experts believe that this happened because of consistent use of innovative approach. A study done by Booz Allen Hamilton and NASSCOM mentioned that business potential for Indian engineering services could grow up to \$50 billion by 2020. This is a big opportunity for service providers to

⁴Source : The New Age of Innovation - by professors C.K. Prahalad and M.S. Krishnan

According to the Gartner report, “India continues to be a vastly under-penetrated IT market relative to its potential. As IT buyers expand, mature and consumers increasingly understand the benefits of IT, acceptance of technology will increase, leading to further IT market growth. The Indian government’s focus on infrastructure projects with IT dimensions will be a strong driver for overall IT growth within the country.”

India is globally recognized as an IT hub. Indian government is also actively helping the organizations in the infrastructure development. By implementing E-governance, government has provided opportunity to all citizens to participate in the social and economic decision making processes, providing efficient and cost effective services.

An overview of Indian ICT Market in 2010 discussed on 6th January 2010 by IDC India.⁵

- India IT-Information Technology enabled Services (ITeS) sector, with a growth rate of 15%, to remain the fastest growing IT-ITeS market in the Asia/Pacific excluding Japan (APeJ) region in 2010.
- Paradigm shift for Consumer ICT – from ‘Consumer 1.0’ to ‘Consumer 2.0’ – to strengthen as
 - PC market to witness a generational shift, notably to the mini notebook PC or ‘netbook’ as Solid State Disk (SSD) ensembles reach a new threshold of usage in mobile computing
 - Smart handheld devices (SHDs) running new applications and services to take off as they reach high levels of penetration and wider acceptance
 - Highly advanced range of client-end digital products such as enhanced digital cameras to address the demands of the ‘serious enthusiast’, and services like online digital photo albums or ‘photobooks’ to see increased adoption.
- A lag in the roll out of 3G / WiMAX to affect the launch of new types of consumer services. While consumers may experience newer digital products, they will have to make do with the limited spectrum of applications currently available and wait for the full range of next generation services experience.
- “Consolidation” to take place in many technology markets as enterprises aim for higher efficiencies from existing IT infrastructure resources to reduce business overheads and capex to the minimum. In 2010 virtualisation to gather steam and grow along the key infrastructure technology products and solutions such as servers and storage, networking and desktops.
- Security in the age of ‘x-as-a-Service’: The critical business case for Business Continuity and Disaster Recovery (BCDR) solutions.

⁵ Source: www.idcindia.com/press/06Jan10.asp

- “Leveraging” to provide enterprises, across a diverse range of industries and sectors, a distinct competitive advantage as they deploy solutions that offer innovative, high value, quick RoI solutions to their customers.
 - o Business Intelligence (BI) and Advanced Analytics to witness increased adoption as a part of the industry transformation in the post-slowdown economy
 - o More organizations to outsource as the industry moves closer to an era of “Technology-enabled Business Outsourcing’ (TEBO)” services
 - o Collaboration and Unified Communications (UC) like Immersive Tele presence, Videoconferencing and other ‘socialytic’ or Web 2.0-type applications to witness integrated build-outs.
- Acceptance and adoption of the “Cloud” to grow as the post-economic slowdown scenario drives more organisations towards it, to harness its power in accelerating business recovery and growth.
- ‘Green Tech’ and ‘green initiatives’ to start emerging in 2010 based on overarching business concerns of cost control, efficiency and new public policy formulations driven by global environmental concerns.
- Power Management and Cooling Efficiencies getting increased attention from large enterprise and BPO industry top managements; introduction of unconventional (‘battery-less’) and solar UPS systems for the India market by major international vendors.
- Establishment of ‘Green’ and ‘Intelligent’ cities / special economic zones (SEZs) across the country.
- e-Governance and ‘Economic Stimulus Spending’ will continue to invigorate Government / Public Sector IT spending to new levels in 2010. Large scale e-government and e-governance projects to witness increased adoption of Document Management Services (DMS) and digital imaging technologies, notably scanners.
- Worldwide IT market growth to revive to 3.2% and touch nearly US\$ 1.5 trillion spending in 2010 up from an estimated US\$ 1.45 trillion for full year 2009.

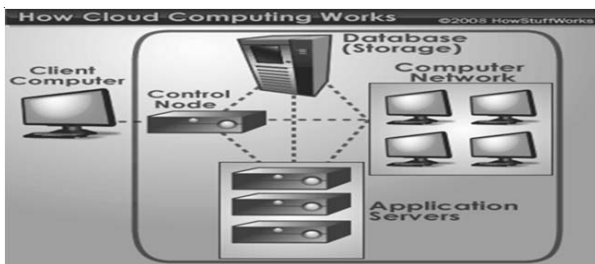
Cloud Computing – A New Paradigm

Gartner defined ‘cloud computing’ as - “A style of computing in which massively scalable IT-related capabilities are provided as a service using internet technologies to multiple external customers,”

Cloud computing is a model which provides services on internet. In other words, it can be defined as demand based services on internet provided by the subscribers on 'pay per use' basis. Its framework allows best utilization of resource. In 1960 a scientist- John McCarthy, brought this idea, which originated from ⁶cluster computing to ⁷grid computing to cloud computing.

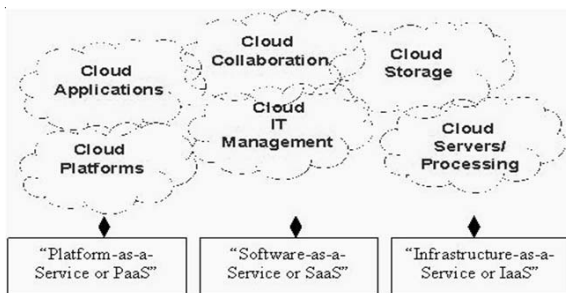
Gist of Cloud Computing:

A person owning a computer needs legal software/ applications, license to perform any functional operation. With the help of cloud computing, we can hire services on internet, pay on the basis of usage, similar to mobile usage.



Source: 2008 How Stuff Works (Figure 1)

Cloud Computing is classified into – IaaS, PaaS, SaaS. They encompass CPU networking, storage, virtual machine, operating system, application development/management, application stack et.al. Today 15 to 25% organizations have adopted cloud computing services.



Source: IDC India-2010 (Figure 2)

Further, it is categorized into four categories – private cloud, public cloud, community cloud and hybrid computing.

Private cloud	Public Cloud
<ul style="list-style-type: none"> ✓ Services provide to limited users / organizationü ✓ Benefits are-flexible, secure and expensive than public cloud 	<ul style="list-style-type: none"> ✓ Services are available dynamically without any visibility over the location ✓ Benefits are – easy and scalable services
Hybrid Cloud	Community Cloud
<ul style="list-style-type: none"> ✓ Combination of private, public and community cloud ✓ Benefits are – multiple combination all three categories, used in deploying application 	<ul style="list-style-type: none"> ✓ Service shared between the organization of the same community ✓ Benefits are - private and secure

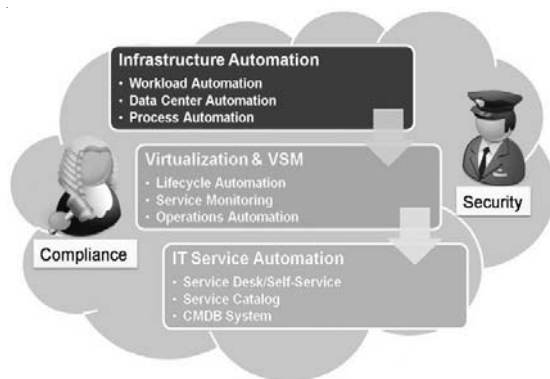
⁶ Clustering is the use of multiple computers, typically PCs or UNIX workstations, multiple storage devices, and redundant interconnections, to form what appears to users as a single highly available system. Cluster computing can be used for load balancing as well as for high availability.

⁷ Grid computing (or the use of a *computational grid*) is applying the resources of many computers in a network to a single problem at the same time - usually to a scientific or technical problem that requires a great number of computer processing cycles or access to large amounts of data.

Source : <http://searchdatacenter.techtarget.com/definition>

The benefits of Cloud Computing are, increase in usability, scalability, standardization and virtualization of software/hardware. It also facilitates customers to save cost, power consumption, storage place, flexibility and timely updation.

Cloud computing model is a pool for sharing network and rapid access with minimal management. Cloud Computing system architecture is divided into front end and back end. Front end means user interface and back end includes servers, memory and computer services. The service provider is required to maintain computers, servers, data storage system and high speed network. Cloud building block is shown below-



Source: <http://pleasediscuss.com/.../itpa-wla-cloud-automation> (Figure 3)

Latest survey outcome – study done by Search Data Centre on Cloud computing adoption by Indian Organisations

Total respondents were – 272

No. of respondents who have already adopted cloud computing / or in process are – 143 With this outcome , it is observed that organizations are more alert and are adapting cloud computing as it helps them to save cost, maintain efficiency and effective operational functions.

The main global cloud service provider players are - Amazon, Google, IBM, Microsoft, Salesforce.com, Startups. Indian companies are also providing cloud computing services to customers. A list of Indian companies is shown below:

⁸Indian cloud computing service providers – Top ten

Company Name	Cloud Offering	Cloud Type
Zenith InfoTech	PROUD	IaaS
Wolf Frameworks	Wolf PaaS	PaaS
OrangeScape	OrangeScape Cloud	Paas
TCS	ITaaS	IaaS and SaaS
Cynapse India	Cyn.in	IaaS and SaaS
Wipro Technologies	Wipro W-SaaS	SaaS
Netmagic Solutions	Cloudnet, CloudServe, Private Cloud	IaaS
Reliance Data Center	Reliance Cloud Computing Services	IaaS, SaaS and PaaS
Infosys Technologies	Cloud based solution for Auto Sector	SaaS
Synage	DeskAway	SaaS

Conclusion

According to the Forrester -"The next generation of information workers will expect a highly connected, contextual information workplace they can take any where".

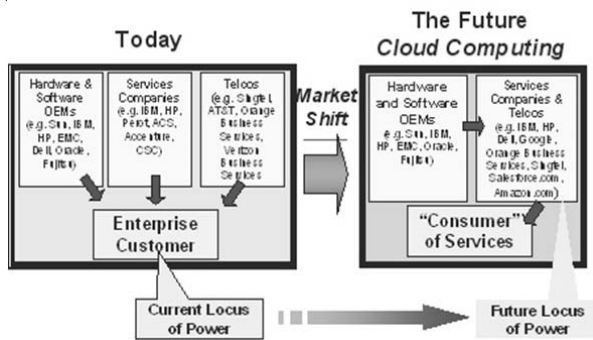
Hakkim Ericsson expressed his idea of Technology Innovation by this formula:

$$(\text{device} * \text{innovation}) + (\text{cloud computing} * \text{innovation}) + (\text{mobile connectivity} * \text{innovation}) + (\text{application} * \text{innovation}) = \text{Mind-blowing innovation.}$$

The ICT industry has evolved in the last two decades. Cloud computing is the next wave of sharing resources on internet, by providing leverage to the organization with expected results like – significant cost saving, simplified operations, secure resource sharing platform and scalable services. It has also opened up job opportunities. It is estimated that cloud computing could create approximate 300,000

⁸ Source : www.techno-pulse.com

jobs in the next five years in ICT. The goal of technology is to bring about social and financial advantage to business and users. Cloud computing ensures seamless information flows and access to information in a legacy system. Future of Cloud computing is shown below-



Source : www.idcindia.com (Figure 4)

“Cloud is designed to be available, everywhere at any the time. By using redundancy and geo-replication, cloud is so designed that services be available even during hardware failures including full data centre failures”

Amitabh Srivastava
- Microsoft Technologies.

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Influence of Corporate Culture on Creativity and Innovation

Abstract:

This article talks about the influence of corporate culture on creativity and innovation through experiences of various companies. It also focuses on various lessons to be learnt from the said experiences and the kind of organization facilitating creativity and innovations.

Keywords:

Corporate culture, creativity, innovation, bottom-line, out-of-the-box, learning organization, competitive edge, 360 degree communication, authoritative style, unique selling proposition, emotional and cultural intelligence, decentralization, knowledge acquisition process.

Introduction:

“The World of technology thrives best when individuals are left alone to be different, creative and disobedient.”

Don Valentine.

Creativity and Innovation are key to the development of any country or company. Creativity means “the quality of being creative or ability to create”. Innovation means “the introduction of something new, a new idea, method or device”. There are many other views and definitions of creativity and innovation in the market. In the corporate context, innovation is defined as “the process of bringing a new idea- one that solves problems or

addresses opportunities into use". Creativity and innovation are two sides of the same coin. "Creativity comes first, innovation later. Innovation is a part of the creative process". The process of creativity and innovation is driven to a great extent by the environment in which individuals or groups function. Infact, in the corporate context, creativity and innovation depends on the corporate environment which in turn is influenced, to a great extent, by the corporate culture.

Innovation In Leading Companies:

- 3M Company is famous for its never ending series of products, which includes scotch brand cellophanes tape and post-it-notes.
- General Electric files more US patents than almost any other US firm year after year.
- Sony is recognized world leader in consumer electronics.
- Hewlett Packard continues to launch successful products at a rate few companies can match.

Source: - James H Higgins in "The Futurist"
(Tail piece Times of India).

This article is about the interface of corporate culture and creativity and innovation. Hence, it is necessary to understand the meaning of culture. According to Daniel R. Denison (1990), "organization culture refers to the underlying values, beliefs and principles that serve as a foundation for organizations management systems as well as the set of management practices and behaviors that both exemplify and reinforce those basic principles."

It is the purpose of this paper to address the following issues:

1. Identify experiences of companies which felt the impact of culture on their levels of creativity and innovation and consequently on the overall performance of the business;
2. Identify important messages from the learning's arising out of the experiences referred above; and
3. Identify the kind of organization, along with culture as an input, which facilitates creativity and innovation.

The above issues will be discussed in turn.

Experience I - Whirlpool

Whirlpool rated as world's number one appliance maker found that in the mid nineties there was fall in sales which adversely effected the bottom-line of the company. The mid-nineties saw more serious problems with increases in cost and decrease in price and profits, in the European region particularly, had fallen at least by 40%. In some cases the decline was 50%. Again in other countries and continents the company faced serious problems. The company was riding on the glories of the past and hence creativity and innovation took a back seat. It took some-time for the company to accept the fact that customer must continuously and constantly perceive the product to be superior. Whirlpool also experienced another problem viz, poor internal communication system which was rather slow, inaccurate, control, top-down and ad-hoc. Moreover, the information was not systematically stored and hence not available at the right time, at the right place, to the right

person, in the right quantum and format. The message was loud and clear that some lateral inputs and thinking out of box were required. The culture of the company was under test and though the answer lay in creativity and innovation as an input for rejuvenating the company the question was how to go about? A culture of innovation had to be initiated and instilled. The core competency throughout the organization had to be thinking 'out-of-the-box'.

The communication process underwent a change and Whirlpool encouraged sharing of new ideas, products and services amongst employees. The result – technologically advanced machines like Whirlpool's 'White Magic Aqua-1shower' in India. The machine promised the whitest wash with extraordinary drying facility. There was another innovation which dispensed with ironing which was followed by the launch of machines which made available ready-to-wear cloths in just about 35 minutes. The technology used here was heat stimulated mist. There were other innovations too.

Once the culture of innovation spread across the network of the company's international locations, sales increased in 2005 to 780 million USD and there were several innovations in the queue. The hindrance to innovation in the company was neither process nor technology. It was not people too. It was corporate culture. Innovation is people driven and people oriented. Hence, the management model had to undergo change. The culture then has to sustain for it to ensure that the competitive edge of business is fully protected. Again, mindsets towards change management had to be proactively geared. Transformational leaders were required. Communication had to be improved and had to be 360 degrees or criss-

cross, top-down, bottom-up, lateral, parallel and anywhere to everywhere and anyone to everyone. Change management programs were launched to share best practices closing knowledge gaps and converting implicit knowledge into explicit knowledge. Innovation was made a part of organizational structure. There was a three tier system viz. skilled employees, innovation consultants and innovation mentors. Employees were educated on the need for change and trained to imbibe new ideas, take a risk but attempt to apply. Every work centre was a learning centre and Whirlpool became a learning organization. Consumers were part of the innovation process. New ideas were bounced with customers who rated them on a ten-point scale. Only those ideas which scored 7/10 were explored further for application and implementation. Thus, the corporate culture underwent a change from a structured top-to-bottom organization to a learning organization with 360 degree communication. The company vision was innovation from everyone-to-everywhere. The results were there in terms of improved bottom line for Whirlpool which emerged as a profitable company and also as a learning organization.

Experience II – Google

Google had its own objective, from the start viz a fun-organization. The founders Larry Page and Sergey Brin visualized Google as a fun place to work. They wanted to keep the organization young and dynamic. The work environment was characterized by fun. There were roller- skater hockey matches for employees, who could bring their pets to the workplace and there were workout gymnasium, assorted videogames and pool table. This environment motivated employees all over the World. It built

camaraderie and paved the way for all-round results. Google’s culture was seen as one of the factors for Google’s success. Decentralization, autonomy, freedom to take decisions, developing risk taking abilities all contributed to Google’s success. The core values i.e. ethic had not changed since its creation. Unlike Whirlpool prior to instilling innovation culture, Google was the company with open communication across its entire network that is to say 360 degree communication. Google developed employ branding by creating a new word, *Googler* for their employs. Employees were taken care of. Hence, creativity went up. Leadership style at Google was unique and ensured that communication amongst employees was open, ideas and concepts could be shared, there is no undue pressure, people are happy and feel work is fun and therefore are motivated to work in harmony with dedication and loyalty. There is also an authoritative style within which employees can develop their own ideas and freedom to innovate, explore and experiment. The vision is established. The path to the vision can be chosen, initiated and developed by the employees. This is the democratic part of the leadership and there is lot of flexibility for individuals and groups to blend themselves to achieve the overall organizational objective. Google’s focus is primarily on analytical intelligence rather than on emotional intelligence and cultural intelligence.

Experience Iii- Nintendo W2

The company positioned itself completely different from the competitors. Microsoft’s X-Box and Sony’s Playstation were in competition on advance graphics engines. Nintendo introduced a new dimension into casual

gaming. This approach was already tested with the DS –LITE gaming device. The company succeeded in attracting females and families in addition to the teenage and young adult males who are supposed to be the core segments of the gaming industry. Nintendo’s approach provided what is now known as ‘unique gaming experiences’ and it became the ‘unique selling proposition’ to provide the competitive edge to Nintendo

EXPERIENCE IV - APPLE Ipod

Apple’s unique proposition was and continues to be - hiring the smartest people and the best talent. They produce with passion - something which they love and they are confident that customers will also fall in love with their products. Apple’s strategy is to first dream through its development teams and then unleash innovation by converting the dreams into reality. The iPod project required lot of external sourcing. The iPod was well integrated with other departments like business development, R&D, manufacturing and sales. Thus the company could ensure that all departments blended their goals to achieve the overall organizational objectives.

Messages

DIAGRAM – I – WHIRLPOOL CULTURE CHANGE



N.B.: The interplay of all the three processes sustained creativity and innovation and supported the change for the better.

The above case studies show the role of corporate culture in influencing innovation. Whirlpool had a strong research, engineering and manufacturing culture. However, it had a very weak culture with respect to communication within the company. The DNA of Whirlpool's culture underwent a change as shown in Diagram I. Organizational structure was revamped. As a result, the engineering and manufacturing strength came out in the open. When communications opened up, innovation could emerge from anyone and be transparent at all places. Culture of innovation was thus initiated through change in the organizational culture. The company addressed the internal obstacles to culture viz: unsupportive culture and climate, limited funding for investment, workforce issues, process immaturity, inflexible physical and IT infrastructure, insufficient access to information.

This enabled the company to track and trace the barriers to innovation and launch a change management program. Such a change helped to develop a learning organization where best practices got shared and formal knowledge gaps were steadily closed. The company created a new organizational structure for innovation, to be all pervasive, which included, as mentioned earlier, skilled employees, innovation consultants and innovation mentors. As a result, the ratio of learning to investment improved. Learning was thus quick, incremental in nature and also time and cost effective. Innovations bringing about quantum changes and jumps in key performance parameters were not ruled out. A knowledge management section was created to set goals, allocate resources and evaluate ideas for funding. The theme was known, learn

and do. The slogan was "innovation from everyone and everywhere" and the tools, techniques and processes included: leader accountability and development; culture and values; resources/funds/people; knowledge management and learning systems; change management and strategy communications; rewards and recognition; systems alignment; measurement and reporting systems.

The culture at Google believed, to reiterate, that work should be fun and the workplace should be able to motivate fun. The working environment had imbibed six factors namely: flexibility, responsibility, standards, rewards, clarity and commitment. Google stood by the letter of these expressions. Communication was also open unlike Whirlpool where this was the weakest link. Unlike Whirlpool, Google was a learning organization from the start. The shared values, beliefs, assumptions, dreams, aspirations, mindsets were all well blended. Employees were taken care of and made comfortable at the workplace. The founding fathers of Google understood this very well and they 'walk the talk'. Elton Mayo's theory that productivity of worker improved when they are taken care of was well practiced. Leadership in Google was totally different as mentioned earlier while there was an open communication and people affiliated to the organization and the company enjoyed the harmony and emotional bonds between themselves and also between employees and company. Within this freedom was the authoritarian style, a clear vision well articulated on a top-to-bottom basis. Employees had to work towards the vision. Leadership at Google had a mixture of McGregor's Theories X and Y. Critics of Google

say that Google focuses too much on analytical intelligence of candidates recruited. Google ignores, it is said, emotional intelligence. Of course open communication carries along with it emotional bonding and mounts the emotional quotient in the management process. However, specific attention to emotional intelligence could help Google to emerge better. It is therefore believed that Google as an organization may not survive very long. Employees at Google may be enjoying extraordinary freedom and project themselves as an undisciplined and arrogant lot. Today Google, has limited or no bureaucracy. However, at the moment, Google is a great success and the culture that has emerged has paid off. It is said that freedom given to employees is pinching the bottom line. Hence, the free dinner has been removed and only the free breakfast and lunch survive. In short, as of now corporate culture of Google's fits into the text book definition of organizational culture viz. "a pattern of shared basic assumptions that the group learned as it solved its problem that has worked well enough to be considered valid and is passed on to new members as the correct way to perceive, think and feel in relations to those problems."(Edgar Schein, 'Organizational Culture and Leadership'- 2004.)

Putting Apple and Nintendo together, the messages which emerge include the following:

- Innovation is driven by internal competencies and resources from the outside.
- Internal competency refers to core competency with respect to management

process, research process and ability to manage change and convert output of R&D into a commercial success.

- Every innovation must provide superior value to the customer.
- Barriers to innovations in business include knowledge acquisition process, behavioral process and organizational process.
- In the cases studied, the companies had unique styles to acquire knowledge and ensure that behavioral processes acted as an effective medium to make new knowledge a commercial success.

Other Important Messages Include The Following:

- Creativity and innovation enables reinvention of companies.
- Creativity and innovation is a continuous process and the end objective is to improve the lives of customers by providing superior value.
- Innovation is simultaneously internal and external to the firm.
- Innovation is driven by two dynamic inputs: core competence and lateral thinking.
- Innovation is driven by managers own set of biases, belief and assumptions. This is the mental model.

Other Examples of Powerful Culture:

▪ **Mickey Mouse**

'Mickey Mouse Culture' of Walt Disney Corporation brings out the powerful impact of a company's corporate culture on people. In its European Theme Park located in Marne-La-

Vallee near Paris, new employees are exposed to new introduction program where they are familiarized with Disney's tradition, operating philosophy, history since inception, Disney Land Lingo ethos, acting and atmospherics, generic skills like gestures, greeting styles and specific skills such as sweeping up, answering the telephone and attending the car park. A cross-cultural group, which went through the induction, revealed that the French recruits were more reserved than their American counterparts. However, the training has its toll. It was reported that some of the new entrants have withdrawn from the training complaining that joining the Disney Organization is a bit like taking holy orders or in the opinion of a few others joining a sect. (Source: Annie Gillet, 1990, Mickey Mouse goes to France Tertial, May 1989, Paris, Group Usine Nouvelle, Reprinted in Best of Business, Vol.2, No.1, pg. 28-33.)

- **Southwest Airlines:**

In Southwest Airlines, humor and capacity to work in a collegial environment is important. The Chairman Mr. Kelleher quotes, "We hire attitudes. We look for 'listening, caring, smiling, saying thank you and being warm'. Our people are result oriented, not process oriented. They don't focus on organizational hierarchy and position or title. We laugh because we want to, not because we have to." Kelleher has created air travels' 'Greatest Show on Earth.' The theme at Southwest airlines is camaraderie based on the **4 F's** viz family, focus, fraternity and frugality.

Conclusion:

Creativity and Innovation requires the following:

- **Culture:** which develops result oriented, competitive, autonomous units.
- **Roles and Relationships:** people have to be motivated on their own – self initiated and self sufficient along-with multiple role sharing and vertical teams and strong support systems.
- **Organizational Structure:** flat structure with autonomy and ability to respond fast to change with scope for adaptability.
- **Processes:** team based interaction and free flow of information with cohesion and consensus and built in reward and penalty system, scope for effective review and control
- **Orientation:** the mindsets have to favor result orientation, well knit , defined, directed and highly focused groups
- **Outcomes:** multilateral, committed mental compliance and result orientation.

What is true of business is also true of the World at large in terms of social, political and economic events within a country and also on an inter-country and inter-continental basis. As the Times of India (December 31, 2010) puts it, " the dawning of the 21st century-like that of the 20th- has brought with it the sense that something has fundamentally changed, and old institutions are no longer sufficient to deal with new realities." Hence, the all pervasive need for creativity and innovation. In fact, the decade ending 2010 has been a decade of reinvention and the crisis of 2008, the global meltdown,

was yet another opportunity to bring creative and innovative methods of managing society, the economy and polity. In India, 2010 is known as the year in which there were, 'novel solutions to old problems', where Bihar had led the way. Again, to quote the TOI- Editorial, Mumbai, December 31, 2010, ".....Bihar's peaceful election, fought on a developmental agenda, shows the way."

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Emerging Markets : Epicentre For Creativity And Innovation

“The world is moving to what is called the new Asian hemisphere. With sales in developed markets slowing down, not growing as fast anymore, more and more companies will shift their innovation capabilities to growth markets like India and China”

Paul Polman, CEO Unilever, Times of India, March 9th, 2011

Abstract

With the developed world slowing down and consumption patterns and aspirations moving upwards in the developing world, also called the emerging markets, the epicenter for creativity and innovation is fast and steadily shifting towards these countries. The article explores the various trends in innovation being adopted by some multinational corporations and local giants to fast track their growth in these emerging markets. The article also talks about the reverse trajectory followed by various innovations developed by local innovation centres, in their diffusion process.

Key Words: Emerging Markets, Innovation, Creativity, Polycentric Innovation, Open Innovation, frugal Innovation, Disruptive Innovation, Reverse Innovation, Emerging Consumers

It was back in 1908 that Henry Ford made a historic promise to American people to make a car for the masses. This led to the production of more than 15 million model Ts. The car was priced at approximately \$ 850 and Mr. Ford had to look at various innovative ways to keep the price at that level. More than three

decades ago America woke up to find that Detroit had been taken over by Japan as the world's leading car producer. It was the innovative business concept of 'lean manufacturing' which led to the catapulting success of Toyota Lexus in America. Today the centre of business activity has shifted even deeper and it is the developing world or the 'emerging economies' which are poised to cause the next upset in the business world. It is no coincidence that the world's cheapest car was conceptualised and created in India or that Huawei, a Chinese telecom giant, applied for more international patents than any other firm did in 2008. The emerging economies of the world are fast becoming the epicentre for creativity and innovation. Promising emerging economies have been grouped together informally such as the 'BRICs' (Brazil, Russia, India, China); the 'Next 11' (N11), the 'E7' groupings which adds Mexico, Indonesia and Turkey to the 'BRICs' and the recent 'CIVETS' a group of six promising economies, beyond the 'BRICs', which are Colombia, Indonesia, Vietnam, Egypt, Turkey and South Africa.

Many of the world's big multinationals have understood this shift and have adopted polycentric innovation preferring to have many Research and Development Centres across the World. India and China rank amongst the top seven countries (seventh and fourth respectively), in housing R&D facilities, amongst US, Germany, Japan, UK, and France.⁹ Top multinational corporations (MNCs) such as CISCO, IBM, GM, GE, Microsoft and Nokia have set up large R&D centres in these countries

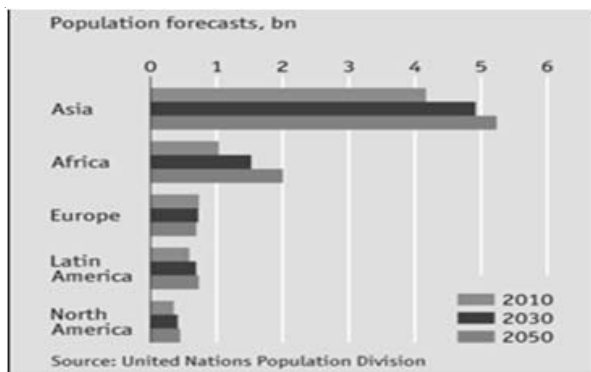
⁹<http://timesofindia.indiatimes.com/business/india-business/MNCs-prefer-India-China-for-RD/articleshow/4257973.cms>

¹⁰ http://www.tatachemicals.net/innovation/innovation_centre.htm

owing to their richness in availability of scientific talent. Xerox is another company which has realised the potential of emerging countries such as India and has its own version of polycentric innovation. Instead of setting up a large captive R&D lab of its own and using in-house R&D personnel, Xerox has chosen a path of 'open innovation'. It established an innovation hub in Chennai which would take a collaborative approach towards R&D, partnering with external inventors, venture capitalists and local universities to create regional innovation networks that would help co-create new products and services catering to the local and global market needs. Tata Chemicals established an innovation centre in Pune (India) in 2004 with the objective of developing world class R&D capabilities in new knowledge-based products, cutting edge technologies and emerging areas of nanotechnology and biotechnology. The innovation centre has filled for 36 patents (including 14 international filings), and is in the process of filing several more.¹⁰ In this way it is helping Tata Enterprise in expanding its business lines by creating those products which are of value and demanded by the local population of the market. The bulb or the nanotechnology enabled cartridge used in Tata Swatch, the very unique water purifier, which uses natural materials such as rice husk ash for water purification, has been developed by Tata Innovation Centre. This product does not need electricity or running water and delivers safe drinking water at a market benchmark price of Rs 1 per day for a family of five.

Nevertheless it would be a hasty judgment to think of emerging countries as a safe haven for creativity and innovation. These markets can be very tough and prove to be full of challenges. Inadequate infrastructure, piracy, weak intellectual property rights, corruption and unpredictable income streams are only few of the challenges that organisations may face. Yahoo, e-bay and Google exited China, Black Berry was not sure of the longevity of it's tenure in India and the controversial shut down of Enron in India are few examples of things not working quite right for the companies from the west. But the opportunities are equally enticing, starting with a huge population and growing much faster than the developed world (See Figure 1).

Figure 1: Population forecasts and GDP percentage change on previous year



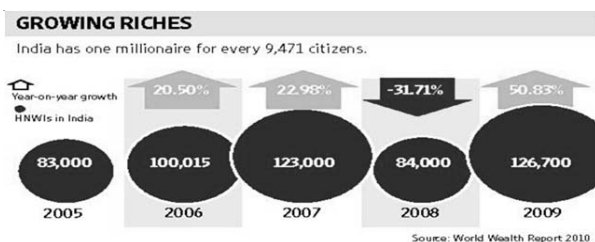
Source: <http://www.economist.com/node/15879369>

The society itself is an evolving one where, in the coming decades, millions of people living below the poverty line will move up the pyramid and add to the already large middle class. The number of millionaires living in these countries is also very large resulting in a promising market for luxury brands (Bugatti Veyron 16.4 Grand Sport', World's most expensive car, from Bugatti Automobiles, a Volkswagen group company, with a price tag of over Rs16 crores debuted in India in the Diwali run-up in 2010). 150 Mercedes Benz cars and 101 BMWs were booked in a single shot each from a small town of Aurangabad, which does not even have a showroom of BMW. Nevertheless if organisations want to succeed in these prospering markets, they will have to look beyond the rich class living in the metropolitans and big cities.

In India the number of High Net Worth Individuals (HNWIs), having investable resources in excess of a million dollars, increased by 51% to 126,700 as compared to a 17.1% increase in the World population of HNWIs in 2009. Asia-Pacific's HNWI population reached 3 million in 2009, matching that of Europe for the first time. Asia-Pacific wealth rose 30.9% to \$9.7 trillion, surpassing the \$9.5 trillion in wealth held by Europe's HNWIs. (See Figure 2)

Source: *The 14th annual World Wealth Report 2010, released by Capgemini and Merrill Lynch wealth management*

Figure 2: Growth in the numbers of HNWI's in India



Source: *World Wealth Report 2010, released by Capgemini and Merrill Lynch wealth management*

The success for most organisations will depend on the organisation's ability to appeal to the large volume of middle class population living in tier 2 / 3 cities and even in remote villages. The challenges and the opportunities together make an interesting platform for organisations to develop a profitable concoction of creativity and innovation in various functional areas of management.

The middle class aspires for goods and services of global quality but at local price points. This calls for frugal innovation, which is a whole new business philosophy that will force organisations to take a fresh look at their business models and deeply innovate in order to come out with quality products at dramatically lower prices. This makes it extremely important to understand the needs at the bottom of the pyramid and then work backwards to develop appropriate solutions. This type of innovation is not something that can be achieved through cheap labour alone, though that will help in keeping the cost down. It is more about redesigning products and processes, rethinking the entire production process, stripping away the unnecessary features and frills, negotiating with the

suppliers and distributors for best deals and find newer cost effective means of reaching the consumers. General Electric's health-care laboratory in Bangalore, India developed a hand-held electrocardiogram (ECG) device (See Figure 3) called the Mac 400 which has only four buttons instead of multiple buttons on the conventional ECG; can run on electricity as well as batteries and uses tiny gadgets used in portable ticket printers for printout instead of the bulky ones. This has brought the price down to only \$800 as compared to \$2000 of a conventional ECG and reduced the cost of getting an ECG test to only \$ 1 per patient.

Figure 3



MAC 400 Portable ECG from GE Healthcare

Figure 4



TATA Swach

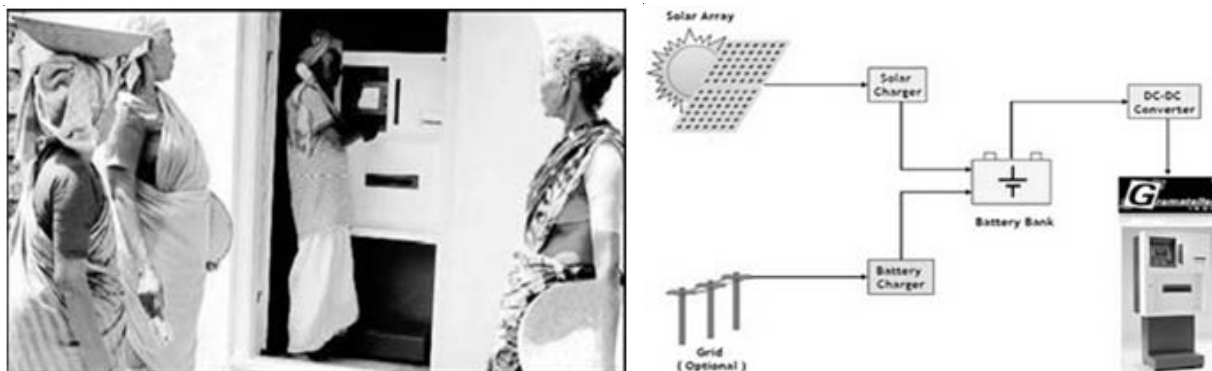
There are many such examples of frugal innovation coming from emerging countries not only from the western multinational enterprises, but also from local enterprises. Apart from 'Tata Nano' and 'Swatch' (See Figure 4) mentioned earlier, 'Bharti Airtel' an Indian telecom service provider has managed to pass on the economic benefit to the customers by following the path of outsourcing everything, but it's core business of selling phone connections, to Ericson and IBM. It is now able to replicate it's low cost model in Africa after acquiring Zain Telecom's African operations.

Quwait based Zain Telecom itself is an innovation leader and was the winner of the 2008 Global Telecom Business Wireless Network Infrastructure Innovation Award for its

'One Network', policy. 'One Network' is the world's first borderless mobile telecom network service, which reduces the cost of making telephone calls by allowing customers to communicate freely across geographical borders and continents without roaming call surcharges and avail free incoming calls wherever they travel in the 21 countries where Zain's One Network operates¹¹.

Technology may be used in innovative ways in order to provide value in low cost through Vortex Gramateller ATMs (See Figure 5) which can accept and dispense soiled notes, a commonality in rural India and also consume very less power and do not need air-conditioned environment to operate in.

Figure 5



Vortex Gramateller Machine

Vortex Gramateller Machine costs around Rs. 175,000, compared to a conventional ATM that costs around Rs. 800,000-1 million.

Organisations, whether local or international, that have managed to break ground in emerging countries, aided by their innovations, Research and Development

capabilities and experience in low cost business models are now looking towards other markets, with similar opportunities. Some local enterprises are even challenging their global counterparts in their respective home countries, which are mostly mature or developed markets. These companies are

¹¹ <http://www.zain.com>

adapting their business practices to the requirements of the regional business ecosystems by adding incremental innovation to their business models. Haier Group of China which is a manufacturer of major appliances and electronics with a wide product mix ranging from wine cellars and refrigerators to televisions, including plasma and flat screen models, has risen from bankruptcy to become world's fourth largest white goods manufacturer, by taking it's brand to the 'Developed World'. Some of the innovative strategic decisions that the company took were sponsoring Australian basketball team, now known as the Melbourne Haier Tigers; Joint

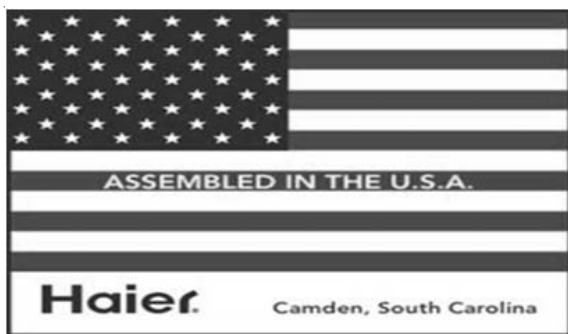


Figure 6 : Haier Ellectronics – Chinese Brand, capturing markets across the globe

ventures with Fujitsu, Hitachi, Sanyo Electric and Samsung which allowed them to manage risk while creating awareness; establishing a strong distribution network (62 distributors and more than 30,000 outlets around the world), with Wal-Mart, Lowe's, Best Buy, Home Depot, Office Depot, Target, Sam's Club, Fortunoff, Menards, and Bed Bath and Beyond; all stocking their products. Above all it is the strategy of creating a local brand name and differentiation at a speed which is allowing Haier to capture the

¹² http://www.brandchannel.com/images/papers/250_ChinaBrandStrategy.pdf

¹³ <http://www.ryerson.ca/~iri/papers/ypdu.pdf>

¹⁴ <http://blogs.ft.com/donsullblog/2010/07/19/reverse-innovation-from-emerging-markets/>

markets across the globe.¹² This is achieved through local manufacturing. Their strategy of overseas expansion is that "Where there is a market, there must be a factory". They invested in a Greenfield Project in New South Carolina in USA which helped them ship out products which were sporting a Chinese brand name as well as a made in USA label¹³.

Organisations are learning to differentiate between 'Emerging Countries' and 'Emerging Consumers' hence paving the way for 'Reverse Innovation'. Many products developed especially for local needs at low costs may also appeal to some segments in mature markets. In Europe, Nestlé has identified pensioners, students, migrants, unemployed adults, and single parents overseeing a large household as categories that respond well to products introduced in emerging markets. In France, for example, Nestlé promoted brand Maggie's, Halal products to that country's estimated 5 million Muslim consumers, and experienced a sales spike of almost five times average, during Ramazan¹⁴ (See Figure 7).



Figure 7 : Maggi closing the gap between emerging countries and emerging consumers

The Dacia Logan car primarily manufactured for the Romanian market along

with other Eastern European countries and Africa has become the fourth largest selling car in France (See Figure 8)

Figure 8 : The Dacia Logan Car



Hindustan Unilever Limited's latest innovation water purifier Pureit is being extended to markets like China and Indonesia. It need not be only a product innovation but innovation in processes can also be exported as Deutsche Bank has done using its Indian learning experience. The biggest challenge for

Deutsche Bank was competing on cost with the

local rivals. It transferred all non-customer facing activities to a separate hub in North Mumbai where compensation costs were one quarter in comparison to that in South Mumbai. Deutsche replicated the similar approach in USA by moving prime brokerage or equity research from New York to Florida, where wage rates were much lower.

Another example of an innovation that will benefit millions of people suffering from heart diseases, who cannot afford costly treatments, is the brainchild of Dr. Devi Shetty, a modern day 'Robinhood'¹⁵ who was also Mother Teresa's cardiac surgeon (see Figure 9). Dr. Shetty's Narayana Hrudayalaya in Bangalore (India) described as the World's largest heart factory by Forbes magazine; charges an average of \$2000 for an open heart surgery compared to approximately \$ 20,000 to \$ 100,000 in USA.

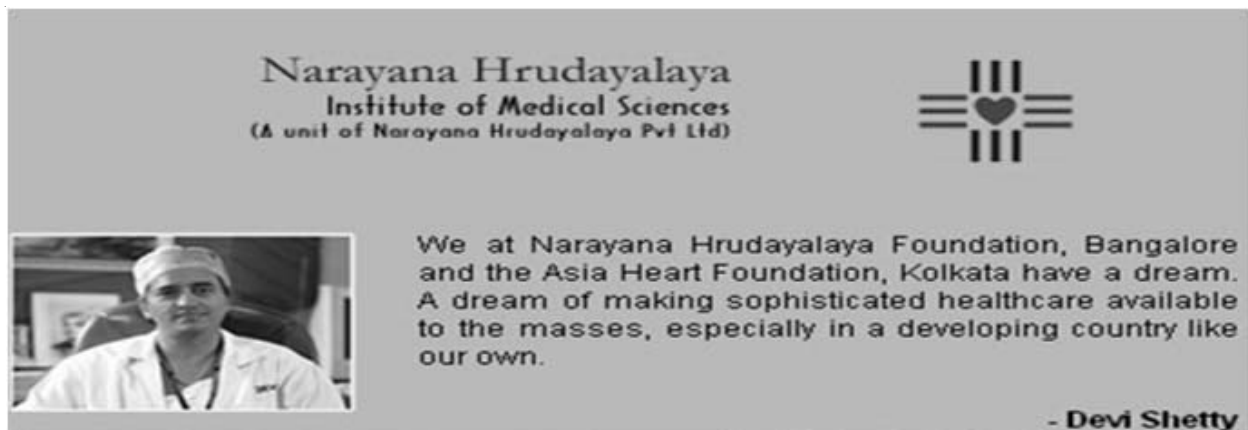


Figure 9 : Dr. Devi Shetty - Henry Ford of Heart Surgeries

This, Dr. Shetty has achieved by borrowing a simple management principle of 'economies of scale' from the manufacturing sector and using it in an innovative way in the health care sector. Narayana Hrudayalaya has 1000 beds as

compared to an average of 160 beds in a hospital in USA. Narayana's 42 cardiac surgeons performed 3,174 cardiac bypass surgeries in 2008, more than double the 1,367 at the Cleveland Clinic, a U.S. leader, did in the same

¹⁵ <http://hbswk.hbs.edu/item/4585.html>

year. His surgeons operated on 2,777 paediatric patients, more than double the 1,026 surgeries performed at Children’s Hospital, Boston¹⁶.

According to Dr. Shetty
“Japanese companies reinvented the process of making cars. That’s what we’re doing in health care. What health care needs is process innovation, not product innovation.”

Dr. Shetty has been called the ‘Henry Ford of heart surgery’ by The Wall Street Journal. Dr. Shetty’s ‘assembly line’ hospital model is finding many takers worldwide. He has already taken his model to USA where he plans to build a 2,000 bed hospital at Cayman Islands, near Miami. Prices would be 50% lower than what is charged in USA and the target audience will be people who either do not have insurance or need surgery’s not covered by their plans.

Another challenge faced by organisations in emerging markets is reaching millions of customers in the remote villages of the hinterland. Poor infrastructure, weak distribution system and high logistical costs make it difficult to penetrate deeper into the rural market in spite of having a product which



Figure 10 : Project Shakti, HUL’s answer for innovation in distribution

can offer higher value to the customers. This can prove as a hurdle in driving growth through volumes and organisations may find themselves unable to bring down the sticker prices. Hindustan Unilever Limited (HUL) innovated in the distribution space and came out with ‘Project Shakti’ in India in year 2000 where women in these villages were invited in self-help groups to become direct-to-consumer sales distributors for HUL products (see Figure 10). These women entrepreneurs called ‘Shaktiammas’ not only contributed to HUL’s bottom line but also brought themselves, self esteem, a sense of empowerment and acceptance in the society. By the end of 2009 there were more than 45,000 Shakti entrepreneurs covering 3 million homes in 100,000 villages in 15 states in India.¹⁷ With this project HUL has maintained a lead over its competitors in rural India and is now taking the project to other emerging nations such as Sri Lanka, Vietnam and Bangladesh. It is being considered for other Latin American and African markets. In Bangladesh and Sri Lanka, it is being promoted as Joyeeta and Saubaghya, respectively. The project has now been extended to include men called ‘Shaktimaans’ as the company wants to treble its rural reach. This move was triggered by the realisation that infrastructure and connectivity to Indian villages has improved in past few years and men on bicycles can cover 5-6 villages having less than 2000 population each. Coca Cola is trying something similar to leverage the local entrepreneurial spirit in Africa. They have set up about 3000 micro distribution centres in Africa, run by locals, which is a very significant

¹⁶http://www.narayanahospitals.com/images/Wall_Street%20Journal.pdf

¹⁷<http://www.unilever.com/sustainability/casestudies/economic-development/creating-rural-entrepreneurs.aspx>

route to the market.

The stagnating growth in the developed markets will continue to push large companies in the direction of emerging markets, but if they want to ride the growth wave they will have to constantly look at the local needs, innovate so as to provide goods and services of global standards at affordable prices and tap spaces which are still unexplored. Organisations will also have to think in terms of sustainability, making a difference to lives of the local community and inclusive growth because if the consuming class will expand, it will provide a larger opportunity to the Industry. There are going to be various constraints and roadblocks but companies with a creative outlook and

innovative solutions whether disruptive or incremental will be able to maintain their competitiveness.

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Role of Innovation in Women Empowerment

Abstract

In every country women face some sort of discrimination. However, the nature, type and degree of discrimination changes according to the country and can be seen across the world. The opinion that 'women are inferior to men' provides a basis for formation of different rules and regulations. Further these rules and regulation make sure that such gender differences are persistent by limiting the opportunities to change law only in the hands of few dominant males. Males always favoured by customs and traditions are given authority and power in the decision making process while women usually have to take back seat.

Recognising the importance of gender equality, many institutions, government and non-profit organisations are focusing on innovative policies and creative ideas for reducing gender discrimination and working on strategy building for empowering women. Many innovations in technological, social and economic environments can be studied to analyse their effect on women empowerment. This paper presents the role of innovation in women empowerment through case study of Indian organisation – SEWA. SEWA's continuous and innovative efforts have resulted in enormous benefits for millions of women and successfully transformed many women lives.

Keywords: Innovation, women empowerment, gender equality, development.

Introduction

In the last two decades, the gender gap between men and women has reduced in few areas like education and health. In many countries, legislations were also amended to give freedom and control to the women over their lives. Unfortunately, in all aspects of life, inequality is still persistent in the world. Biological differences is not the only cause of this discrimination but social factors like religion, culture, customs are also used to justify subordination of women. This gender inequality produces various threatening forms of violence and coercion. Many women and women associations have raised their voice against gender discrimination by adopting various tools. In India organisations like SEWA are restlessly working for empowering women economically, socially and technically by adopting various innovative strategies.

Entire world is witnessing the dynamic change in technology and science that improves methods, techniques and alternative resources of production. Today, Innovation/creativity and also gender equality forms an important point of agenda in many countries' developmental policy formulation. However, innovation and women empowerment are rarely discussed in the context of human progress.

Both innovation and women empowerment requires out-of-the-box thinking and breaking the boundary of predetermined criteria. Innovation plays a very important role in women empowerment. Innovation, directly or indirectly,

improves lives of women and empowers them to realise their capability. For women's fair participation in social, economic, political, technological, legal environment, innovation presents creative ways to alter current policies, customs, and traditions. Innovation has capacity to achieve goal of women empowerment and transform the lives of women through new ideas, products, and practices. Innovation and women empowerment together can benefit millions of women who live below poverty line. Both can help to achieve goals of global development, economic growth and satisfaction of basic human needs.

Meaning of Innovation and Women Empowerment

Innovation: Innovation¹⁸ refers to creating something new or finding new applications of same thing. It indicates a change in thought process of doing same thing in a new and better way. There is a difference between the word 'invention' and 'innovation' as contributed by Schumpeter (1934)¹⁹ Invention refers to inventing or discovering something new. However, innovation means new ideas put into practice which results in increase in economic value, customer value or producer value.

Women Empowerment: Women empowerment refers to giving freedom to women to make their own decision, to take responsibility of the same. It refers to providing support in the form of knowledge, information, education and authority which are essential for

¹⁸ The word Innovation comes from the Latin word 'innovationem', noun of action from 'innovare'. The Etymology Dictionary further explains innovare as dating back to 1540 and stemming from the Latin 'innovatus', pp. of 'innovare' which means "to renew or change," from in- "into" + novus "new".

¹⁹ Schumpeter, J. A. (1934), The Theory of Economic Development. Cambridge, Harvard University Press, pg 66.

taking important life decisions. According to Kabeer(1999)²⁰ women’s empowerment can be defined as “women’s ability to make strategic life choices where that ability had been previously denied to them”. Empowerment aims at offering a socio-political space to women by providing access to and control over different means like resources, knowhow, technology, education authority, etc. It also includes creation of an opportunities for women by decentralising the decision making power concentrated in the hands of few.

Innovation and Women Empowerment

Empowerment is midway in the change processes. It benefits women at individual, household, community, state as well as at the country level. Innovation has capacity to transform women’s lives. Simple innovations can benefit women by improving their well-being in terms of nutrition, income, health, life span, etc. For example- foot pedalled water pumps and oral contraceptive pills. Innovation can help in improving life of women in many ways. Some of them are mentioned below-

1. Gender Equality- Innovations can help in creating greater gender equality in family systems, political institutions, markets and social roles. Promising innovations like gearless scooters, to foot-pedalled water pumps, mobile phone banking, fair trade as well as workplace skills training, financial education have brought us closer to achieve mission of gender equality. However, achievement of these goals require equal participation of women and men in the development and deployment

process with a strategic emphasis on equal sharing of benefits arising from the results.

2. Human Progress- Innovation and women’s empowerment are essential factors in development and human progress. Innovation can support in building a strong foundation for sustaining women’s empowerment and well-being. Innovation has potential to address various issues related to knowledge, information, reproductive health, infrastructure, livelihoods, mobility and communications, where women are disadvantaged. Objectives of poverty reduction and human development can be achieved with improvements in both innovative practises and gender equality.
3. Development of Self-Confidence- It facilitates women to get access to various resources useful for decision making. It helps to develop self-confidence which supports them to take independent decisions in their own interests. Plenty of examples are available where yesterday’s immobile, silent and dependent women had transformed into economically free, independent women because of application of creative and innovative practises which resulted in progress for their families, businesses and communities at a large.
4. Change in Social Attitude- Innovations can bring a shift in social attitudes about what women can do and can’t do. It creates greater opportunities like employment,

²⁰Kabeer N. (1999), Resources, Agency and Achievements: Reflections on the Measurement of Women’s Empowerment. Development and Change, 30, 435-464.

economic opportunities, savings, entrepreneurship and credit, et.al. Truly transformative changes restructure societal norms and regulations, attitudes, behaviours and entire organisational practices.

5. A Powerful Strategy- If innovations are analysed from gender angle, a very powerful and untapped strategy arises which can transform women's lives. A wide range of innovations activated by different players, in various sectors and in different settings across the world have resulted in considerable advantages for millions of women. In many cases, these innovations have truly revolutionised women's lives.

Given below are a few examples from the field of technology, social norm change and economic flexibility, which have crossed the boundaries and resulted in incremental impact on women's well-being, empowerment and gender equality (Anju Malhotra, et. al)²¹

Technological Innovations- Internet, cell phones, alternative energies, water filtration and sanitation, reproductive technologies, agricultural innovations empowered women at individual, household, economic, social and political level.

Social Norm Change Innovations- These innovations have resulted in women empowerment by transforming gender attitudes, behaviours and harmful practices. They have helped to abolish anti-human practises such as child marriage, trafficking, prostitution, restrictions on women's mobility, etc.

Economic Flexibility- Innovations in economic flexibility support women in overcoming barriers to equitable financial and non-financial opportunities and benefits. They include innovations in the field of microfinance- credit, savings and insurance, etc. They also include legal and social policies undertaken to promote impartial access to productive assets and employment opportunities.

Moreover, one important thing to note here is that all these innovations were not targeted to women empowerment in the beginning. New players enter in the market with new approaches and solutions. They offer new products, services and solutions to the problems. Their objective may not be a women's empowerment. Still, these innovations may result in gender role transformation. For example- energy, transportation, improvements in water, sanitation, infrastructure, information, communication modes as well as in agricultural and medical technologies are not targeted at women empowerment. However, these innovations have resulted in shifts in gender relations.

Innovation, Women Empowerment for Comprehensive Development

All the three things are inter linked to each other. Innovation plays a very important role in the economic and social development of a country. Innovative and creative thinking always focuses on social and economical advances. Innovation has been recognized as a major source of modern productivity, efficiency and profitability.

²¹ Anju Malhotra, Jennifer Schulte, Payal Patel, Patti Petesch, Innovation for Women Empowerment and Gender Equality, ICRW.

It constitutes a central process of economic advancement in the advanced as well as developing countries. It creates progress path for equal distribution of wealth, gender equality to satisfy the needs of the less privileged communities. We can take any example from advanced countries like America, Germany, Japan, etc. Contribution of Innovation in science and technology are major factors which made these countries economically and industrially sound. Technological advancements create positive environment for investment in capital leading to the growth of industrialisation in the country. Innovation leads to the cumulative increase in workers' productivity and efficiency in industries. Innovations are always targeted to eradicate the seven types of wastages namely - overproduction, defective products, unnecessary downtime, transportation, processing costs, motion, and inventory which requires profound policies by institutions and governments.

'Women Empowerment' has been a buzzword now in the every nation's policy formulation. Majority of nations recognised the contribution of women in the economic development of a country. Empowerment of women is foremost agenda point in the majority of nation's developmental policies decisions. Women development in areas like education, power and employment leads to the development of an individual, family, society and nation as whole.

However, even after recognising the women's contribution in the national economy, women still suffer from various types of powerlessness in social and economic sphere

of life. It is a vicious cycle of powerlessness. As compared to men, limited power offered to women result in their poor educational level and income level. It also reduces their employment opportunities in the labour market. Lack of participation in decision making process, limited access to production inputs and resources and lower employment opportunity than men, further aggravates the problem of unequal distribution of wealth and income which in turn reduces their power status in the family and society. In developing country like India, women empowerment is very much essential to achieve developmental targets. And innovation in thinking and action will only change this situation. Without women's recognition and participation, it will be difficult to achieve economic, social, technological development. Women at all level are the engines of growth. If women develop, India will develop and will definitely achieve its dream of becoming super power in near future.

Strong, powerful and highly committed men and women, play an essential role in implementing innovations to empower women. Women's organisations like SEWA have provided critical support to influence the agenda and shape the direction of innovation processes. The success of an innovation for women empowerment depends on favourable conditions, right time, government support and equal participation of both men and women in the process. Innovation under these favourable conditions can transform social and economic environment by changing social attitudes about men and women in institutions like family, workplace and political structures.

Research Methodology

Case study method has been adopted for this research article. SEWA an organization operating in India continuously against the gender discrimination and adopting innovative strategies to empower women in the India was taken as an example. Information has mainly been collected from the secondary source. Efforts of this organisation are resulting into the development of women and underprivileged communities in various regions of India, thereby, contributing towards development of the nation. All innovative measures adopted by SEWA have improved women's lives and gender equality in India. However, the major limitation was lack of documentation of these innovative initiatives taken by them. Despite these limitations, I have been able to bind evidence from a broad range of sources about this organization striving for women empowerment through their innovative measures. State or central government mainly focus on social and economic investment for achieving women empowerment goal. However, building comprehensive and grassroots level organisation like SEWA is an innovative way for increased well-being and gender equality. Removal of gender disparity from the grassroots level requires help from all government, private sector, civil societies and other champions.

Case - SEWA - Self Employed Women's Association

Introduction- SEWA is the acronym for the Self-Employed Women's Association. In an Indian language (in Hindi), '*sewa*' means 'service'. It was established as a trade union in Ahmedabad in 1972. The founder person, Ela

Bhatt, was an active labour organizer and a lawyer. This organisation functions as a cooperative union. It strongly believes that women need organizing, not welfare. Currently SEWA operates through 85 cooperatives units located at different parts of the country. All these units are primarily operated from the state of Gujarat and work towards economic and social empowerment for poor women through innovative and creative measures.

A poor daily women wagers or women running tiny business units are the members of this organisation. SEWA works for these women workers from the informal sector. This informal sector represents more than 94 percent of the Indian workforce. SEWA provides solutions to various problems faced by this working group. It offers services such as banking, insurance, housing loans, training, health care, childcare and also legal aid. Its focus is on providing the right working and living conditions for self-employed women.

To achieve its vision, it offers microfinance facilities to poor working women. Sewa's microfinance-plus aimed at empowering women economically and socially in the state of Gujarat. It has adopted a holistic approach to protect their livelihoods by assuring financial security, protecting their rights, health and social concerns. SEWA Bank offers various sources of financial investment, security nets and support measures for poor working women. Since its foundation, SEWA microfinance-plus service has helped more than half a million women in India. It provided them necessary access to information and ensured increase in their income as their rights. In all, it resulted in individual and household well-being in the

poor working women community. It also developed a self confidence and negotiating ability among women at home and in the society.

SEWA's associations and its various campaigns aim to protect the interests of working women. It includes vegetable vendors, home-based workers, construction workers, and so forth. Presently, SEWA operated 60 health care centres through which curative care has been provided to more than 43,000 women.

SEWA Bank had 130,400 women account holders depositing Rs 454.3 million in the year 2002. This bank provides an integrated set of services to their member which is one of the reasons behind the success of this bank.

SEWA also offers insurance program in association with various national insurance companies. Till now, this insurance program has settled claims of around 11,000 women. It distributed Rs. 15 million as a settlement of their claims under the insurance program.

All these efforts have been instrumental in enhancing the lives of these under privileged women and in some cases they also have brought about policy changes at the national and international levels through its numerous campaigns. For instance, in 1996, due to the efforts of the home-based workers' campaign and Video SEWA, the International Labour Organization recognized the home-based workers as full-fledged "workers" for their

economic contribution to the GDP of the country. Similarly, the Ahmedabad Municipal Corporation granted licenses to the street vendors and entitled them to receive bonuses from contractors, as a result of the Street Vendors' Campaign. [Source- (Chen 2005)²²; (Chen and Snodgrass 2001)²³; (Schuler, Hashemi and Pandit 1995)²⁴]

Innovative Strategies adopted by SEWA for Women Empowerment

1. Platform for Information Access

SEWA has provided access to insurance, banking, health care, and social security benefits that aid in comprehensive development of women. It has offered benefits to poor, illiterate and vulnerable women. It provided means and mechanisms which were not available freely to these women earlier. Formal training sessions organised by SEWA helped women to gain knowledge and enhance their skill which had enriched their capacity in their respective areas. In association with the Satellite Communication Network (SATCOM) facility, SEWA conducts training programs on organizing, leadership-building, disaster management, water conservation, et.al. Availability of information is a key to success in the today's global world. SEWA works very hard for information transfers. It conducts various meetings for members such as *gram sabhas* (village meetings) and *Pratinidhi Milan* (trade council meetings). Regular meetings of the Trade Committees members are organised to

²²Chen, M. (2005). Towards Economic Freedom-the impact of SEWA. Ahmedabad: SEWA Academy.

²³Chen, M., and Snodgrass, D. (2001). Managing resources, activities, and urban risk in India: The Impact of SEWA Bank. Washington, D.C.: Assessing the impact of microenterprise services.

²⁴Schuler, S., Hashemi, S., and H. Pandit. (1995). Beyond Credit: SEWA's Approach to Women's Empowerment and Influence on Women's Reproductive Lives in Urban India. Arlington, Virginia: John Snow Inc. Research and Training Institute.

discuss the trade problems and arrive at a proper solution. The SEWA Mahila Housing Trust facilitates easy access to infrastructure and housing finance. Formation of cooperatives has helped women to get continuous information about labour markets and to enhance better contact with big economic bodies including the government.

2. Develop Internal Sense of Responsibility and Accountability

SEWA enforces internal accountability among its members. Regular meetings of elected representatives are organised for analysing various problems and to find possible solution for the problem faced by the members. The meeting also provides a platform to monitor the performance of these representatives. Their past performance is reviewed and through discussions and brainstorming sessions, the future plans are prepared. A "Retreat," organized once every three months for SEWA staff and top management is a forum for discussions, team building and brainstorming that reinforces the vision and mission of SEWA.

3. Success through Participation and involvement

SEWA's various initiatives increased the confidence and self esteem of women especially those who belong to disadvantaged communities. The greater involvement of these women in banking, training and decision making process helped them to build their confidence. It also increased their status in their villages. SEWA had experienced initial resistance for an involvement of these underprivileged women. However, later on their participation in the economic functions was accepted by the society. A few of these women

have also been elected as representatives in village councils.

4. Local Organizational Capability

The greatest strength of SEWA is its organizational capability. It has enabled the formation of various organizations of women at both the local and the international level. Through SEWA, vulnerable and illiterate women have been recognised for their economic contribution. It provided them with social and financial security. Its continuous efforts have increased their bargaining power and empowered them to take their independent decisions. During 1970's and 1980's Indian economy showed limited growth. There were limited national investments in infrastructure development, gender-equitable legal reforms and law enforcement. India had experienced limited changes in financial, labour and trade markets. However, SEWA yielded several achievements even amidst limited growth in this period. Its female founding champion, Ela Bhatt is a biggest contributor to the success of SEWA. Along with successful partnerships with the women's movement, government, private sector and international agencies, her innovative strategy formulation and implementation has played a major role in its success. SEWA's women members have also played a critical role in shaping and diffusing the innovation of microfinance-plus.

Discussion

Various innovative strategies are adopted by SEWA to encourage poor women to get acquainted with the advanced technology which increased women's personal and political power. It is continuously working for women

empowerment and to uplift the standards of living of poor, under privileged women in India. It has started its activities on a small scale. However, its present contribution towards women's growth and nation's economy is remarkable. It shows that, instead of starting the process of empowering the poor with a predetermined plan, we need to evolve the activities and projects organically. Firstly, we should take into consideration the beneficiaries and their needs. It started with a vision to organize poor and deprived women. Initially, it engaged in the small economic activities. However, recognising the further needs of these women, it has offered various essential services like banking, insurance, housing loans, training, and health care. Adoptability, flexibility and natural evolution have helped SEWA to achieve its goals. It is crystal clear from this case study that, properly designed and well executed innovative strategies definitely result in the women empowerment which increases women's economic and social status and development of the entire nation. The use of an appropriate technology like e-banking, e-marketing, insurance scheme is an effective tool for women empowerment. For example – SEWA uses advanced information and communication technologies like Internet for marketing products produced by SEWA members. It also used latest video technology for training its staff and members. This case study shows that innovation plays an important role in the empowerment of women and thereby development of the human being. Well designed innovative strategies, implemented without any bias will definitely lead to women empowerment. It not only contributes to the personal growth of women but also the growth

of the society. This case study also shows that if given a chance to participate in activities, even women with low levels of education can enhance their economic and social status and can contribute to the nation's economy. Under various schemes and policies implemented by SEWA, under privileged women with poor economic background are provided with an opportunity to participate in the various health care and savings groups. It increased their competencies, capabilities, self-esteem, and social status. Thereby, their income level, productivity and efficiency have also increased. It created new employment opportunities for them. Many women have emerged as local leaders and representatives in village councils. Involvement and participation are the keys to empower women. However, state and central government have to support these institutions with financial and technical resources. Then only, such organisations can work more effectively for the growth and development of poor women in India and help in building strong, independent, fully literate nation.

Conclusion

When we analyse innovation from the gender perspective, to find its effect on women's empowerment, wellbeing and gender equality, a very strong and untapped technique evolves. It has a capacity to alter women's lives by restricting gender discrimination happening all over the world in some form or the other.

Multiple examples of innovations in technological, social, legal, political and economic environment are available around us. These changes are implemented by various

sectors, in dynamic environment and by various agents throughout the world. These efforts have resulted in enormous benefits for millions of women. Some of these innovations are successful in transforming women's lives. Gender equality or empowerment of women is not necessarily the centre points of all innovation. However, while implementing innovative strategies targeted at increasing productivity and efficiency, human rights and equality concerns are also mingled with them. The objective of women well being and welfare can be achieved in two to five years. However, women empowerment is a long term process and usually requires ten to fifteen years of time. Promising Innovations can definitely help us to achieve objectives of women's empowerment and gender equality. However, innovative strategies should be designed and implemented by equal involvement of both men and women, without any gender disparity.

State or central government mainly focus on social and economic investment for achieving women empowerment goal. However, building comprehensive and grassroots level organisation like SEWA is an innovative way for increased well-being and gender equality. Removal of gender disparity from the grassroots level requires help from all government, private sector and civil societies.

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Inovative HR Practices - People Enhancement

ABSTRACT

This research article discusses about the implications of creativity and innovation from an HR's perspective. Also this article highlights the details as to how HR managers implement the innovative tools to retain their key talent and also motivate them for achieving organisational goals. Moreover, it is very true that only developed and motivated employees can take company to reach its goals.

KEYWORDS

People Power, Creativity, Innovation, Mergers and Acquisitions, Line Managers, Retain, Retrain.

"Our assets walk out of the door each evening. We have to make sure that they come back the next morning."

Mr. N. R Narayana Murthy – Chairman, Infosys

Introduction

Innovation is the way to drive growth in any organization. It could be defined as putting ideas into valuable action. It can be thought of as a business process which needs to be managed. It might be a cliché that Thomas Edison knew 1800 ways not to make a light bulb filament, but it's also true. Innovation requires trying things and taking risks.

Creativity has earlier been viewed as the gift of a small

number of talented people. The concept creativity and innovation became the driving force for organizational success. Human Resource has a critical role in establishing an environment that communicates organizational values and creates management practices that respect and support the unique skills and creative potential of every individual.

Human resources may be defined as the total knowledge, skills, creative abilities, talents and aptitudes of an organization’s workforce, as well as the values, attitudes,

approaches and beliefs of the individuals involved in the affairs of the organization. It is the sum total or aggregate of inherent abilities, acquired knowledge and skills represented by the talents and aptitudes of the persons employed in the organization.

Human Resource Management and Development has to be seen as a function that will **acquire, deploy, develop and maintain human beings who are useful for the organisation while facilitating their optimum productivity and delivery of utility.**

Objectives of Human Resource Management

Objectives of HR could be divided into two types as shown in table 1 below.

Towards Employees	Towards Organisation
<ul style="list-style-type: none"> • Ensuring effective utilization and maximum development of all employees • Ensuring their respect • Identifying and satisfying their individual needs • Ensuring blending of individual goals with those of the organization • Achieving and maintaining high morale among employees • Developing and maintaining a quality of work life 	<ul style="list-style-type: none"> • Helping the organization reach its goals • Providing the organization with well-trained and well-motivated employees • Inculcating the sense of team spirit, synergy, team work and inter-team collaboration

Table 1: Objectives of Human Resource Management

Functions of Human Resource Management

In order to achieve the above objectives, HRM undertakes the following activities:



Source: <http://www.whiteboardonline.co.uk/modules>

- Human Resource or Manpower Planning
- Recruitment, Selection and Placement of personnel
- Training and Development of employees
- Performance Appraisal of employees
- Taking corrective steps such as transfer from one job to another
- Remuneration of employees
- Social security and Welfare of employees
- Setting general and specific management policy for organizational relationship
- Collective bargaining, contract negotiation and grievance handling
- Staffing the organization
- Aiding in the self-development of employees at all levels

- Developing and maintaining motivation for workers by providing incentives
- Reviewing and auditing manpower management in the organization
- Potential Appraisal. Feedback Counselling
- Role Analysis for job occupants
- Job Rotation
- Quality Circle, Organization development and Quality of Working Life
- HR role in Mergers and Acquisitions
- Development of preliminary organizational designs and identification of the top three levels of management
- Assessment of critical players and deployment of appropriate resources in the new company
- Retention of key people and separation of redundant staff
- Development of a total rewards strategy for the combined companies
- Communications strategy development and implementation

Why People Power

In almost all organisations, people are the most valuable resources¹⁸. Undoubtedly employees are a firm's repository of knowledge and give any organisation a competitive advantage. People Power is a strategy and philosophy that enables employees to make decisions about their jobs. This helps employees own their work and take responsibility for their

¹⁸ www.1000ventures.com

results. Thus employees can serve customers in a better way at the level of the organization where the customer interface exists. New enterprises are characterized by flat hierarchical structures and multi-skilled workforce. Talented and empowered human capital is becoming the prime ingredient of organizational success.

Illustrations

1. Hughes Software Systems (HSS)

One of the India's largest satellite service operator offering satellite broadband services under the HUGHES brand. Their customers include large enterprises, small and medium businesses across various verticals, and consumers including financial institutions, telecom service providers, educational institutes, large retail chains, large public enterprises, and government departments. They offer solutions in the areas of networking, system integration, managed network services, security, transaction services, intranet, Internet, broadband kiosks, and interactive distance education.

Innovative HR Practices

- a. Managers give "**Snap Awards**" for individual and team achievements to their teams when they excel or do something outstanding. These are usually given during the quarterly staff meeting where all employees participate which is followed by a party.
- b. There are **Annual Achievement Award** under four categories :

Most Initiatives

Best Customer Orientation

Best Team Worker

Most Innovative

Managers send nominations every year and a task force of senior managers picks the winners.

- c. There are **Presidential Awards for overall excellence**. These are given annually and are in four categories:

Engineering

Business Development

Non-Engineering

Engineering/ Customer Support

- d. There is an award **for Best People and Project Managers**, given to two best managers and leaders each year.

Popular Awards provide very powerful peer recognition. This is very credible and most satisfying. The winners are then put in special roles e.g. the winner of "Best Leader" award is the one who conducts the session on leadership in the development program for managers. The person chosen as the "Best Mentor" leads the implementation of the mentoring program.

- e. Employees who show capability, initiative and interest are appointed to work and lead in several cross-functional taskforces from time to time.

E-greetings have been operational in HSS through the intranet to send appreciation to

other employees. Special cards suited to the HSS environment are available.

Recently they organized a painting competition for the children of HSS employees. This special event brought forth the talent and creativity of the participating children. The New Year cards for 2001 have been made using eight of the best paintings selected in this painting competition. All the 72 paintings were displayed at the HSS kids Gallery at Gurgaon and Bangalore. This has helped HSS to build a more family like environment.

2. Cisco Systems, Inc.

Cisco Systems, Inc. is the worldwide leader in networking that transforms how people connect, communicate and collaborate. Networks are an essential part of business, education, government and home communications today and Cisco Internet Protocol-based (IP) networking solutions are the foundation of these networks. Cisco hardware, software, and service offerings are used to create Internet solutions that allow individuals, companies, and countries to increase productivity, improve customer satisfaction and strengthen competitive advantage.

Vision of Cisco Systems, Inc. - To change the way people work, live, play and learn

They have empowered their line managers by

- a. Providing them with HR tools, technologies, online tools etc.
- b. Giving them an edge over their counterparts in other organizations
- c. At the click of a button, a manager can look at the database of his/her own

people, track history of development, increments, promotions, stock options etc.

- d. They are also given the rating and ranking tools
- e. They could recommend changes and training needs and they could draw upon the resources available

Thus, we can say that technology is deployed in a very effective way.

3. Mind Tree Consulting

Established in 1999, is a global Information Technology services company with operations in the US, Europe, Middle East, Singapore, Japan and Australia. The company has its global head-quarters in Bangalore, India. Some of the major clients of the company are Volvo, Burger King, Cendant, Alcatel, Sanmina, Port Authority of Singapore, Unilever and Royal Mail, among others. It is today firmly established as India's best mid-sized IT services company. The major line of business of the company consists of IT services and R&D services.

Once in 3 to 4 weeks, they call up their employees and give them information as to what is happening. Whenever there is a project win or a customer delivery, they ring the bell in the company to inform everybody. They have the CEO's snapshots which is released once in two weeks, the in-house magazine, meet the "Mind Tree Minds" (one of the way they call their employees), where the computer selects some names at random and they meet the senior people to get the right perspective of what they are doing, why they should do it, etc; and to make sure that there is enough interaction. Undoubtedly, all these things

enhance communication, security, sense of belonging and commitment towards the organization.

4. Bharti Airtel

Bharti Airtel limited is a leading global telecommunications company with operations in 19 countries across Asia and Africa. The company offers mobile voice and data services, fixed line, high speed broadband, Internet Protocol Television, Direct-to-Home, turnkey telecom solutions for enterprises and national & international long distance services to carriers. It has been ranked among the six best performing technology companies in the world by business week. It has 200 million customers across its operations.

- a. The company strongly believes in 'softer skills' such as working in teams, interpersonal skills, communication skills, creative thinking, entrepreneurial skills etc.
- b. They have a unique policy like '**HR Reach out**'. Every HR member is assigned a department. He / She works with the department very closely not only to proactively enable employees perform but also to partner with the business and influence business processes and policies.
- c. Very unique initiative of the company is the 'Customer Contact Programme'. Once a month, all senior managers reach out to customers to get a first hand feel and feedback from them.
- d. They conduct Employee Satisfaction Surveys, have departmental strategic matrices developed to work on employees feedback, etc.

5. Birla 3M

3M is fundamentally a science-based company. They produce thousands of imaginative products, and are a leader in scores of markets - from health care and highway safety to office products and abrasives and adhesives. Their success begins with their ability to apply technologies - often in combination - to an endless array of real-world customer needs. For company success, the top management gives credit to their employees. They believe that singular commitment of 3M employees made the life of their customers easier and better around the world.

Company encourages two-way communication by something called as "**Between Us**". This program is held once in six months, in which the MD and the HR head visit all the branch offices. The MD focuses on the business aspects and requests the people's involvement in fulfilling the organization's dreams. Whereas the HR head talks about the new HR policies and then there is an open discussion. In the discussion employees can express themselves on whatever issues they have with regard to work. For any sensitive issues employees can give opinion in writing without disclosing their names. For employee safety the paper on which the question is answered is destroyed.

6. Wipro Technologies

Wipro technologies are amongst the largest global IT services, BPO and Product Engineering companies. In addition to the IT business, it also has leadership position in niche market segments of consumer products and lighting solutions. The company has been listed since 1945 and started its technology

business in 1980. Today, it generates USD 6 billion (India GAAP figure 2009-10) of annual revenues. Its equity shares are listed in India on the Mumbai Stock Exchange and the National Stock Exchange; as well as on the New York Stock Exchange in the US.

It makes an ideal partner for organizations looking at transformational IT solutions because of its core capabilities, great human resources, commitment to quality and the global infrastructure to deliver a wide range of technology and business consulting solutions and services, 24/7.

- a. Every four months the company conducts an employee survey where all the employees provide inputs on the health of the workplace. This survey enables them to identify how strongly the person feels about the organization, and how strong is the person's clarity of his/her existence in the organization.
- b. It also enables them to see the person's own ability to identify with the vision of the organization, and whether he/she thinks the organization listens to what he/she has to say.
- c. Employee also reveals whether he/she feels that his supervisor takes interest in his/her development, has he/she received any word of praise from the boss for a good job done and so on. This proves to be an eye opener for the managers as well.

Conclusion

Innovative HR practices not only empower employees but also educate and train them to take their own decisions. This enhances motivation of the employees. Moreover it also

increases their commitment and team spirit.

V. Sundar Rao (Former VP-HR, Saint-Gobain Vetrotex) quoted that most of the HR professionals were earlier busy with recruitment with or without help of recruitment consultants. Certainly his role was to retain people with innovative Pay and Perks. So the priority used to be RETAIN -> RETRAIN -> RETIRE.

Today in globalised world with creative scenario all over, to sustain HR has made organizations COST EFFECTIVE by reducing non-performers, retaining high performers and retraining potential people. Hence now the priority is RETIRE -> RETAIN -> RETRAIN the best employees.

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Creativity & Innovation in Energy Resources & Consumption

Abstract

Today we live in a World wherein natural resources are limited. Water, air, soil, minerals, oil, the products we get from forests, grasslands, oceans and from agriculture and livestock, are all part of our life support systems. Without them, life itself would be impossible. We human beings have been increasing in numbers and the quantity of resources each one of us uses has also gone up. The Earth cannot be expected to indefinitely sustain this expanding level of utilization of resources. As the Earth's natural resources are rapidly dwindling and our environment is being increasingly degraded by human activities, it is evident that we have to be innovative in finding out non conventional energy resources. Also we have to display more creativity in curbing wasteful consumption of energy without compromising on the rate of economic development.

Economic Development - Measure of Sustainability

Energy has always been closely linked to man's economic growth and development. Hence energy utilization has been construed as the index of economic development. The rapid economic development witnessed by the second half of twentieth century, has gathered further momentum in the twenty first century. But this accelerated pace of development has raised the issue of its sustainability over a long period of time. It is this concern to improve the quality of human life without hampering the quality of eco system on earth that has given rise to new

terms like “sustainable use of resources” & “sustainable development”. Energy resources & fresh water resources are dwindling fast. Therefore energy resource management and management of hydrological and aquatic ecosystem have emerged as areas of concern.

Sustainable development is defined as development that meets the needs of the present generation without compromising the ability of future generations to meet their needs. It is not only aimed at socio-economic development but also takes into consideration the environmental impacts, i.e. it includes social development and economic opportunity on one hand and the requirements of the environment on the other. It is a process which leads to a better quality of life while reducing the impact on the environment.

Energy – The principal driver of development

Energy is defined by physicists as the capacity to do work. Energy is found on our planet in a variety of forms, some of which are immediately useful, while others require a process of transformation. Urban centers use enormous quantities of energy. We use energy for household purpose, agriculture, production of industrial goods and for running transport. Between 1950 and 1990, the World’s energy needs increased fourfold. The World’s demand for electricity has doubled over the last 22 years.

No energy related technology is completely risk-free and unlimited demands on energy increase this risk factor many fold. All energy uses create heat and contribute to increase in atmospheric temperature and lead

to global warming.

It is broadly accepted that long term trends in energy use should be towards a leaner global energy system that is less carbon intensive and less reliant on finite non renewable energy sources. It is estimated that the currently used methods of using renewable energy and non renewable fossil fuel sources together will be insufficient to meet foreseeable demands for power generation beyond the next 50-100 years.

Creativity & Innovation – Energy Resources

Today for meeting our energy needs, we have over indulged into exploitation of non renewable energy sources. Social thinkers have realized that the Earth’s resource base for energy is shrinking fast. For almost 200 years coal was the primary energy source, fuelling the industrial revolution in the 19th century. Currently, oil accounts for 39% of the world’s commercial energy consumption, followed by coal (24%) and natural gas (24%) while nuclear (7%) and hydro/renewable power sources (6%) account for the rest.

However at the present economic growth rate, which is expected to increase in the coming years, one cannot guarantee that the future generations will have anything left for them.

For instance, by 2030, India will need three to four times as much energy as is currently being used, if the economy is to grow at 8% - 9% a year. We import nearly 80% of our oil consumption, which is expected to be around 142 metric tons (MT) in 2010-2011. By 2030, we may need from 350 MT to 500 MT of oil a

year, depending on the growth rate and the policies being followed. Our domestic produce of crude is expected to be around 35MT and we will need to import the rest. At that time our oil imports would constitute between 6 to 9% of global production of crude as against less than 3% today.

While we have the resources to produce the coal we require, our ability to produce it as needed has been constrained by a number of hurdles. Total coal production in 2011- 12 is expected to be around 570 MT. From a long term point of view, we are short of coal. Our known extractable reserves will not last beyond 2050 if our coal consumption continues to grow as it has been growing over the past 25 years. Therefore all the existing and potential players in the field of thermal power generation are looking for global sourcing of coal assets.

With fossil fuel sources of energy getting depleted fast, the futurologists all over the world are unanimous about the necessity of displaying the spirit of creativity and innovation in the energy resource space. Ceaseless Innovation is the principal characteristic of human beings. This has acted as a life blood of the process of evolution and growth, mankind has displayed over last thousands of years. As we evolve, develop, invent, create and extend the frontiers of economic development, the world energy scenario needs to innovate faster to cope with the ever expanding energy requirement canvas. This creativity, innovation and technological advances will collectively drive improvement in energy efficiency, will make solar power more cost competitive and will lead to increased usage of other renewable and non

conventional sources of energy.

Energy from renewable and non conventional sources

Renewable energy systems use resources that are constantly replaced and are usually less polluting. Some examples are hydropower, solar, wind and geothermal.

To limit our dependence on conventional energy sources like crude oil, search for the availability of alternatives is on. Some of the promising approaches among these are –

a) Shale gas or tar oil –

This non conventional source hitherto unexplored in our energy scenario is likely to supplement natural gas and crude. Today our ability to harness natural gas is rather limited and enormous quantities of it are getting flared. However rapid progress is expected in this field. Technological development and Innovation in this area is causing the shift to newer sources like PNG, CNG in various domestic, commercial, and industrial applications instead of LPG. Many cities are getting PNG for cooking instead of current usage of LPG .

b) Ethanol and biodiesel –

Ethanol as a fuel additive is obtained from renewable sources. Sugarcane and corn-based ethanol require land and water. They are therefore not a viable option as it would compete with food production, and we cannot afford to set aside more agricultural land and increase the already skyrocketing prices of food.

Cellulosic ethanol, which is a biofuel produced from wood, grasses, or the non-edible

parts of plants, could be a very large and a very important source that would not compete with food production. India could produce upwards of 200MT of cellulosic ethanol a year. The only catch is that the technology is not yet commercially viable. Many countries are working on it and Denmark is even in the process of setting up a commercial plant. It is expected that within one decade the energy cost derived from this fuel be brought down to a level comparable with that from other fossil fuels.

An alternative process to produce bio-ethanol from algae is also being developed. It produces ethanol directly which is removed without killing the algae. It is claimed the process can produce 6000 gallons per acre per year compared with 400 gallons from corn production.

Emerging Energy Sources

a) Nuclear

Today we are a power deficient country in that the demand for electrical energy is far more than its supply. To meet our large electricity production needs, we have to tap all energy resources available to us. While coal fired thermal power plants, apart from hydro would remain the mainstay of our electricity production for quite some time, we would need to supplement them with sizeable additional resources to assure long term energy security as well as environmental protection. In this energy mix, nuclear power has an important role to play in the coming years. The other energy sources such as solar, wind power, tidal powers etc. also assume significance.

India's Atomic Energy programme is a mission oriented comprehensive programme

with a long term focus. From its inception, the guiding principle of this programme has been self reliance through the utilization of domestic mineral resources & building up capability. We, in our country are, unfortunately, short on nuclear fuel. Domestically available uranium is just enough to run over their lifetime only 10,000 MW of first generation nuclear plants of the type we have today.

Hence our strategy is to build fast breeder reactors that can run on the plutonium and depleted uranium produced by the first generation plants as they generate electricity. The fast breeder reactor in turn generates more plutonium than is put in. Thus it breeds plutonium, as the name implies, and after 8-10 years there is enough plutonium to start a new breeder reactor. However, the problem with using nuclear fuel is disposal of waste. The fuel rods get depleted of uranium as the reaction progresses. When it comes down to such a level that the chain reaction cannot sustain itself, the rods need to be disposed. These rods still contain some amount of radioactive material and their emissions are dangerous. Attempts have been made to recycle these spent rods, but the process proves to be very expensive as compared to making new rods. Also the water used as a coolant is disposed of in the nearby water bodies. This leads to thermal pollution affecting the aquatic biodiversity.

Since our Uranium reserves are modest, they cannot make an overly significant contribution to electricity requirements if it is used once in a nuclear reactor and then disposed off as waste. Therefore Department of Atomic Energy of Government of India has embarked on a carefully planned programme

through which the available Uranium can be used to harness the energy contained in non fissile Thorium. India possesses about 30% of the world reserves of Uranium or Thorium.

The first stage of this programme involves using the indigenous Uranium in Pressurized Heavy Water Reactors (PHWRs) which produce not only energy but also fissile Plutonium.

In second stage, by reprocessing the spent nuclear fuel and using the recovered Plutonium in Fast Breeder Reactors (FBR), the non fissile depleted Uranium and Thorium can breed additional fissile nuclear fuel Plutonium and Uranium 233 respectively.

In the third stage, Thorium & Uranium 233 based nuclear reactors can meet our long term energy requirements. Sustainable development of our economy requires nuclear energy & sustainable development of nuclear energy requires closing the nuclear fuel cycle with Thorium utilization.

The spirit of creativity and innovation as well as our capabilities on technical front were amply demonstrated by our nuclear scientists in 1974 when the ongoing technical co-operation agreements and contractual obligations to supply nuclear fuel for our nuclear plants were unilaterally & abruptly withdrawn by USA, France & Canada after our peaceful nuclear explosion experiment at Pokhran. This sudden retaliatory political action by big wigs from nuclear energy space could have caused a serious setback to our nuclear energy programme. But it did not happen primarily because of our determination to face challenges head on with the help of our own R & D infrastructure already created to develop

self reliance. In fact these embargoes spurred the creative thinking in the minds of our scientist & technocrats which led to the growth of indigenous capability for developing the denied products, technology & knowhow. Though delays were caused in some ongoing projects, nevertheless we could develop a Plutonium - Uranium mixed oxide fuel, as well as facilities for its industrial scale production, as an alternative to the enriched Uranium based fuel .

b) Solar

Sun is the primary source of energy in our lives. Solar energy is also India's most readily available resource. With just 10 million hectares of land covered with today's commercially available photovoltaic cells with an efficiency of 15%, we could generate all the projected energy requirements of 2035 through this route. The land could be desert land or other unproductive land and there would be no competition with food production. Unfortunately the cost of this electricity is around Rs.13 per kilowatthour (KWhr) or unit, compared to Rs. 3 per KWhr for power generated by coal based plants. With technical progress combined with innovative approach and mass production, the costs could be brought down. Thus the primary objective of our solar mission is to make the cost of solar energy comparable to the cost of coal based energy by 2020. Out of different techniques used for harnessing solar energy, the solar photovoltaic (PV) cells hold maximum promise. These cells known as solar cells make use of sun's light and not its heat to make electricity.

PV cells are made up of at least two semiconductor layers, one layer containing a

positive charge & the other a negative charge. Sunlight consists of little particles of solar energy called photons. As a PV cell is exposed to the sunlight, many of the photons are either reflected or pass right through or are absorbed by the solar cell. When enough photons are absorbed by the negative layer of the PV cell, electrons are freed from the negative semiconductor material. Due to the manufacturing process of the positive layer, these freed electrons naturally migrate to the positive layer creating a voltage difference similar to a household battery. When the two layers are connected to an external load, the electrons flow through the circuit creating electricity. Each individual solar energy cell produces only 1 to 2 watts. To increase power output, cells are combined in a weather tight package called a solar module. Several thousands of these modules are wired up to form a solar array which creates the desired voltage and amperage output required by the project.

PV cells are made up of semiconductor material silicon which is available in abundance in nature. These cells are environment friendly; they burn no fuel and have absolutely no moving parts which makes them virtually maintenance free, clean and silent. The various components of a solar electric system are PV panels, batteries, inverters, charge controllers etc. They connect to and interact with each other to form a complete solar electric system. Solar panels installed on rooftops and terraces are setting new standards for green manufacturing.

The availability of government grants & other concessions have provided a fillip to the

efforts put in by US companies in this direction. In its pilot project, Ford's Michigan Assembly plant is able to generate 15 megawatts of electricity. This solar system has a storage facility that can store 2 million watt hours energy using batteries. Also the batteries from electric vehicles can be reused for stationary energy storage. Ford is using electric trucks to transport parts between buildings at the manufacturing site. They have built 10 numbers of electric vehicle charging stations at the plant. Going solar is a great solution to reduce its carbon footprint & save energy costs.

Many companies in USA are developing new ways of harnessing the Sun's energy to generate electricity as a part of sustainability initiatives. One of the new innovations in this space uses mirrors & lenses to concentrate the sun's light onto small PV cells. This new cell design called 'multijunction' is certified by the 'National Renewable Energy Laboratory' of USA to operate at 41.4% efficiency compared to current generation silicon solar cells that fall between 15 to 20% efficiency bracket.

Sun's heat energy also known as solar thermal energy is likely to be used for electricity generation in the near future. Currently on efficiency scale wind energy is better than the solar heat energy but shortly it may catch up with wind energy.

c) Wind

Wind energy can also be harnessed to generate power. Tamil Nadu has great potential for developing wind power. Maharashtra comes second only to Tamil Nadu. However setting up wind farms requires huge amount of land in areas where gusty winds blow. But the amount

used by the turbine bases, the foundations and access roads is less than 1% of the total area covered by the wind farm. The balance area can be used for agricultural purposes or as grass land for cattle grazing. To offset the requirement of large tracts of land for wind mills, they are now being constructed offshore.

Wind power depends upon wind speed. As we go up from the earth's surface, the wind speed increases. Hence a large number of tall structures are required to be erected for mounting wind turbines. Also wind is an intermittent source. The speed and direction of wind changes from time to time. Therefore a single wind turbine cannot produce electricity on continual basis. Hence they are erected in large numbers in different directions or orientation. Collectively they are called as wind farms. Other problems associated with it are bird kills, 'noise' effect on TV reception and aesthetic objections to the sheer number of wind turbines that are required to meet electricity needs. It cannot be used as a sole electricity resource because wind is an intermittent resource.

d) Tidal power

70% of earth's surface is occupied by oceanic waters. For harnessing tidal power, two distinctly different approaches are being developed. One using the kinetic energy is relatively old while the other making use of thermal energy is comparatively of recent origin.

Solar energy heats up sea water & creates currents, tides and winds. Kinetic energy associated with the waves and tides of oceans can be used for generating electricity through water turbines. The concentration of potential

wave energy on earth is located between 40 to 60 degrees latitude in both the northern & southern hemispheres where wind blows most strongly.

In the other approach, the difference in temperature of warm upper layers & cold deep sea water is used for Ocean Thermal Energy Conversion (OTEC). Indian Oceanographic institute has been doing pioneering work in this direction in Tamilnadu coast.

Consumption – Innovative trends in urban centres in going green.

But we cannot just talk of eco-friendly ways to increase electricity production. We must also think of using less. Our urban centres have become notorious for voracious energy consumption compared to rural areas. Many new buildings in big cities are going green. A green building is one which uses less water, optimizes energy efficiency, conserves natural resources, generates less waste and provides healthier spaces for occupants, as compared to a conventional building. Since cost of operating / running a building is 15 to 20 times more than the cost of running it, green buildings operate on the principle of reduce, reuse and recycle. They use as little energy as possible and consume appropriate resources in conscious way.

Not only awareness has been created in this area but we are positively moving in the right direction. In 2003 the foot print of green buildings in India was mere 20, 000 square feet. After formation of Indian Green Building Council (IGBC), this activity has got a tremendous boost. From the current status of 70 million square feet, IGBC is working on the target of one billion square feet of green

building footprint by 2012. When energy efficiency measures are incorporated in the building design stage, the potential for energy savings is 40 to 50%.

Indian rating system known as “Leadership in Energy and Environmental Design (LEED)” is certifying the green buildings into different categories. It complies with the green standards of “US Green Building Council (USGBC). It specifies stringent norms to be met for greenest, most energy efficient and high performance buildings. Many new corporate constructions coming up now are designed green which aim at LEED gold certified status in line with their corporate philosophy. The key eco friendly features found in construction and operation of these buildings comprise of, deploying construction procedures that do minimal damage to the soil, use of eco friendly material, use of photovoltaic panels to generate electricity, water cooled air conditioning system with occupancy sensors to monitor carbon dioxide levels, use of glass panels along walls keeping in mind different directions and positions of the sun to maximize the use of natural light inside the building, installation of energy efficient CFL & LED gadgets. Such buildings help in achieving a high well being quotient. Internationally India is the second greenest country in the world after USA. Within India also Delhi & Chennai are high on the green quotient.

Currently Mumbai is far behind but to catch up with other progressive cities, Maharashtra Government as well as Municipal Corporation of Greater Mumbai (MCGM) are now following carrot & stick approach. They are not only offering incentives for eco friendly buildings but MCGM has made certain eco

friendly measures obligatory for large occupancy buildings to reduce their dependence on civic body. This has provided the necessary fillip for new constructions in large residential complexes to go green. The new upcoming buildings feature solar water heating systems, rain water harvesting and water recycling systems, waste management systems. Even in existing or old buildings, recycling of used water for non potable uses in toilets, gardening, vehicle washing is gathering momentum mainly to overcome water scarcity.

Regulatory measures are being introduced not only for reducing pressure on water & energy resources, but also for environment protection.

The waste disposal and / or garbage management issue has remained a neglected area in big cities for quite some time. However with the spread of green awareness, to prevent further decay of our environment, the things have started moving ahead on waste recycling front also. The conversion of organic waste into useful products like manure & gas is being practiced in many housing societies.

For managing waste from residential areas, BARC has done pioneering work. By using its expertise it has developed the process technology and equipment for generating gas from organic and biodegradable kitchen waste under its ‘waste to energy’ initiative. Here the main issue or constraint is the susceptibility of the system to waste other than biodegradable type. In other words, entry of waste other than kitchen waste - especially plastics and its different variants used in packaging etc. makes the system malfunction. To overcome this limitation, BARC has also developed a mechanical sorter which segregates the

organically decomposable kitchen waste from other type of waste. But this additional or supplementary equipment is little expensive which vitiates the operating economics & makes the system financially non viable even in large residential complexes also.

Local self government institutions like municipal corporations have also been at pains to educate the citizens of importance of segregating the dry and wet garbage at the point of source itself. After creating sufficient awareness about the necessity of segregation of different types of waste or garbage, they have started imposing fines on the housing societies who are not complying with the requirement of segregation of dry & wet garbage. Locality Management Councils are also pitching in to spread awareness on this count. As and when the citizens get disciplined & every family starts segregating the waste generated in its household, then the expensive accessory equipment like mechanical sorter of BARC which becomes a white elephant in the operation of the system, can be done away with. Instead a simple verification of the composition of the waste being put into the system by manual unskilled labour will suffice for successful & commercially viable operation of this plant / process.

Apart from these 'fast becoming conventional' systems of green buildings some constructions are more creative and innovative in reducing their energy requirement for air conditioning purpose. They use wind towers to continuously supply air in the building. Wind towers are a series of concrete or fly-ash towers. Every morning, these draw in hot air, which passes through channels splashed with

water at night & gets cooled. This cooled air is circulated through a building. The combination of increased air flow and contact with water brings down the temperature by 8-10 degrees Celsius, which in cities such as Bengaluru does away with the need of air conditioning.

The physics of geothermal energy is tweaked in many ways by modern air conditioning systems in Indian green buildings. Both heating and cooling can be achieved, though heating often requires a supplemental system. Geothermal systems are a major money saver because almost 70% of the energy used by most buildings is for air conditioning.

Over the years, with more green construction happening in India, an industry catering to this has sprung up. High performance glass, which can arrest almost 30% of heat in windows, is manufactured by Saint – Gobain and Asahi, while waterless urinals, which use concepts of specific gravity, are manufactured by Parryware, Hindware etc.

Even though a lot of headway has been done to go the green way, there is ample scope for displaying the spirit of creativity & innovation to move fast on green highway.

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Business Creativity and Innovation: How To Develop Creative and Innovative Culture in an Organisation

Abstract

In today's competitive climate where cycles of products become shorter and shorter requires organization to institutionalize the process of innovation - to plant the seeds of creativity that could utterly transform a business. To build innovative culture, first requirement is to understand the creative process (**Existing Things** \Rightarrow **Recombination** \Rightarrow **New Things**) which involves two processes – Thinking and Producing and the second is to commit to policies that support the creative process.

Key words : Entrepreneurship, formula, strategies, creative muscle, Ned Herrmann's model, Management Innovation Index, creative climate, cost-benefit analysis, incremental improvements, protective cocoon

"You can't expect your business to be 21st century success story if you persist in using 19th century techniques to run it. A fundamental re-think is needed. In the age of Web 2.0 and wkinomics, managers must modernize or die."

- Gary Hamel



CREATIVITY + VALUE = INNOVATION

Creativity and Innovation is the talk of every discipline and identifying creative ideas is a great way to grow business but it should not be only limited to idea, action must be taken for the same, as all innovation begins with creative ideas, otherwise, it will only imaginative but not creative.



Actions for Ideas

- Perform Cost – benefit analysis (evaluate it) and look for their implementation and its result on time basis.
- Prioritize the ideas that provide significant long term growth for the business.
- Take steps to implement ideas based on feasibility.

ALWAYS CELEBRATE POSITIVE RESULTS FOR INNOVATION TO FURTHER ENCOURAGE CREATIVITY AND INNOVATION.

Promising Business Practices

To promote business innovation, business practices must be followed and institutionalized in the culture – by training, giving promotions and rewards to those who employ them successfully. Here are some practices:

- Select the most promising innovators.
- Create a protective cocoon around them and provide them with tools and resources.
- Give innovators room to “play” for truly transformative solutions.

- Resist the temptation to look for immediate results as hard core pressure will kill the creative process and will result in work just to meet deadlines and will yield only incremental improvements.
- Commit to driving best ideas through implementation and encourage other innovators by showing them that their best efforts will actually be adopted and see the light of day.

It is very much required to know whether the employees in an organization are open to share their views and assess whether one can ask challenging questions to them in ‘Yes’ / ‘No’ format. This will help innovation process in an organization.

Strategies for Developing Creativity

- Culture change initiatives.
- Skills training can be provided for leaders, managers and staff.
- Coaching innovation champions and teams and perform cost-benefit analysis on the most promising ideas.
- Organizing some contest and other activities in an organization to develop a culture of creativity and generate creative ideas.

CAN CREATIVITY BE LEARNED?

A study by George Land reveals that we are naturally creative and as we grow up we learn to be uncreative. Creativity is a skill that can be developed and a process that can be managed. Learning to be creative is akin to learning a sport. It requires practice to develop the right muscle, and a supportive environment in which to flourish. Business leaders are increasingly adopting the principles and practices of art and design to help build creative muscle in their organizations.



Source: www.creativityatwork.com/articlesContent/whatis.htm

Creating a Creative Climate

Research around creative culture and general climate has led to the identification of key areas on which companies can focus to develop an effective climate in which people are not only creative, but where they are motivated to develop these ideas into value-adding contributions for the success of the whole organization.

If a company wants to become more creative, rather than just encouraging people or teaching tools, then perhaps the best way is to develop the organizational climate. Instead

of preaching innovation, the organization should nurture and nourish talent so that they are motivated towards innovation.

Key areas companies can focus to develop an effective climate:

- To do anything, people must feel motivated. The climate of the organization must lead people into deep motivation that is required to push through from idea to end product.
- People, who feel challenged, drive to extend their personal boundaries, develop latent talents and explore new possibilities.
- Fun loving culture is humour. Making jokes is, in itself, a very creative activity, and develops the 'creative muscle' needed to constantly innovate.
- Once people are motivated, they need environment to be creative for that they requires freedom, time and support from company.
- A sharper edge is needed that drives forward towards success for which people require energy and an organizational climate where debate is encouraged to discuss ideas and add value to new thoughts which are generated.
- In fact some friction is inevitable and necessary because it produces proactive energy. This is again helpful for innovation.
- It is one thing to have an idea; it is another thing to put it into practice which requires more openness to experimentation, to maintain trust and to take risk.



Creativity requires whole – brain thinking, right – b r a i n – – – – imagination, artistry and intuition, plus left – brain logic and planning.

Ned Herrmann’s model by William Edward “Ned” Herrmann (1922 - December 24, 1999)

The experience of creativity is itself a work event and like other events in the organization context, it could evoke emotion. Qualitative

research and anecdotal accounts of creative achievement in the art and science suggest that creative insight is often followed by feelings of elation. For example: Albert Einstein called his 1907 general theory relativity “**the happiest thought of my life**”.

Formula for Best Solution

The formula of **5W + 1H** (Why, What, When, Where, Who and How) and ‘**Think 25**’ i.e. 25th letter of alphabets, ‘Y’ can be one of the way in the thinking process of innovation by an individual

Can Management Innovation Index be the Answer?

The Management Innovation Index (MIX) assists organizations in synchronizing leadership, management and strategy for innovative and measurable business outcomes. MIX gives a snapshot of an organization’s management innovation capabilities and capacities at a given moment in time. It does this by surveying the organizational culture, environment, strategy and practices and employee’s beliefs and attributes in relation to management and innovation.

Source: www.creativityatwork.com/articlesContent/whatis.htm

Conclusion

To make organizational climate more creative and innovative in thought, the focus should be on developing business creativity, collaborative leadership and innovation through arts – based training, coaching and research – based consulting.

Skills in critical thinking, creativity, communication, collaboration and innovation are crucial for achieving success in a global economy.

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Foreign Currency Convertible Bonds (FCCB) - A Novel Instrument of Finance

Abstract

Foreign Currency Convertible Bonds (FCCBs) is one of the investment avenues for foreign investors to invest in India and for Indian enterprises to access low cost funds from foreign sources. These bonds assume great importance for mutli-nationals and in the current business scenario of globalization where companies are constantly dealing in foreign currencies. There are two major sources of finance Equity and Debt. FCCB is combination of both the above forms. Till date India has raised more than U.S. \$ 6 billion through FCCBs. FCCBs are quasi bonds which give the advantage of both debt (creditor ship capital) & equity (ownership capital). The FCCB has become increasingly popular due to the unique advantages that they offer to both issuers and investors. The FCCBs are bond issues that typically have tenures of 5 to 8 years and can be converted into equity by investors after a certain date. FCCB issues often carry a 'call' and 'put' option. The call option permits the issuer to 'call' the company for an early redemption. On the other hand a put option grants the lender the right to exercise the option of converting the FCCBs into equity capital. FCCBs can be raised through an automatic route for the industrial sector, especially the infrastructure sector while others will have to take RBI's permission on a case to case basis. Valuation model has been discussed in this paper with the help of suitable examples. The value of FCCBs can be found with the help of Black and Scholes model and Discounted Cash Flow model. This paper also throws some light on pitfalls of FCCBs.

Key words :

- 1) Call Option- Call Options give the option buyer the right to buy the underlying asset
- 2) Put Option- Put Options give the option buyer the right to sell the underlying asset
Black and Scholes Model- This model is helpful to find out the value of option. The Black Scholes Model is one of the most important concepts in modern financial theory. It was developed in 1973 by Fisher Black, Robert Merton and Myron Scholes. The model incorporates the constant price variation of the stock, the time value of money, the option's strike price and the time to the option's expiry.
- 3) Option Pricing- Any model- or theory-based approach for calculating the fair value of an option.
- 4) WACC- A calculation of a firm's cost of capital in which each category of capital is proportionately weighted. All capital sources - common stock, preferred stock, bonds and any other long-term debt - are included in a WACC calculation.
- 5) Prepayment- The payment of a debt obligation prior to its due date. The excess payment over a scheduled debt repayment amount.
- 6) Automatic route- FCCB through automatic route does not require any approval from government or RBI.
- 7) Par Value, premium, discount- The face value of a bond is par value. A bond that is priced higher than its par value is called as premium value. A bond that is issued for less than its par (or face) value is called as discount value.

Box: 1

“Business funds can be derived through a huge variety of financial instruments. These range from pure debt, at the one extreme, which requires definite periodic payments that cannot be defaulted on without serious injury to the owners of the enterprise, to pure equity contributions, at the other extreme, which require virtually no contractual commitments except for equitable treatment along with other owners. Between, there is a mix of available instruments involving ownership, creditor, income, and control rights in varying degrees, with possible combinations limited only by the ingenuity of the capital markets and of those who manage the financing problems of an enterprise.”

Source: Ezra Solomon, The Theory of Financial Management, Columbia, University Press, 1961, P 28

Foreign Currency Convertible Bonds (FCCBs) are quasi bonds which give the advantage of both debt (creditor ship capital) & equity (ownership capital). The FCCBs have become increasingly popular due to the unique advantages that they offer to both issuers (raising equity at premium to the current market price) & investors (**potential equity upside with a limited downside**). The FCCBs are embedded with options as we know in option contract buyer has huge potential upside limited risk of downside, it means unlimited profits, & limited losses, especially in cheerful equity market conditions.

The FCCBs are bond issues that typically have tenures of 5 to 8 years and can be converted into equity by investors after a certain date (or if the share price of the company crosses a certain level over the conversion price)

Conceptual Framework of FCCBs

‘A bondholder has an option to convert the bond into equity’.

In the Indian context, clause (a) of sub-section (3) of Section 6 and Section 47 of the Foreign Exchange Management Act 1999 “a bond issued by an Indian company expressed in foreign currency & the principal & interest of which is payable in foreign currency”.

The FCCBs (also referred to as FCCNs) issued by Indian Co’s in different countries in the international markets are known by various names.

For e.g. - Bonds issued & listed with US Securities and Exchange Commission (SEC) by Indian Co’s in U.S. market are known as ‘Yankee Bonds’. The major merits of these Yankee Bonds are the longer maturities of bonds that place them outside the External Commercial Borrowings (ECBs) ceiling. Yankee bond markets are tremendously deep liquid which make available low interest carrying and long maturity period funds. The US markets are free from rigid syndicates and fee structures. Similarly, if Indian Inc. issues these bonds in Japanese market, then these are known as ‘Samurai Bond’. In a similar fashion, these bonds are also known as ‘Sushi Bonds’. These bonds are issued by the Japanese companies in Yen in Euro markets. Otherwise, all bonds issued in Euro markets in the UK are referred to as

‘Bulldog Bonds’. Looking at the share in the bonds market, the US dollar accounts for more than **half of the FCCBs issue**. The British pound Sterling, French Franc and Japanese Yen together account for a quarter of bond issued in the global market.

Features of FCCB

“As already mentioned, FCCB is a quasi-debt instrument, i.e. a bond that can be converted into an issuer company’s equity shares at the investor’s option, at a predetermined strike rate, thereby extending the bondholder the advantage of becoming a prospective owner of the company. The issuer has the advantage of avoiding amortization obligations in the event of conversion. **The right to convert the FCCB into equity can arise at any time, starting immediately after allotment and vest for 2-3 years.**

- i) FCCB issues often carry a ‘call’ and ‘put’ option. The call option permits the issuer to ‘call’ the company for an early redemption. On the other hand a put option grants the lender the right to exercise the option of converting the FCCBs into equity capital. However, in India both the options are subject to RBI guidelines. Furthermore, FCCBs can be redeemed at ‘a premium’, ‘par’ or even ‘at discount’.

Redemption- (a) Redemption on maturity – Unless previously redeemed or purchased by the company, the bonds are redeemed at par on the expiry of a pre-determined period from the date of the allotment. (b) Put Option-When the Bondholder redeems the bonds after expiry of a certain period commencing from the date of allotment,

he is said to exercise the Put Option. (c) Call Option - When the company purchases the bonds from the bondholders at discount, par or premium in the open market or otherwise, the company is said to exercise its Call Option.

- ii) The issuer can attain an annual cost saving of approximately 2%-3% on its borrowings. This is because; the interest component of FCCBs is generally 30%-40% lesser than on other non-convertible debt papers, foreign currency loans or External Commercial Borrowings (ECBs). Further, only a few covenants are required for FCCBs as compared to fund-raising through syndicated loans and debentures.
- iii) The pricing of the FCCB option is generally between a 30%-70% premium over the current market price giving sufficient cushion to the issuer.
- iv) FCCBs are also a tool for 'debt restructuring'. This is because, either the lender will exercise option of conversion or these bonds will be reissued to the same holder or to some other new lenders.
- v) Like any incremental borrowing, the issuance of FCCB also requires the

approval of existing consortium of lenders. They can approve the issue of both secured as well as unsecured FCCBs. As a practice, most of the FCCBs issued by Indian companies are usually unsecured and rated as well as listed to ensure creditworthiness

- vi) The Yield to Maturity (YTM) in case of FCCBs normally ranges from 2% - 7%".

Yield To Maturity

The rate of return anticipated on a bond if it is held until the maturity date. YTM is considered a long-term bond yield expressed as an annual rate. The calculation of YTM takes into account the current market price, par value, coupon interest rate and time to maturity. It is also assumed that all coupons are reinvested at the same rate. Sometimes this is simply referred to as "yield" for short.

YTM and the price of the Bonds have inverse relations i.e. if YTM goes up the price of the Bonds will come down and when YTM goes down the price of the Bonds will go up. The following table gives an indication between the YTM and current yield, when bonds are quoted at discount or at a premium or at par:-

Box-2

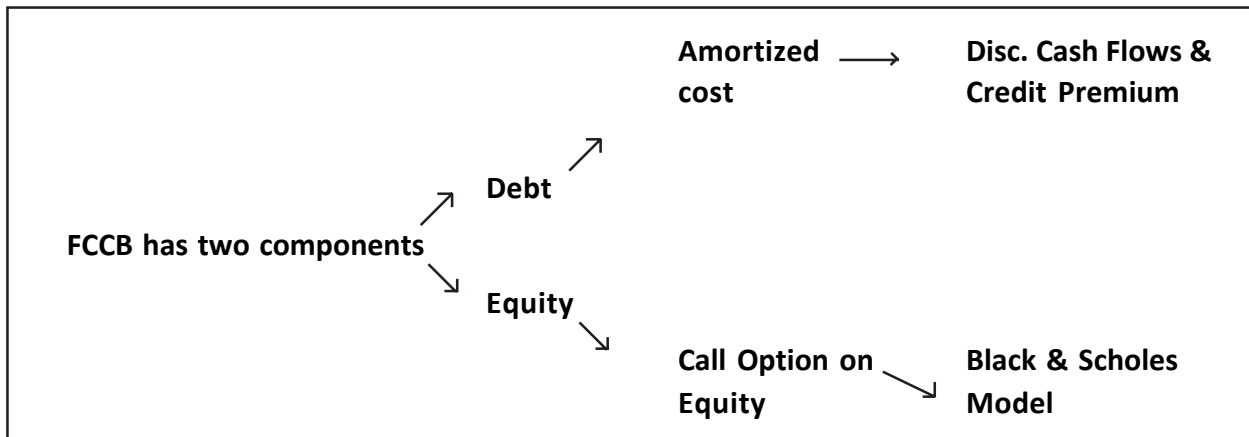
- A 8 years bond with 9% coupon & Rs 1000 par value, is selling for Rs. 800/-. What is YTM on this bond?

$$\begin{aligned}
 \text{YTM} &= \frac{C + ((M-P)/n)}{0.4M + 0.6P} \\
 &= \frac{90 + (200/8)}{.4 * 1000 + .6 * 800} \\
 &= .131 \\
 &= 13.1\%
 \end{aligned}$$

Bond Selling At.	Relationship
Discount	Coupon Rate < Current Yield < YTM
Premium	Coupon Rate > Current Yield > YTM
Par Value	Coupon Rate = Current Yield = YTM

Thus, the YTM will be greater than the current yield when the bond is selling at a discount and will be less if it is selling at a premium.

Box-3



Option Pricing – BS Model

Assumptions:

- European option
- The price of the underlying follows a lognormal distribution
- Risk free is constant and same for all maturities
- Markets are frictionless: Absence of transaction costs & taxes
- Volatility of the underlying is known & constant
- The underlying asset has no cash flows

Price formulae

Box-4

$$c = S_0 N(d_1) - X e^{-r_c T} N(d_2)$$

$$p = X e^{-r_c T} [1 - N(d_2)] - S_0 [1 - N(d_1)]$$

Box-5

$$\text{where } d_1 = \frac{\ln(S_0/X) + (r_c + \sigma^2/2)T}{\sigma \sqrt{T}}$$
$$d_2 = d_1 - \sigma \sqrt{T}$$

Opening up the abbreviations

- c = Price of call option
- p = Price of put option
- S_0 = Spot price
- X = Strike Price
- T = Time to Maturity (as % of 365 day year)
- r_c = continuous compounded risk free rate
- s = Implied Annualized Volatility
- $N(w)$ = cumulative normal probability

A FCCB carries along with it certain risk:
a) Credit risk in form of credit spread included in the YTM; b) Earnings risk on the equity c) Risk due to fluctuations in a foreign country's interest and Forex rate. Therefore, before purchasing any FCCB, a rational investor should verify the rating of the FCCB undertaken by some good bond rating agency.

Hence, the interest rates on the FCCB usually work out to be London Inter Bank offered rate (LIBOR) + risk compensation.

Taxation of FCCBs

"The taxation provisions for the FCCB are contained in section 115 AC of the Income Tax Act, 1961. These are:

- Interest payments on the bonds shall be subject to deduction of tax at source (TDS) at the rate of 10%.
- Tax on dividend on the converted portion of the bond shall be subject to TDS at the rate of 10%.
- Conversion of FCCBs into equity will not give rise to any capital gains liable to income-tax in India. Similarly, transfers of FCCBs by one non-resident investor to another non-resident investor outside India shall not give rise to any capital gains tax in India.

The foreign resident is not required to file any return before the Indian taxation authorities, if Indian taxable income contains only income from other sources".

RBI Guideline- Major Changes- August 2005

"RBI has introduced some structural changes to promote the growth of the infrastructure sector as well as housing finance companies. The guidelines also intend to restrain money laundering practice.

- ✓ FCCBs can be raised through an automatic route for the industrial sector, especially the infrastructure sector while others will have to take RBI's permission on a case to case basis. The minimum average maturity will be three years for the borrowing until \$20 mn and five years

FCCBs exceeding \$20 mn.

- ✓ Non-Banking Financial companies (NBFCs) can now raise FCCB with a minimum average maturity of five years from multilateral financial institutions, reputed regional financial institutions, official export credit agencies and international banks to finance import of infrastructure, equipment for leasing to infrastructure projects under an approval route.
- ✓ Housing finance companies can issue FCCBs by satisfying the given minimum criteria, i.e.,
 - i) The minimum net worth during previous 3 years to be at least Rs. 500 cr;
 - ii) Listing on BSE or NSE;
 - iii) Minimum size of FCCB being \$100 mn.
 - iv) Submission for the purpose of utilization of funds by the applicant. As per bankers, these new norms will hinder smaller companies from tapping this route.
- ✓ The limit for pre-payment of FCCB without prior approval of RBI has been augmented to \$200 mn (from existing \$100 mn) subject to compliance of applicable minimum average maturity period for the loan”.

Pitfalls

As per RBI, above mentioned regulation due to options given to the companies to prepay their FCCBs at any stage of the tenure of the FCCB, overseas investors could exit very quickly either on the ‘downturn’ in the parent economy or on an increase in interest rates in overseas economy, in spite of the maturity period being five years.

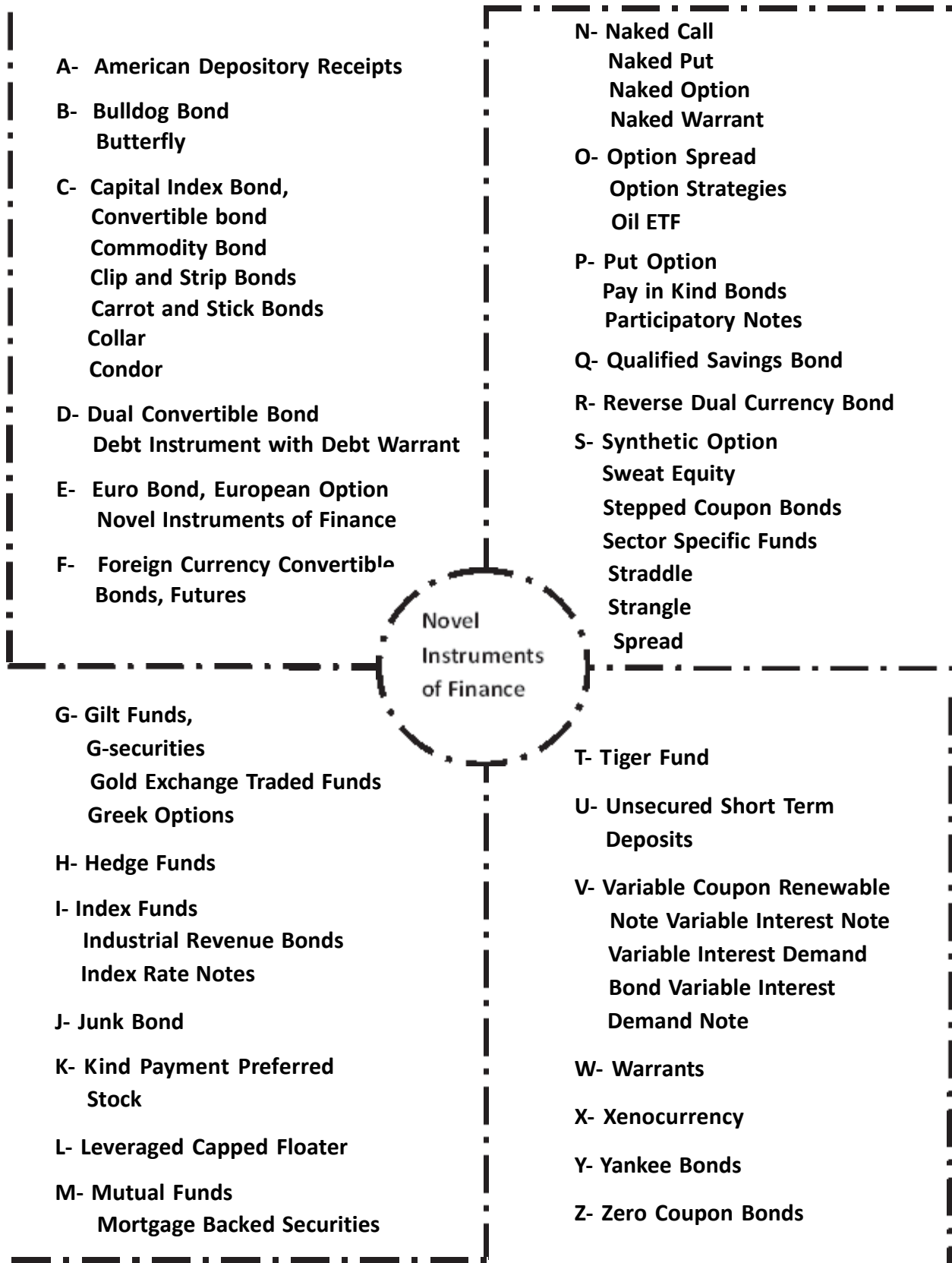
FCCB issues have as mentioned earlier a ‘call’ and a ‘put’ option to suit the structure of the bond. It all depends upon the structure of the instrument as to which party has a call or a put option. An investor having call option would exercise the option if the interest rate rises. This would enable him to recall his low interest yielding funds and invests it afresh for better returns.

An investor having put option would exercise the option if the share price exceeds the conversion price such that he makes a significant gain. From the issuer’s perspective, it might be exercise its call option, if the overall cost of raising funds in the domestic market significantly reduces. Here the relevant factors would be the reduction in domestic interest rate, the exchange rate premium and the interest scenario abroad. (Interest rate Issuer will exercise his right of call option and redeemed bond and refinance the business at lower cost) Also, if the operating profit of the issuer significantly exceeds the break-even, the issuer might exercise its call option to redeem the external debt and reduce the interest cost thereby leading to an increase in EPS. On the other hand, it might choose to exercise the put option if the expected operating profit is lower than the break-even. This would also eliminate his additional interest burden and impact the profits positively.

Problems with FCCBs

The FCCBs have to be serviced by payment in agreed foreign currency on maturity or prepayment as the case may be. The amortization obligation will be charged on the foreign exchange reserves of the borrowing country. Therefore, the options with the

A-Z Instruments of Finance

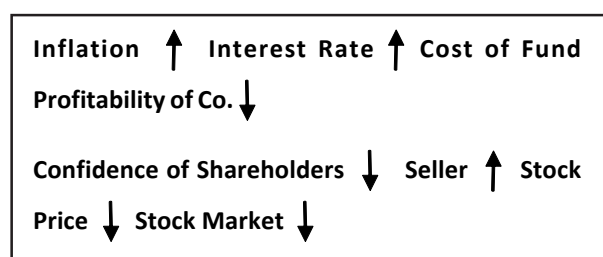


government will be, either to: Impose higher taxes or allow Higher inflation in the economy or initiate fresh domestic borrowing in terms of government securities meaning thereby increasing the supply of treasury bonds and hence an increase in their interest rates.

Thus, issuance of foreign currency denominated bonds can be useful only if they have a longer maturity than the domestic bonds, in which case the forex inflows can be used towards fiscal reform and improvement of the budgetary structure of the local (Indian) economy.

Typical Chain of Likely Events

Table: 1



As we have observed in table one above that all the FCCBs will convert into depository, so huge money outflow from Indian market.

FCCBs is Double Edge Sword

The FCCB gives the investor a choice – to convert the bond into a fixed number of shares at a predetermined price, or to receive a fixed yield to maturity. The choice to convert depends on the current market price of the issuers’ scrip- the investor exercises the option to convert mostly if the conversion price is lower than market price. If the investor chooses not to convert, the reward redemption premium on maturity of the bond- the value being the imputed interest rate he would have received every year over the life of the instrument. The

problem arises in the accounting treatment being used by the issuers.

Using a loophole in the accounting standards, most Indian companies have not accounted for the redemption premium payable if the bond is not converted. Once an FCCB is issued, it is showed as an unsecured loan. Ideally, thereafter, the companies should be writing off the redemption premium proportionately every year. But, most companies argue that an FCCB is not a debt instrument, since there is always a chance for its conversion into equity- and therefore does not merit accounting for the redemption premium. This means that even though the companies had borrowed debt (which is what an FCCB is till it gets converted into equity), they were not showing the liability either on their balance sheet or even their profit and loss account. This, then, not only under reports their state of indebtedness but also inflates profitability and margins. Companies like Amtek Auto, Aurobindo Pharma, Bharat Forge, Educom, GTL Infrastructure and Suzlon Energy are showing this as contingent liabilities, though it has not been directly mentioned in the balance sheets of most, barring Aurobindo.

Conclusion

As a novel instrument of finance FCCB helps to go beyond national frontiers, raise money at lower cost and lower the composite cost of capital i.e. to say Weighted Average Cost of Capital (WACC). In turn this will help to lower the minimum acceptable rate of return in the equation $R \geq K_0$ Where, R is minimum acceptable rate of return and K_0 is the cost of capital.

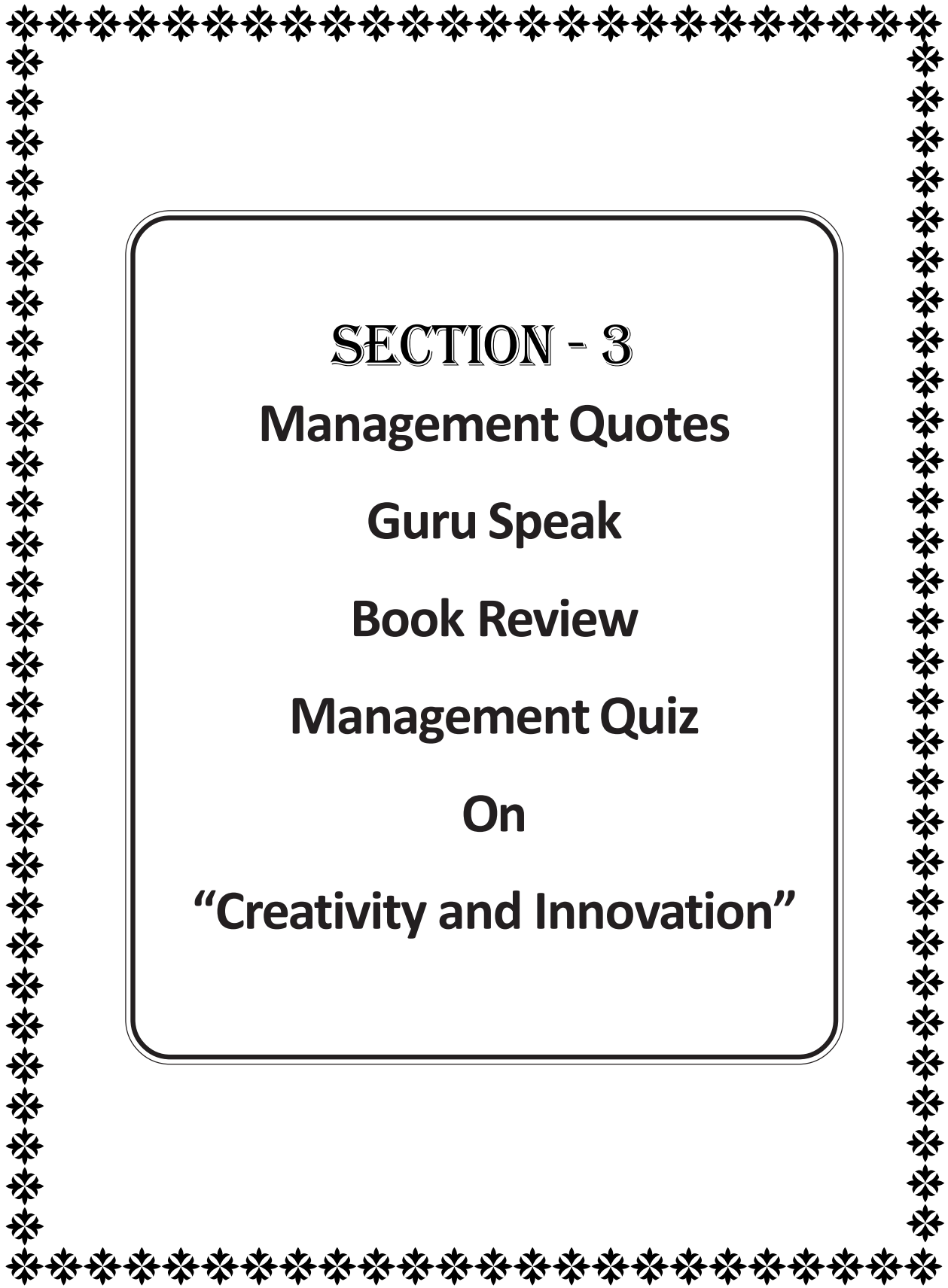
Thus, enterprises can raise money from foreign countries through newer and newer methods by structuring creative and innovative elements in financial instruments. Such creativity helps to increase investment opportunities & maximise shareholders wealth. Thus, financial wizardry is key to promoting creativity and innovation in managing business and creative financing is one of the ways of improving corporate financial performance.*

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- 4) www.sebi.gov.in



* Financial Wizardry- See Navin Samtani- The Financial Wizardry of the Ambanis, pp- 244 to 252, Dr. V. N. Bedekar Memorial Research Volume-I (2006)



SECTION - 3
Management Quotes
Guru Speak
Book Review
Management Quiz
On
“Creativity and Innovation”

Ms. Sarita Sali
Assistant Professor

Ms. Rita Nimje
Student of MMS SEM II

Management Quotes

Focus on a few key objectives...I only have three things to do. I have to choose the right people, allocate the right number of dollars, and transmit ideas from one division to another with the speed of light. So I'm really in the business of being the gatekeeper and the transmitter of ideas.

Jack Welch

An established company which, in an age demanding innovation, is not able to innovate, is doomed to decline and extinction.

Peter Drucker

"Creative activity could be described as a type of learning process where teacher and pupil are located in the same individual."

Arthur Koestler

"Tools are great. But giving people tools, without first changing their mindset is useless... Do not train your employees on creativity techniques or bring in innovation software until you have addressed your underlying cultural issues (the mindset)."

Stephen Shapiro

"Creative thinking is not a talent; it is a skill that can be learnt. It empowers people by adding strength to their natural abilities which improves teamwork, productivity and where appropriate profits."

Edward de Bono

“Innovation is not the product of logical thought, although the result is tied to logical structure.”

Albert Einstein

“Most people think of innovation only in terms of R&D or new product development — but taking an idea and turning it into cash is an effort that involves almost every part of a company. The challenge is thinking about and managing this extremely broad set of inter-related activity as a unified process.”

Hal Sirkin, Boston Consulting Group

“Innovation is about connecting the dots. Lines, not boxes. And technology’s greatest power in driving innovation is connecting the various dots and boxes that exist in the business landscape, such as customers, employees, suppliers and intermediaries.”

Stephen Shapiro, in ‘24/7 Innovation’

“Creativity methods provide senior management with a unique tool to tap into a massive organizational resource. Learning to leverage the creative thinking skills of every individual, regardless of their level, creates the sustainable competitive advantage every corporation is striving for.”

Jim O’Neal

“Great minds always stay nimble because they’ve learned how to move on. Einstein worked on big problems until he died. The artists we most admire transform themselves and their work from time to time.”

Marco Marsan, from ‘Think Naked’

“Organizations are in large part shaped by the way people think and interact. To make organizations more innovative, we must change the way people think and interact.”

Andrew Papageorge

“Innovation— any new idea—by definition will not be accepted at first. It takes repeated attempts, endless demonstrations, and monotonous rehearsals before innovation can be accepted and internalized by an organization. This requires courageous patience.”

Warren Bennis

What is creativity? I define creativity is the act of turning new and imaginative ideas into reality. Creativity involves two processes: thinking, then producing. Innovation is the production or implementation of a creative idea. If you have ideas, but don’t act on them, you are imaginative but not creative.

Linda Naiman

The greatest danger for most of us is not that our aim is too high and we miss it, but that it is too low and we reach it.

Michelangelo

“To raise new questions, new possibilities, to regard old problems from a new angle, requires creative imagination and marks real advance in science.”

Albert Einstein

Some men look at things the way they are and ask why? I dream of things that are not and ask why not?”

Robert Kennedy

“Creativity is inventing, experimenting, growing, taking risks, breaking rules, making mistakes, and having fun.”

Mary Lou Cook

Guru Speak

“Innovation needs to be real, very, very real, not to just give a tremendous leap to the business but also impact real consumer’s experience”

Hemant Sachdev
Joint Managing Director, Microsoft

“Make them (CFOs) a stakeholder to the innovation process as opposed to the people who come at the last mile and who have to say Yes/No”

Chandramouli Venkatesan
Executive Director, Cadbury India Ltd.

“The investment in media has to consider the irritation factor in innovation. It’s necessary to make consumers feel good about your brand”

R Balki
Chairman and Chief Creative Officer, LOWE

“For me, disruptive innovation is about redefining performance and hence consumer acceptance”

D Shivakumar
Vice President and Country General Manager, Nokia India

Source: The Economic Times, Friday 18th March 2011, Page No. - 21, Mindshare Brand Equity Compass 2011.

Social Innovation

Avaz: Ajit Narayanan

Avaz is a communication device for people with speech disorders which works by converting limited muscle movements into speech

Suraksha: Gautam Kumar

Suraksha is a device that can detect liquefied petroleum gas (LPG) leakage and set off a warning alarm and send an SMS to five registered users

**Photo-Red Protocol:
Alefia Merchant**

A compact digicam with a built in flash, using the phenomenon of 'red-eye reflex' to detect critical eye ailments such as retinoblastoma

**Digital Slate & Pen:
Aishwarya Lakshmi Ratan**

Low cost digital slate and pen allow handwritten entries made with an ordinary pen and paper by placing the paper on the slate

Source: Business Standard, Monday 21st March 2011,
Next Gen Innovation, Adapting Technology for Human Need

Ms. Sonal Dabke
Assistant Professor

Book Review

A review of “Connect the Dots” by Rashmi Bansal

Rashmi Bansal, whose earlier book – ‘Stay Hungry Stay Foolish’ was a best seller and much appreciated by critics and public, came out with another interesting book featuring a collection of inspiring stories of twenty entrepreneurs who made it big in the business world. Stay Hungry....featured stories of Business men who had a Management degree where as Connect the Dots which is more like a sequel to the earlier book features stories of people who have become successful without any Management degree and by starting out on their own. Some of the entrepreneurs the book talks about, are Kunwer Sachdev of Su-kam, Runita Ramnathkar of Fem Care Pharma, Ranjiv Ramchandani of Tantra t-shirts, Chetan Maini of Reva Electric Car Company.

Each of these stories relates gripping and inspiring accounts of these individuals journey of struggle, which has ultimately resulted in success. It’s a book that will dare you to dream and motivate you to connect all the dots in your life which may not always be obvious at first. All it needs is little introspection and soul searching, passion, creativity and a strong desire to prove oneself. This is exactly what seems to be the theme of the cover page which shows the title written in an inverted manner. This book is a must read for all those people who want to start their own ventures but feel challenged due to lack of a Management degree or financially sound background.



Happy Reading!!!

Ms. Sarita Sali
Assistant Professor

Management Quiz

Questions:

Q 1. A quality philosophy was born in Motorola and later GE expanded the scope of this concept. The abstract of concept is reduced costs, increased efficiency and quality and increased profit. Name the concept?

- a. BPR (Business Process Reengineering)
- b. Quality circles
- c. Six Sigma
- d. Kaizen

Q2. The technique that compares one's performance to previously set standards is called:

- a. Benchmarking
- b. Marketing
- c. Budgeting
- d. Forecasting

Q 3. The technique used by managers to help solve employee's differences is called:

- a. Arbitration
- b. Debate by Objective
- c. Accommodation
- d. Conflict Resolution

Q4. The process of dispersing decision-making closer to the point of service or action is called:

- a. Centralization
- b. Decentralization
- c. Neither a or b
- d. Both a and b

Q 5. Which international soap brand was marketed as having a purity of 99.44/100%?

- a. Pears
- b. Dove
- c. Lux
- d. Dyna

Q 6. Lawrence Miles conducted traditional cost reduction exercises on a number of companies' products. These led him to coin the term while he was working at General Electric Co. USA in 1947. What was the term?

- a. Value Engineering
- b. PDCA
- c. Value Analysis
- d. Inventory Management

Q 7. A professionally-managed form of collective investments that pools money from many investors and invests it in stocks, bonds, short-term money market instruments, and/or other securities is referred to as?

- a. Mutual Funds
- b. Real Estate Investment Trust
- c. Investment Club
- d. Diversification Funds

Q 8. Employees typically think like a herd -they are all motivated the same way:

- a. True
- b. False
- c. Neither a nor b
- d. Both a and b

Q 9. Who were Bretten woods sisters?

- a. World Bank and IMF
- b. UNO and WHO
- c. G-20 and SAARC
- d. SAARC and World Bank

Q 10. The management technique where employees get strong input to identify their goals, time lines for completion, ongoing tracking and feedback is:

- a. Budgeting
- b. Strategic Planning
- c. Statistical Analysis
- d. Management by Objective (MBO)

Q 11. First Asian nation to get loan from World Bank:

- a. Indonesia
- b. Sri Lanka
- c. Japan
- d. India

Q 12. HTC Company is based from?

- a. Japan
- b. China
- c. Taiwan
- d. India

Q 13. Planning your personal expenses based on your revenue inflows is called:

- a. Tax Planning
- b. Budgeting
- c. Investing
- d. Financing

Q 14. Which is the truest statement regarding monetary rewards as it pertains to motivating employees?

- a. Monetary rewards are always effective

- b. Monetary rewards are hardly ever effective
- c. Money is important but is often not the most significant motivator of employees
- d. None of the above

Q 15. What is a term used to describe a location that is provided to a franchisee fully equipped and ready to operate?

- a. Design
- b. Company Owned Location
- c. Area Franchise
- d. Turn-key

Q 16. The Paternalistic style of management most resembles which other management style:

- a. Autocratic
- b. Democratic
- c. Laissez-Faire
- d. Materialistic

Q 17. Android is mobile platform or software of:

- a. HTC
- b. Sony Ericsson
- c. Google
- d. Alta vista

Q 18. Miss world Ksenya Sukhhinova is from which country?

- a. Bulgaria
- b. France
- c. Russia
- d. Japan

Q 19. Positive reinforcement is a positive motivational technique:

- a. True

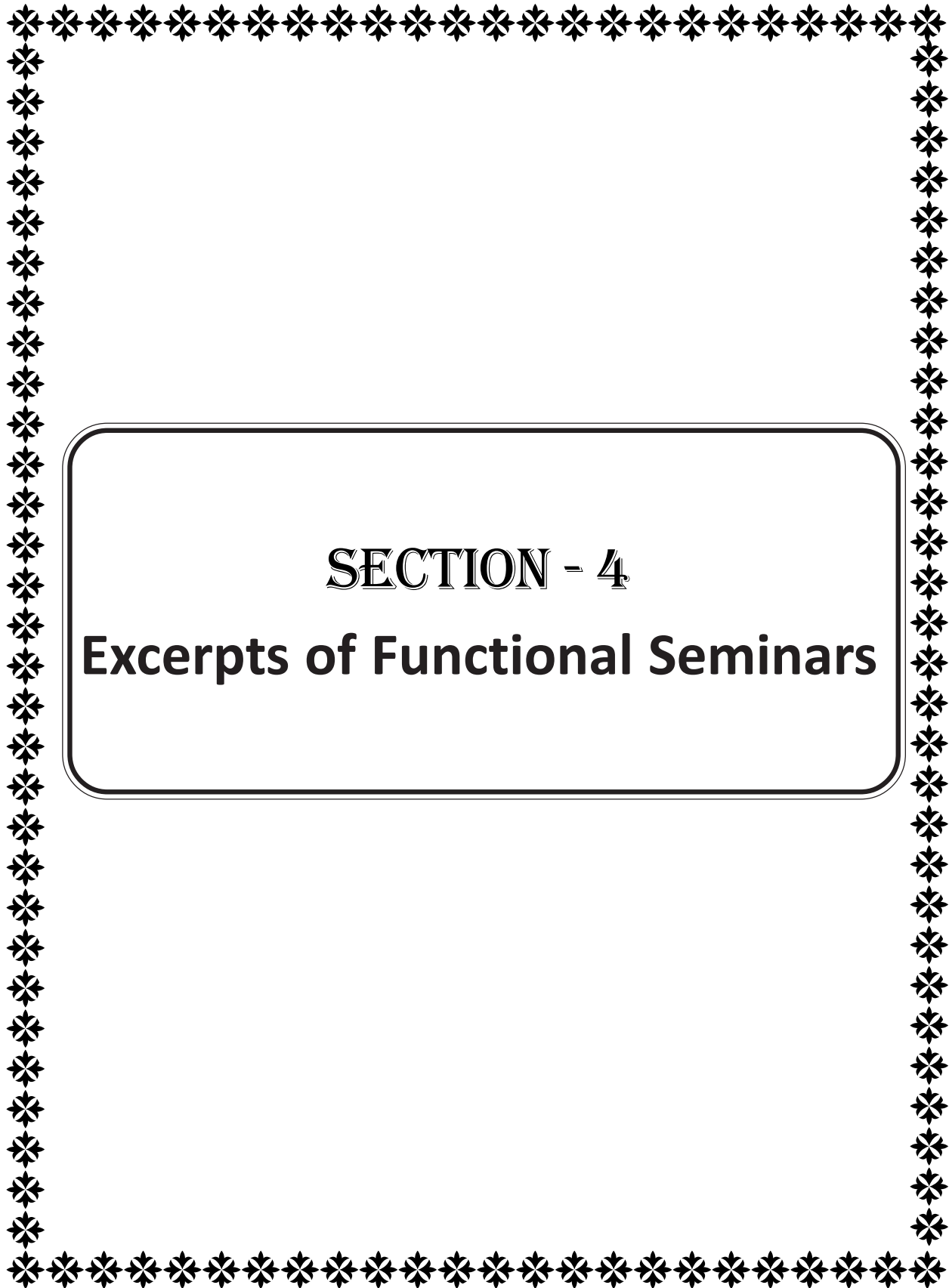
- b. False
- c. Both a and b
- d. Neither a nor b

Q 20. This world famous direct marketing company was founded by Rich Devos and Jay Van Andel in 1959. Name it?

- a. Swadeshi
- b. Amway
- c. Both a and b
- d. None of the above.

ANSWERS:

<i>Question no.</i>	<i>Correct alternative</i>
Q.1	c
Q.2	a
Q.3	d
Q.4	b
Q.5	b
Q.6	c
Q.7	a
Q.8	b
Q.9	a
Q.10	d
Q.11	d
Q.12	c
Q.13	b
Q.14	c
Q.15	d
Q.16	a
Q.17	c
Q.18	c
Q.19	a
Q.20	b



SECTION - 4
Excerpts of Functional Seminars

Ms Gitanjali Kapoor
Assistant Professor
DR VN BRIMS

Ms Simpi Khandelwal
Assistant Professor
DR VN BRIMS

Finance Summit on “PRACTICAL ASPECTS IN FINANCE”

held on 27th March, 2010

“It would be worthwhile to recall, what Henry Ford had once remarked: “Money is an arm or a leg. You either use it or lose it”. This statement is simple but quite meaningful. It brings home the significance of money or finance. Finance in real sense is the cornerstone of the organization and good financial management is vitally important to the health of the business firm.

Finance is an exciting, challenging, ever-changing discipline in today’s scenario. Its practical aspect can be viewed from how funds are acquired and allocated in to the business as an outcome of various decisions and strategies.

DR VN BRIMS organizes Finance Summit every year for the upcoming finance leading professionals which offers a unique platform for the students in developing markets to network with fund owners, technology providers, investors and other specialist advisers in future along with exceptional opportunities to know more about current scenario with practical approach across emerging markets. The event further familiarized business leaders from different sectors with their commitment to finding creative ways to optimize resources — and in particular to human and financial capital — to lead the nation out of the economic environment in which we currently find ourselves.”

DR VN BRIMS organised a full day Finance Summit titled “ Practical Aspects in Finance” on 27th March 2010 at Panini

Sabhagruh. The dual objective of organizing this function specific seminar was - firstly, to give the students an insight into the practical applications of the theoretical concepts learnt in the class room and secondly, to improve and strengthen the industry-institute interaction.

DR VN BRIMS invited the speakers from the corporate and banking sector for the seminar to explore the practical aspects of finance.

The first speaker Mr. K.V Ramaswami, CEO of Quadratic Financial Services Pvt. Ltd., spoke on 'how to build wealth through asset allocation'' This was an interactive presentation, which compelled the students to think and speak up.

Mr. Mohan Deshpande, Vice President Finance, Elder Pharmaceuticals, our second speaker for the seminar, presented on 'Financial Decision Making Process'. He shared his experience in the industry with the students and also enlightened them on the expectations of the industry from fresh management graduates.

The third speaker of the day was Mr. Pravin Ambeskar, a Senior SAP Consultant, who gave

a presentation on 'The role of IT in Finance''. His presentation highlighted how ERP/ SAP solution can be useful for a Finance Manager to take the prompt decisions, how huge volume of financial and quantitative data can be stored systematically and can be retrieved, how this real time information can be used for in-depth quantitative and financial analysis.

Mr. Vaibhav Pradhan, from Thane Janata Sahakari Bank Ltd. presented on 'Treasury Management' and explained the detailed assessment of treasury management in the banking sector.

The last speaker of the day Mr. Rajenn Golatkar, Deputy Chief Accountant at Mukand Industries gave a presentation on 'Working Capital Management'. The fact that working capital management strategies, which are taught in the classroom, are actually practiced in the corporate world was clearly brought out in his presentation.

To conclude, the seminar was very much appreciated by the students, as it complemented their theoretical learning in the classroom.



Ms Sanskruti Kadam
Assistant Professor
DR VN BRIMS

Lt. Col Venkat Raman
Assistant Professor
DR VN BRIMS

HR Summit, on “EMERGING TRENDS IN HUMAN RESOURCES”

held on 4th September, 2010

Dr. V. N. Bedekar Institute of Management Studies (DR VN BRIMS) organized a HR Summit on “Emerging Trends in Human Resource” on 4th September 2010 in Panini Sabhagraha.

The function commenced with Saraswati Vandana and with lighting of the lamp at 9.00am. This was followed by felicitation of dignitaries on the dais.

Dr. P.M. Kelkar - Director, DR VNBRIMS gave a welcome address. This was followed by an opening speech by Lt. Col. V. Raman who introduced the concept and idea behind organizing the Seminar. After this, Dr. Guruprasad Murthy- Director General, Dr. V.N.BRIMS gave a brief talk about the latest trends in the field of HR.

The keynote address was given by Mr. Vikas Shirodkar, V.P. HR, General Motors. He spoke on –“Building a World class Organization”. According to him a world class organization is an organization which has acquired a position of “the best of the best” in the world in its given business and continuously strives for beating its own standards so as to retain that position. He explained the topic by giving examples of ‘Arvind eye hospital’, ‘Cavin care’. The two unforgettable statements made by Mr. Shirodkar in the presentation were “World class organizations cannot be made until and unless each and every employee becomes an entrepreneur.” and “Everybody can make a difference.”

The next speaker was Mr. P.V. Kalawar - VP HR, Clariant Chemicals Ltd. He gave brief history on how Human Resource Manager came into existence. He also explained about how to survive in today's competitive market. He also threw light on the eight major challenges faced by HR like globalization, measures to attract and retain talented staff, and so on, on implications for HR and challenges in the role of HR. He concluded his speech by saying "Question everything" and "if no one listens, the voice will be silenced".

Mr. C.A. Karnik, Director-HR, Forbes and Company India Ltd. was the next speaker for the day. He spoke on "Future of Work, Mastering Change". He talked about new areas in HR like mass customization of work, wealth extraction to wealth creation and so on. Then he focused on what HR has to do, for example, train people to think (think like an entrepreneur and train people to think out of the box), Retrain people, Create customer sensitivity, Channelize aspirations of people, Self reality etc. He concluded his speech by quoting from Peter Drucker that "The best way to predict future is to create it".

The next talk in the Seminar was given by Mr. V. Chitnis, V.P. HR, Thirdware Solutions Pvt. Ltd. His topic was on "HR and technology". He explained how technology has advanced by giving an example that people earlier used to go to the office and work, but now people work

from home. He also talked about the key aspects, policies and processes of HR. He gave insight into some of the challenges faced by HR like identification of talent, attracting the right talent, and retention of good talent etc.

The last speaker for the day was Mr. Nitin Paranjape, C.E.O. of Max Office Ltd. He focused on working smart, growing faster with MS office tools. Normally people focus on "I know what I need to know, what I don't know I don't need", he said, "instead of thinking like this people should learn to learn". He very cleverly mentioned the two terms commonly used by everyone i.e. "Basic Knowledge and Advanced knowledge of computers". According to him there is no such difference like Basic and Advanced in computer knowledge. He explained how to use shortcut keys and scroll down keys which we normally tend to neglect.

Dr P. M. Kelkar - Director DR VNBRIMS then gave the closing remarks in which he thanked the speakers for giving excellent inputs in the functional area to one and all. This was followed by a Vote of thanks.

To conclude, the summit greatly benefited all the students as the speakers gave excellent insights in all vital areas of HRM and shared their experiences from the industry. It was a very useful and memorable event. The HR Summit turned out to be a very successful event, beneficial to both students and teachers.



Written by
Avinash Nair

Student, MMS II, 2009 - 11 Batch

Guided by
Ms Sonal Dabke

Assistant Professor, DR VN BRIMS

Ms Seema Agarwal

Assistant Professor, DR VN BRIMS

Marketing Summit, on “HOLISTIC MARKETING”

held on 9th October, 2010

DR. V.N. Bedekar Institute of Management Studies (DR VN BRIMS) organised a Marketing Summit on Saturday, 9th Oct, 2010 at its campus in Thane. The theme of the summit was ‘Holistic Marketing: Key to a Globally Competitive Organisation’.

Marketing Summit is a platform launched by the Institute which can foster stronger ties between Education and Industry. The summit is intended to provide students with a lateral view of the subject in order to get enriched knowledge in emerging concepts in sales and marketing area.

The mascot of this summit was “caterpillar” which symbolizes evolution. Students like the caterpillar are nurtured in the protective environment of the institute, where they develop their skills and spread their wings like a butterfly to go on and explore the corporate world.

As our tradition at DR VN BRIMS this auspicious event was started by lamp lighting ceremony which was done by Dr. P.M.Kelkar, Director DR VN BRIMS and Dr. Guruprasad Murthy Director General DR VN BRIMS in the presence of the dignitaries, teachers and students.

The session started with a welcome speech from Dr. P.M.Kelkar, Director DR VN BRIMS. Dr. Kelkar spoke about meeting needs of customers with profitability as the core principle of marketing, stating corporate examples of Jonshon & Johnson. He put light on the concept of ‘Best Practices’ and ‘Next Practices’. He concluded by stressing on the point that marketing

nuances are learnt from experience and developing on customer generated ideas is the key to Marketing Success.

This was followed by an introductory speech by Dr. Guruprasad Murthy. He elaborated on identifying uniqueness in every market as the secret of marketing supremacy. He advised the future managers to be aware of the fact that more advertising would never guarantee more sales. The sales rely on the marketing efforts and not simply advertising. He mentioned about globalization stating examples of China which has sustainable competitive advantage in terms of low-cost operations, USA with reference to their prowess in patents and technology.

The proceedings continued with the keynote address given by Mr. S K Palekar, Chairperson, Executive Education Centre, S P Jain Institute of Management and Research. He has an experience of 34 years having worked in corporate giants like P&G, MRF, Best Foods and Onida. He is an expert in the fields of Brand Management, Sales and Market Research. He is also a trustee of an NGO named Yuva Parivartan. His topic was 'Mistakes to Avoid to be a Successful Marketer'. He started by explaining the challenges faced by India during the globalization phase in 1992. He also mentioned about the nascent concept of Global Competition Marketing which played a pivotal role in emergence of Indian firms on the global stage. He mentioned about the "4C Concept" (Cash, Confidence, Cost Consciousness, Courage) with reference to India. At the outset of the new millennium the booming Indian economy offered good capital strength, The Indian companies showed some

courage in terms of risk taking and making quick and influential decisions. The cost conscious mind set and cost models developed helped Indian companies to attain a competitive advantage on the Global stage. He also emphasized students to adhere to the '4Cs' to be a successful marketer. He advised the students to listen to the customer's voice and not just statistics.

The next speaker was Mr. Virendra Gupte, Chief Trade Services, Tata International. He presented on 'Challenges of Globalization'. He initiated the speech by stressing on the global interdependence which is witnessed in today's competitive environment. He mentioned about the evolution of globalization over the past decades and its necessity. He illustrated on the various driving forces present in globalization. He advised students to imbibe the philosophy of 'learning, unlearning and relearning'. He stressed that prosperity along with responsibility and accountability will be the future of Global Marketing.

This was followed by a very interesting Marketing Quiz which was sponsored by Business World. There was good completion among the teams and the enthusiasm of the audience made the session very memorable.

This was followed by a session on "Blue Ocean Strategy" presented by Mr. Sushil Pawaskar, Country Manager Norex International AB Sweden. He started by enumerating the trials and tribulations faced by young managers, he also discussed various phases the future budding managers would encounter in the corporate world. He explained the concept of blue ocean strategy and stressed that simultaneous pursuit of differentiation and low-

cost are the key to a successful blue ocean strategy. He also spoke about the importance of creating sustainable competitive advantage through uncontested market space. He made a special mention about the tools applied in the formulation of a blue ocean strategy. He spoke about the strategy canvas and the ERRC (Eliminate, Reduce, Raise, and Create) Grid. He opined students not to beat the competition but to make it irrelevant. He also discussed about strategy canvas and stated industrial examples like Cirque de soleil and Nintendo Wii.

The grand finale of the summit was a panel discussion organised with the help and support of Retailer's Association of India (RAI). The topic was 'Emerging Trends in Retail Marketing'. Mr. Lawrence Fernandes, Director Learning, Retailer's Association of India was the moderator for this panel discussion. The discussion was graced with the presence of key dignitaries like Mr. Ritesh Ranjan, Area Manager Pantaloon Retail, Mr. Abel A Correa, Chief of IT Systems and future supply chain solution Ltd. And Mr. Deva Jyotula, Store Manager, Korum Mall.

Mr. Lawrence Fernandes presented on the history of Indian retail and its subsequent evolution over the past decade. He stressed on the future potential in the Indian retailing industry. He also discussed about the future opportunities and the favourable government policies which are a catalyst in fostering the Indian retail industry.

The panel discussion was initiated by Mr. Lawrence Fernandes who asked the panellists to forecast the future of Indian retailing. Mr. Ritesh Ranjan discussed the employment opportunities retail market offers to India. He stressed on the point that there is utmost requirement for skilled labour in the Indian retail market. He also mentioned that the retail industry has helped to foster the employment scenario in India. He illustrated the expectations that retail industry has from its future managers. Mr. Abel Correa stated that supply chain strategies are not made at company boardroom, but at warehouses and factories. He also advised future managers that perseverance and commitment are the key to success in the retail sector. Mr. Deva Jyotula stressed on the importance of store layout in retailing; Korum mall at Thane, being an apt example for the same. He also mentioned various events and promotional strategies implemented by Korum Mall which has tremendously boosted the footfalls at Korum. The panel discussion was a very insightful event and the highlight of the day.

The Marketing Summit has set a benchmark and would indeed be carved as a remarkable event. The summit was successful in bringing many insights of the people at the helm of corporate affairs to the forefront and helped in expanding the thinking horizon of the students.



Mr. Kiran Kothare
Assistant Professor
DR VN BRIMS

Operations Summit, on “RECENT TRENDS IN OPERATIONS”

held on 13th December, 2010

Dr. V. N. Bedekar Institute of Management Studies (DR VNBRIMS) organized an Operations Summit on “Recent Trends in Operations” on 13th November 2010 in Panini Sabhagriha.

The summit started with lighting of the lamp which was followed by felicitation of dignitaries on the dais.

This was followed by an impressive audio visual show prepared by the students to bring out the relevance of Operations Management in general & emerging trends in the manufacturing industry in particular. It provided the overview of the event that was to unfold during the day.

The proceedings started with a welcome address of Dr. P.M. Kelkar – Director DR VN BRIMS who shared his experiences in MNCs Ciba-Geigy, Roche and M/S Johnson & Johnson he worked for in the area of Operations Management.

Then, Dr. Guruprasad Murthy- Director General DR V N BRIMS explained succinctly the importance of Operations Summit.

The first guest speaker Dr. S. Siddhan, Business Advisor, Arch Pharmalabs provided the bird’s eye view of the entire canvas of Operations Management before coming to the specific topic of ‘Recent trends in operations.’ His erudite speech touched upon different aspects of operations management as practised in different sectors viz. manufacturing & service providers like airlines & banking.

He explained the new, contemporary & emerging areas like TQM, TOC in so simple a language that the students without technical background & not introduced to the basics of Operations Management could also understand & appreciate them.

The next speaker was Mr. Deepak Agnihotri who highlighted the importance of 'Dashboards & Business Scorecards' in 'Operations Performance Management'. Through his long association with software development space, in various IT companies, he covered the emergence of MRP, MRP II & ERP as management information & performance measurement techniques highlighting refinements each of them could bring about in the direction of achieving 'Real Time On Line' capabilities. With many live examples, he explained how enterprise performance data is converted into right reporting tools through customized dashboards to suit different purposes. The high point of his talk was the analysis of scorecard for Best Business School survey of 2010 carried out by Business India.

Mr. Sthiti Banerjee, the next speaker took a welcome departure from conventional slide presentations. For his post lunch session, he used a very interesting case study for getting the wholehearted & total participation of his audience. The case pertained to customer sensitivity & customer satisfaction but, for its analysis the knowledge of operations field was essential. This case helped in honing the problem solving skills of the students after careful analysis of the symptoms & the prevailing situation.

The active participation of students in the case study was followed by equally interactive session of Mr. Shrirang Chitanvis who

introduced the emerging fields of 'Lean Manufacturing' & 'Six Sigma' to the audience. As a practising consultant in the space of these new techniques in Operations Management area, Mr. Chitanvis engaged the students by giving examples from our daily life. Through this novel approach, he could effectively imbibe basic underlying principles behind emerging concepts & trends on the minds of students.

The last presentation was from a practising specialist Mr. Devendra Arolkar—a Joint General Manager from Larsen & Toubro Limited who introduced the students to real life situation prevailing in the industry about quantum growth to be achieved through Mergers & Acquisitions. He drew attention to the new trend in India Inc. to attain the status of becoming an 'Indian Multinational' in short time. For achieving this objective, large corporates are now increasingly resorting to inorganic growth options. The topic of his presentation "Inorganic growth - An Operations Strategy" highlighted the differences between the slow & steady organic growth over a period of time & inorganic growth the M & A activity can achieve in very short time. He brought out the efforts of his company to achieve energy security by acquiring coal blocks in Australia. The sharp performance comparison on energy front between India & China unfolded in his presentation made students aware of the limitations, we as a country face.

The summit ended on a high note which appealed the students as prospecting managers of tomorrow to meet these challenges in the business environment more effectively for transforming the status of Indian economy from a "developing" one to the "developed" one.



SECTION - 5

Proceedings of Seminar

‘Why India !!!’

On

22.10.2010

At

**Institute Of Directors (IOD),
New Broad Street House, 35 New Broad Street,
London EC2M 1NH**

INVITATION

**Vidya Prasarak Mandal's
London Academy of Education and Research**

Cordially Invites You to

Why India !!!

Seminar

Friday, 22nd October 2010

At

Institute of Directors (IOD),
New Broad Street House, 35 New Broad Street,
London EC2M 1NH

Time:

16 hrs to 19 hrs

Contact:

Harsh Ondhia
Lall Ondhia Ltd.
Charter House, 8-10 Station Road, Manor Park
London E12 5BT
Ph: 020 8478 5054; Fax 020 8514 7475
e-mail: harsh@lallondhia.com
website: vpmthane.org

Programme:

Speakers	Topic: Why India !!!
Dr. Vijay V. Bedekar	Genesis
Dr. Guruprasad Murthy	An Overview
Dr. Vishnu Kanhere	Finance & Legal Framework
Dr. Subramanian Siddhan	Pharmaceutical Industry
Dr. P. M. Kelkar	Technology & Innovation

Mr. Krishan Ralleigh
*Chief Editor,
India Link International,
a U.K. based magazine,
proposed a vote of thanks.*

REPORT ON - WHY INDIA !!! - SEMINAR

VPM's London Academy of Education and Research (LAER), London, U. K. conducted a Seminar on the theme "Why India" on Friday, 22nd October, 2010 at Institute of Directors (IOD), New Broad Street House, London EC2M 1NH. The Seminar commenced at 4.00 pm (London time) and lasted for 3 hours. Dr. Guruprasad Murthy, Professor-Director-General of Dr. V. N. Bedekar Institute of Management Studies (DR VN BRIMS), (Thane) welcomed the delegates to the seminar and also welcomed those who were waiting to participate in the seminar through web cast in India. Dr. Murthy recalled that this was the third seminar in the series which started in May, 2009. The first seminar was conducted on 26th May, 2009 on the theme "Global Meltdown - Lessons to be Learnt" at Brunei Hall, School of Oriental and African Studies, (SOAS), University of London, London followed by the second seminar on two themes "Corporate Social Responsibilities" and "Fraud Management and Control (An Anti-Fraud Theme) at the same said venue. Further, Dr. Guruprasad Murthy and Dr. Vishnu Kanhere conducted a one day management development programme on "Finance Management for Managers" at Milton Keynes, Buckinghamshire, U.K. on 31st October, 2009.

Dr. Vijay V. Bedekar, Chairman of VPM (Thane) and Director LAER initiated the proceedings of the seminar "Why India". In his introductory speech, he said that India is growing and transforming inspite of the poverty line. Poverty, delays and corruption do exist. However, India at one time known as a third World country is now slated to be an emerging World power after US and China. It is expected to be the third largest economy in terms of GDP in USD million by 2040.

In fact, the theme “Why India”, was borrowed from the ideas which were published in newspapers when Mr. Cameron, the Prime Minister of U.K. visited India in July, 2010. Mr. Cameron initiated the thought Why India? He also provided an answer by saying that India is a responsible global power and while Britain is the World’s oldest democracy, India is the largest. India is a pluralistic and tolerant society, he added. The transformation in India can be seen with many leading Indian business houses like Infosys, Mahindra and Mahindra and Tata’s donating princely amounts to the Harvard Business School. The reverse flow of wealth has started. He also cited a recent statement by Nita Ambani, wife of India’s richest man and industrialist, Mr. Mukesh Ambani, while delivering a lecture at London School of Economics on the topic ‘Towards an Indian Renaissance: Building Institutions of Excellence’. Ms. Nita Ambani told the audience to ‘join the movement that is India.’ Dr. Bedekar commended this thought to the audience.

Dr. Murthy addressed the theme “Why India” by presenting an overview of India’s social and economic progress within the framework of democracy. He started by saying that the cornerstone of India’s social and economic life is political democracy with the individual being at the heart of all that happens in the country. He reiterated this point by quoting parts of the preamble of the Constitution of India “Fraternity assuring the dignity of the individual”. Dr. Murthy identified India’s journey since 1947 and spoke about the license raj which was the outcome of the pre-1991, paradigms of socialism, controls, regulation, state capitalism and sheltered markets. In 1991, India’s journey towards liberalisation began. He presented a graphic picture of the key parameters of the Indian economy since liberalisation which included the gross domestic savings as % of GDP, the industrial and services sector growth vis-à-vis the GDP growth and the sector wise occupation

(%) and the contributions of the respective sectors (%) to GDP. He also highlighted the improved position of India with respect to foreign exchange reserves, foreign direct investment and foreign institutional investment as of date vis-à-vis May, 1991. India is excelling in all spheres of life viz. social and economic and as a young nation it is providing to the World-at-large skilled cost effective competitive work force. India today is a favoured nation as a destination because it is a happening place and a global hub for wealth creation. He also projected a very bright future for India in terms of its role as an intellectual engine power of the World and an important contributor to knowledge society. He spoke about the views of important persons and sources like the Prime Minister of U.K., Mr. David Cameron and the BBC News Channel and their perception of India’s role in the globe. Dr. Murthy, said that in future ideas and thoughts will be conceived in US, designed and made viable by India, manufactured in China and finally marketed and serviced by India and the USA to the rest of the globe. Dr. Murthy concluded by saying that India is personification of change and hence will ride at the crest of the wave of the social and economic change occurring in the World given its strong political will of functioning within a democratic form of polity.

Dr. Prabhakar M. Kelkar, Professor-Director, DR VN BRIMS then presented ‘Advances on Technology and Innovation in India’. Dr. Kelkar started by citing several events which demonstrated India’s march towards technical excellence and technological and innovation driven progress across various sectors of the industrial and other sectors of the Indian economy. He said that India has engineering capabilities and means to innovate. In addition, India enjoys the English advantage which it should leverage rather than go chasing low value manufacturing. Dr. Kelkar

presented examples of various companies which have contributed to improving management of key resources like energy and also innovations which have contributed to improved decision making. He highlighted various dimensions of India's progress in the field of technology and innovation. India he said is a centre for R & D design and an intellectual engine power of the World. Indian companies and top management personalities of Indian companies have become role models. In fact, Harvard business school is preparing case studies on business models of Indian Cos. like MindTree and Zensar Technologies which emerged unaffected during the global meltdown. Dr. Kelkar also presented a comparative view of China and India with a FICCI 2010 report on Indian manufacturing. The role of Maharashtra in the industrial economy of India was highlighted and the contribution of Maharashtra towards improved productivity was cited. Further, there is lot of business at the bottom of the pyramid and many companies like Phillips, Nestle, Coco-Cola and GSK are addressing the same. India's record of innovation has also shown improvement and India is emerging as a low cost centre of innovation. India's achievement included Chandrayan and Nano. Again, the 'power of ideas' campaign conducted by the Economic Times, India in January, 2009 is something which is innovative. Professor Anil Gupta's Honey Bee network is another unique way of connecting people with problems and innovators with solutions. The focus is on frugal innovations providing service to customers at the bottom of the pyramid. Dr. Kelkar also addressed innovations in rural areas and said that rural India is in the vortex of change. The rural hinterland of the country is absorbing innovation as part of its appetite for change and is integrating with the developments arising out of liberalisation and globalisation. Another opportunity for small towns is USD 2 billion food industry, expected to grow to USD 6 billion by

2015. In conclusion, he said India is a big opportunity for growth of both hi-tech or low-tech businesses with a large consumer base, young, talented human assets base, untapped and hidden potential of tier-two and tier-three cities, towns and villages. He concluded by saying 'India is the future'.

The third presentation was made by Dr. Siddhan Subramanian Governing Body Member of Dr. V. N. Bedekar Institute of Management Studies (Thane) and Business Advisor to the Board, Arch Pharmalabs Ltd. on "Why India - Pharmaceuticals". Dr. Siddhan started by saying that Indian pharmaceutical industry is a success story inasmuch as it is a source of employment and also ensures that essential drugs are available at affordable prices to the millions of the sub-continent. He said that Indian pharmaceutical industry is a sun-rise industry with a strong science technology base and ranks third in terms of volume of production in the World. It's a fast growing industry with a compounded annual growth rate of 11 per cent between 2004-08 and also a most successful example of knowledge based industry. Indian pharma production constitutes about 14% by value which is 1.5% of global value. Dwelling on certain technical dimensions viz. generics, active pharmaceutical ingredients (API's) and branded products, he said that generic products can be produced and distributed without patent production and could be sold without advertising. On the other hand he said that API is the chemical constituent that has the biological activity giving the desired benefit. Dr. Siddhan presented many graphs and maps to show the 'locus standi' of generics in the market place, the US generic market, the business forecast for generics, countries which will have technical gains, the global generics forecast and a wide variety of other related matters like global pharma forecast in terms of annual sales value, Indian pharma growth, Indian pharma imports and exports, World

contract research, pharma services business, FDA approved plants outside (USA), health related patents and generic patent. Other graphs included R & D investments vis-à-vis GDP of different countries, Indian spend on R & D biotech industry in India and country attractiveness of the pharma industry. He also said that India is an important M & A player in the pharma industry and presented trends till 2008 and since 2009. In conclusion he said that, India is a country that has made great strides in Pharma sector as a sustainable provider of affordable health care to India.

The fourth presentation by Dr. Vishnu Kanhere, Governing Body Member of Dr. V. N. Bedekar Institute of Management Studies (Thane) and Eminent Practicing Chartered Accountant was on the investment and operating environment in India. The perspective of his presentation included the financial, organisational and taxation framework. In addition, he also addressed the issues of special concessions available to overseas investors and risk management alongwith de-risking solutions. He initiated his presentation by saying that India is complex and has many challenges. However, India is a land of tremendous potential and opportunity, Hence, India is a destination of choice. He identified the inbound investments which included foreign direct investment, portfolio investments, venture capital funds and individuals. The financial framework of India he said included the central banker viz. the Reserve Bank of India and other regulators and regulations namely Securities and Exchange Board of India (SEBI), Stock Exchange Authorities, Insurance Regulatory and Development Authority and Foreign Exchange Management Act. The financial framework also includes commodity trading, forex markets and online exchanges with their own prescribed rules. India offers a good, well regulated banking system with World class banking services. In the financial markets,


SEBI has emerged as a mature regulator and there are legitimate arbitrage opportunities. At the same time, the modus operandi, of the National and Bombay Stock Exchanges, is transparent and efficient. The turn around time of various business activities and transactions has improved because of talented manpower as well as electronic media. Foreign Exchange management has been a success. The expression 'regulation' is replaced by the word 'management', repatriation facilities are eased and there is a minimum withholding tax. In addition, there are bi-lateral treaties which provide for various additional facilities, unique and special, to the parties to the bi-lateral agreement. The online and commodity exchanges are also well regulated, globally accessible, safe, transparent and efficient, providing online trading facilities. The commodities in which online trading takes place include: oil seeds and produce, steel and metals, products and gold. Dr. Kanhere also addressed the insurance sector which he said was well regulated and provides for a wide variety of de-risking solutions viz. life, general (fire, marine and others) health insurance and other emerging products. Emerging investments include insurance with single premium policies, investment in deposits in trusts, bank deposits - back to back, mutual funds / time share in emerging sectors. Presenting the organisational framework he identified options open in terms of forms of organisations which include, inter-alia, proprietary businesses, Hindu Undivided Family, partnerships, companies and consortium. The taxation framework, he said, was fairly stable and has evolved policies based on trust and transparency. Modern technology has enabled filling of tax returns and also payment of tax on an online basis. This ensures minimum human intervention and the concomitant hassles. He said that by global standards, India has a moderate tax regime and the intensity of tax rate is much lower than

U.K., US, Australia, Germany and a few other countries. Only Singapore and Brazil have tax rates which are relatively lower than India. The special incentives and provision include: safe harbour provision - direct tax code, advance rulings, double tax avoidance treaties - DTAA and favourable withholding tax rates (5 to 15%). The enabling framework is electronic backbone and safe, secure, easily accessible, low cost management of various transactions, of course,

along with arbitrage opportunities. The supportive framework for FDI's i.e. OCB's and NRI's include encouragement of capital inflows, ease of organisation, smooth governance, beneficial taxation and liberalised exchange management of outflows and remittance factor. He also presented a comparison of problematic factors for doing business in India vis-à-vis China and presented some strategies for SME's.

PRESENTATION - Dr. Guruprasad Murthy



WHY INDIA???



A Presentation
by
Dr. Guruprasad Murthy
Director-General
Dr. V. N. Bedekar Institute of Management
Studies, Thane

INDIA's DEMOCRACY




"India, as an ancient and at once diverse and somehow unified population of more than one billion people, deserves recognition for making steady progress under democratic governance without trampling on its neighbours. India achieves greatness by maintaining a democratic rule-of-law government and living in relative peace. India achieves greatness by improving the quality of life of its free citizens."

"Fraternity assuring the dignity of the individual" is the cornerstone of the Constitution of India

PRE 1991 PARADIGMS

- Socialism
- Controls
- Regulation
- State Capitalism
- Sheltered Markets
- High Population Growth Rate > 2% p.a.
- Growth Rate < 3% p.a.
- Net Growth Rate

Success was whom you
knew rather than what you
do or could do
(NARAYANA MURTHY
in 2009)



INDIA 1991 Licensed Raj to Liberalisation

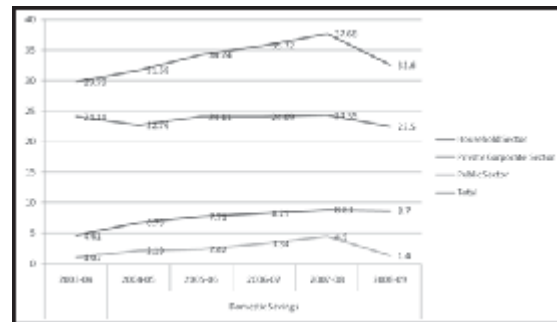


“The crisis in the economy is both acute and deep. We have not experienced anything similar in history of independent India” - Dr. Manmohan Singh, Finance Minister, Budget Speech, 24th July, 1991



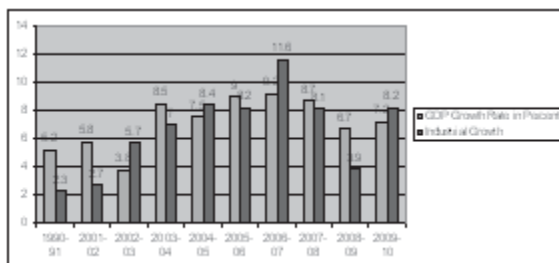
WTO Meetings of 2006 and 2009 India's Commerce Minister reflected “India had been a mute spectator. Now, we are openly demanding that the high farm subsidies in developed countries be substantially reduced.”

GRAPH - ONE INDIA: SAVINGS PROFILE 2003-04 TO 2008-09 Gross Domestic Savings As % of GDP



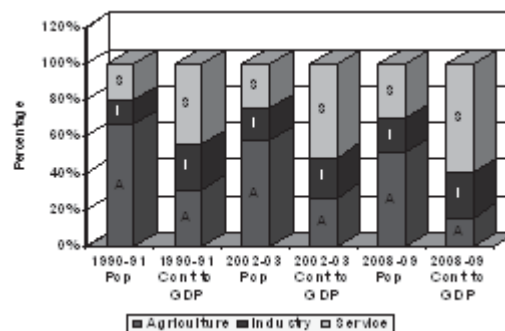
SOURCE: Economic Survey Reports of Respective Years

GRAPH - TWO INDIA: GDP GROWTH RATE (%) & INDUSTRIAL GROWTH (%)



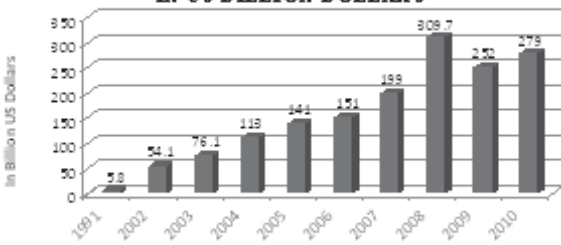
SOURCE: Official Website of Ministry of Finance Government of India – India Annual Reports 1991, 2000-01 to 2009-10

GRAPH - SIX INDIA: SECTOR WISE OCCUPATION (%) & CONTRIBUTION TO GDP (%)



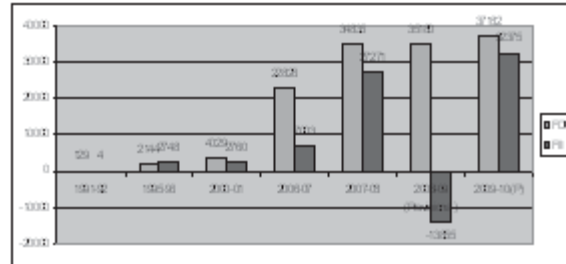
SOURCE: Official Website of Ministry of Finance Government of India Annual Reports of respective years, <http://finmin.nic.in/reports/annualreport.asp>
Government of India Economic Survey of respective years. <http://indiabudget.nic.in>

**GRAPH - SEVEN
INDIA: FOREIGN EXCHANGE RESERVES
IN US BILLION DOLLARS**



SOURCE: Official Website of Reserve Bank of India Report on foreign exchange reserves

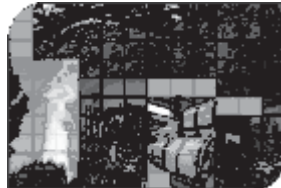
**GRAPH - EIGHT
INDIA: FDI AND FII INFLOWS
(US \$ MILLION)**



SOURCE: RBI Monthly Bulletin September 2010

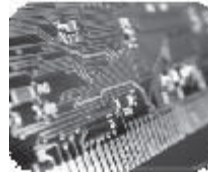
INDIA - ECONOMICS

- Strong Economy
- Highest GDP growth rates, high growth trajectory
- Fourth largest's GDP (PPP basis) in the World at \$ 3.5 tn
- GDPs is expected to hover around 8 – 9% and exceed 10% in time to come



INDIA - ECONOMICS

- Excelling in Technology, Industry and Entrepreneurship



INDIA – YOUNG NATION

- Skilled cost effective, competitive workforce, willing to work harder
- Higher growing wage and disposable income
- Increasing urbanisation
- Consumption led economy across metros, urban and rural areas – largely untapped and increasing year on year
- Emerging middle class
- Prosperity Growth > Inflation Rate



INDIA - FAVOURED NATION AS A DESTINATION

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Global hub for Wealth creation

- Materialism is no longer a taboo
- Profit is no longer a dirty word
- Indian Cricketers / Actors are Brand Ambassadors for Global Brands.



REASONS FOR SUCCESS

India's success is market-led whereas China's is state induced



The entrepreneur is at the centre of the Indian economic model and the individual is at the centre of the Political model too.

IMPLICATIONS OF INDIA MODEL



'Domestically led' means:

- Insulation from global downturns
- Less volatility
- Came out of the global crisis faster

GOLDMAN SACHS RESEARCH 2007

India's GDP will quadruple by 2020 and surpass that of the US by 2050



P. M. of U.K. David Cameron visited India in July 2010.

"The Prime Minister's enthusiasm for drawing India closer is evident."

- BBC News channel (27 July 2010)



"UK and India relationship is beneficial not just for the two countries, but for the world. It is exhilarating to see a country growing at super-speed and it is a joy to experience the zeal."
-The British High Commission recorded the statement of the P.M. of U. K.

GLOBALISATION

Globalisation is about

- Sourcing capital from where it is cheapest
- Sourcing capital and talent from where it is best available
- Producing where it is most efficient
- Selling where the markets are, without being constrained by national boundaries
- Sharing of ideas, knowledge and culture



INDIA TO EMERGE AS WORLD CLASS NATION THROUGH

- Value Creation
- Value Delivery
- Living Values



THE FUTURE

USA

INDIA

CHINA

USA & INDIA



Conceived



Designed



Manufactured



Serviced

India is Personification of Change



Obama's Economic Advisor Backs India's Line Of Development, Calls It 'Mumbai Consensus'

India At CWG: Mission Accomplished 101%

Gush of dollars set to hit India

'GDP to grow by 9.2% in FY11'

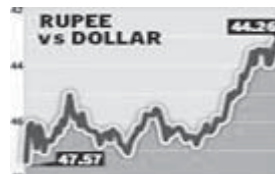
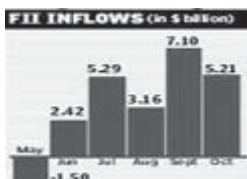
India will remain a power-deficit country for many many years

India back In UN Security Council after 19 years

India drops 2 ranks in hunger index

IMF raises India's growth forecast 9.7 %

Should we rejoice or worry about flood of FII funds?



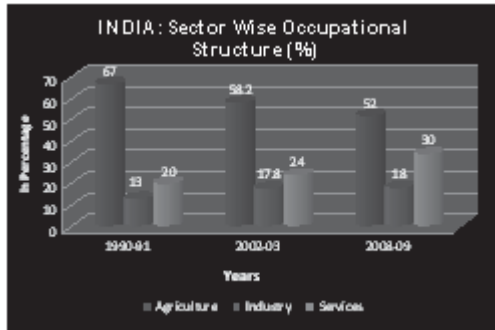
Publication: The Times Of India Mumbai;
Date: Oct 19, 2010; Section: Front Page; Page: 3



India is the only millionaire – the One land that all men desire to see, and having seen once, by even a glimpse, would not give that glimpse for all the shows of all the rest of the globe combined.

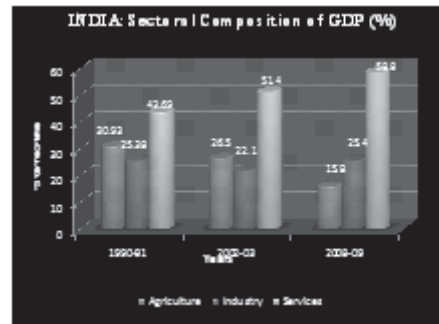
- Mark Twain, in *Following the Equator*

GRAPH - FOUR



SOURCE: Government of India Economic Survey of respective years. <http://indiabudget.nic.in>

GRAPH - FIVE



SOURCE: Official Website of Ministry of Finance Government of India Annual Reports of respective years. <http://finmin.nic.in/reports/annualreport.asp>

PRESENTATION - Dr. P. M. Kelkar

Why India!!! Technology and Innovation

Dr. Prabhakar M. Kelkar
Director, VPM's Dr.V. N. Bedekar Institute of Management



What do these events demonstrate?

- India replaced US as the 2nd most important FDI destination for transnational corporations during 2010-12 (UNCTAD- United Nations Conference on Trade and Development's latest Survey)
- Need not think of making low cost products like shoes, lighters, pens, when it can make ipads and iphones (Boston Consulting Shanghai partner David Lee)
- Has engineering capability and means to innovate. Got English advantage which it should leverage rather than go chasing low value manufacturing (Boston Consulting)

What do these events show?



- Intel Capital Corporation invests \$23 million in 3 Indian technology companies
- July Systems (mobile internet solutions enabling media brands to publish, distribute, monetize inventory and personalize services for consumers)
- KLG System (smart grid and energy management and efficiency solutions to power utilities and end-users)
- MCX (leading commodity futures electronic exchange)

What do these events show?



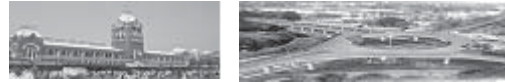
- Fortis Hospitals, Apollo Hospital and Max Healthcare sign exclusive pacts with 3 US corporates
- ABNAMRO signs \$1 billion contract with IBM, TCS and Infosys
- TCS and Wipro bid for \$200 million outsourcing contract from Royal Mail Group (won UK's Child Maintenance & Enforcement Commission contract)

What do these events show?



- 25 Years ago, Texas Instruments (TI) set up R & D Centre in Bangalore. Today, there's hardly any product at TI worldwide not touched by the engineers in India
- TI, Intel and Cadence have made India the chip design hub of the world
- All majors from GE to Samsung are getting their global R & D done out of Bangalore

India as Centre for R & D, Design



- Chennai emerged as hub in engineering design, R & D and product development for global players. Provides good eco-system, talent pool and growing number of OEMs
- Automobiles, telecom, infrastructure and wind energy sectors have set up their R & D centres
- Visteon, Caterpillar, Nissan-Renault, Vestas, Kone, FLSmith, Nokia, Ericsson, Flextronics, Alcatel, Tessolve, Sanmina-SCI corporation, Defiance Technologies have set foot-print here
- Mahindra & Mahindra established Research Valley on 145 acres of land to undertake design, prototype development and testing new vehicles

India's Intelligence hard to ignore



- IBM has chosen India research lab to develop new technology interfaces for the mobile phones
- Announced partnership with IIT Bombay to develop mobile device interfaces that can be used by semi-literate or illiterate people
- Doing projects on service science with ISB Hyderabad
- IIT Bombay working with Nokia develop system where consumers will be able to send mobile messages in mother tongue. IDEA Mobile has launched this service

India's Intelligence hard to ignore



- Yahoo collaborating with IISC Bangalore in the area of 'machine learning' which is a branch of artificial intelligence wherein a computer program will analyze large data and make predictions about future customer behaviors, advertisements that have high success rate, determine fraudulent transactions and help investors make right decisions
- TCE College of Engineering working with Honeywell to develop imaging system which can see objects behind the wall
- SAP Research collaborated with People Education Society's Institute of Technology (PESIT) to develop software for rural health management



Business as you never thought possible



- SAIL and Tata Steel have created mjunction, which offers buyers and sellers of steel, efficient, transparent, convenient and credible platform to do business over the Internet
- mjunction offers innovative eSelling, eSourcing, eFinance and eKnowledge services across steel, coal, automobiles, consumer products companies making it to be country's largest eCommerce company

Harvard Business Case Study on Indian Companies

- Harvard Business School plans to make case study on business models of MindTree and Zensar Technologies that emerged unaffected during global meltdown
- HBR students will study personality profiles of Kris Gopalakrishnan (Infosys), Anand Mahindra (Mahindra and Mahindra), Britannia Industry's Vinita Bali and ICICI Bank's K.V. Kamath
- HBR Professor David Gavin & his research group are conducting interviews of 25 senior executives of Indian firms to understand distinctive qualities of Indian business environment, organizations and leadership

Harvard Business Case Study on Indian Companies

- As per Gavin, Infosys takes care of multiple stakeholders, not just the shareholders
- has wonderful system for planning for slack. Fair degree of unpredictability in environment helps them to move around their resources
- MindTree and Zensar Technologies have distinctive management practices. MindTree has culture of very strong value system like sharing and collaborations. Zensar has a vision community, where employees are empowered to develop major policies and issues for the company

FICCI 2010 Report on Indian Manufacturing

INDIA

- Rapidly climbing value chain in quality by making cutting edge quality products
- Economy driven by entrepreneurs and joint ventures with MNCs
- Pricing mechanisms are market-driven and subsidies, if any, are absolutely transparent
- NPAs are mere 1.5 to 3%

CHINA

- World class manufacturing hub, economies of scale
- Economy driven by massive FDI investments by MNCs
- Pricing mechanisms are unclear
- Average NPA in could be as high as 25%.
- Issues with quality of some products

FICCI 2010 Report on Indian Manufacturing

CHINA

- Aggressive exports of manufactured goods may result in dumping issues
- Highly successful SEZs and large exports markets

INDIA

- Entrepreneurs have focused more on design, innovation and quality. 14 Indian Automakers received Deming Award
- Needs to learn 'how to scale up production and how to set up huge Special Economic Zones' that provide business friendly climate and tax havens with simplified regulations

Maharashtra: Industrial Investment Destination

- World Competitiveness Report-2006 ranked Maharashtra ahead of developed nations like Italy, Korea, South Africa, Russia, Indonesia etc.
- A factory in Maharashtra employs 16% more capital, and 2% more labor but produces 37% more output and adds 51% more value than a factory in other parts of India
- In 2009-10, Maharashtra's service sector contributed 40% and its industry base 26% to India's GDP

Maharashtra: Industrial Investment Destination

- State has followed industrial investment and infrastructure creation policy aimed at sustainable industrial growth through innovative initiatives for the development of business and provides positive and conducive industrial climate
- Largest power generating capacities in India, abundant water availability, over 250 industrial parks spread over 52,000 hectares and a highly technical HR base
- Pune is established auto hub for over 50 years with well developed SMEs and MSMEs

India: Destination for Outsourcing Clinical Research

- World's largest patient pool
- Offers 700,000 specialty hospital beds, 221 medical colleges and skilled English speaking medical personnel
- Clinical trials have grown from 60 million in 2003 to more than \$100 million in 2006
- Ernst and Young predicts that this market will increase to \$1 billion by 2010 and more than 15% of global clinical trials will be conducted in India by 2011
- Huge population and genetic versatility makes India a cheaper alternative for research and clinical trials in embryonic Stem Cells. This industry expected to grow to \$540 million with a growth rate of 15%

Business at the bottom of the pyramid

- Every year, 40 m families jump from poverty to the bottom-of-pyramid club
- Philips, GSK, Nestle, Coca-Cola, HUL, Marico, Godrej and Dabur rushing to bottom of pyramid market for consumers
- Horlicks launched Asha, milk food drink for rural consumers in AP; PepsiCo's plans to launch snack costing between Rs. 1-5 for malnourished people; Vitingo, power-based beverage coke selling @ Rs.2.5 per sachet; Maggie noodles at Rs. 4/- for people in Dharavi slums
- Philips promoting green energy (woodstove range), lighting solutions (LED lanterns) and accessible healthcare for villages

India's Record of Innovation

- India: 1 out of 6 countries to launch satellites. Successfully launched Chandrayan-1 spacecraft on the moon in 2009. Completed development and testing of LCA
- Established beyond doubt ability to safely handle and process atomic materials and make reactors for peaceful purposes
- Today, evolving as centre of innovation for low-cost healthcare devices, wind power, micro-finance, electric cars, refrigerators
- Tata's Nano, Nokia's made in India phone, Vodaphone mobile phone (examples of high tech innovations for making affordable products)

Chandrayan & Nano



Innovations for Bottom of Pyramid

- Honey Bee Network encourages frugal innovations aimed at serving customers at bottom of the pyramid
- National Innovation Foundation under Chairmanship of Dr. Mashelkar and guidance of Prof. Anil K. Gupta has database of about 14000 innovations
- Cycle that runs on water and land, Scooter-mounted floor mill and washing machine, Helmet that doubles as mobile phone charger using solar and wind energy in 40 minutes, Mitti Cool Refrigerator, Cooker, Cycle operated horse-shaver, Swatch water purifier



Transformation in Rural India



Innovations for Rural India



- Godrej Boyce developed and launched small size portable refrigerator Chhotu Cool for price of Rs. 3000 to 3500 (£43 to 50) for bottom of the pyramid consumers
- GE Healthcare developed and launched Mac400, a portable ECG machine for patients in rural India, costs just 600 £ and reduced cost of ECG to \$1. Marketed in 113 countries of the world
- Tiny Bank Branch can be set up in remote areas for just Rs. 15000/- (£220). Utilizes mobile phone and finger print scanner to manage 50000 account holders

Rural road for new venture opportunities

- Rural does not mean poor. Rural people have motor bikes two-wheelers and cars, trucks, tractors (exceptional performance year after year by Hero Honda, Bajaj Auto and Maruti-Suzuki)
- India offers advantages of open economy, untapped rural markets and a talented workforce
- Expats have discovered that long term staying power and constant innovation are keys to succeed in India
- Jim Foster, American entrepreneur is venturing to provide rural households with good, affordable, internet broadband access e.g. airjaldi.net

Rural road for new venture opportunities

- Stanford graduate Peter Frykman is supplying DripTech drip irrigation systems and uses that experiences for Chinese market
- Sam Goldman, a Stanford graduate started affordable lighting solutions for rural and low income consumers
- John Howard, a former McKinsey Consultant launched Duron Energy co. for selling solar powered plug and play devices for lighting and battery charging to rural consumers
- Freeman Murray built technology incubator for young start-ups in Bangalore

Small towns have big appetite



- HAPPY Meals in Gwalior, Zinger Burgers in Vizag, Baby corn pizzas at Haridwar, Broccoli pasta in Kota; multinational food chains love small-town India spend on fast food
- Kota, Shirdi, Allahabad and Kochi account for about 25% of the business of multinational food chains
- Domino plans to open 70 new stores in next 12 months in tier 2 and 3 towns and cities. McDonald, KFC have big estimates from small town business
- Indian quick service chain is the fastest growing restaurant in Asia-Pacific with value growth of about 20% as per report by National Restaurant Association of India (NRAI)
- \$ 2 billion India's organized restaurant industry is expected to grow to \$ 6 billion in 2015. \$10 Billion is total hotel industry

In conclusion....

- India provides a big opportunity for growth of both high tech or low tech businesses
- It has huge consumer base, talented people to convert idea into manufactured products/ service. Its vast supplier base, growing infrastructure, IT driven technology can give cutting edge to your business
- Almost all recent achievements have come out of tier 2 and tier 3 cities and towns and villages. Mass education and government support will further achieve sustained and superior business growth

- **India Is**
The
Future!





SECTION - 6

A Research Monograph

On

***'Management of Micro, Small
and Medium Enterprises
(MMSME)'***

For

The Ensuing Seminar

On

11. 02. 2012,

For

Academic Year 2011-12

Written By –

Ms Sonal Dabke, Assistant Professor

Ms. Gitanjali Kapoor, Assistant Professor

Management of Micro Small and Medium Enterprises

Even today, we are generally told that gigantic organizations are inescapably necessary; but when we look closely we can notice that as soon as great size has been created there is often a strenuous attempt to attain smallness within bigness.

“Small is beautiful” – E.F.Schumacher, economist, 1911–1977

MSME – An Overview

Micro, small and medium enterprises (MSME), as per MSMED Act, 2006¹, are defined based on their investment in plant and machinery (for manufacturing enterprise) and on equipment for enterprises providing or rendering services. The present ceilings on investment for enterprises to be classified as micro, small and medium enterprises are given in figure 1:

Figure 1: The limit for investment in plant and machinery / equipment for manufacturing / service enterprises, as notified, vide S.O. 1642(E) dtd.29-09-2006

	Manufacturing	Services Sector
Enterprises	Investment in Plant &	Investment in
Micro	< Rs 25 Lakhs	< Rs 10 Lakhs
Small	Between Rs 25 Lakh and	Between Rs 10 Lakhs and
Medium	Between Rs 5 Crores and 10	Between Rs 2 Crores and 5

MSMEs play a vital role in the growth of a country. MSMEs are a powerful medium, in fact an incubator for first generation entrepreneurs. They contribute approximately 40% of the gross industrial value added in the Indian economy. This sector generates largest employment opportunities for the Indian population next only to the agricultural sector. The reason for this can be attributed to the less capital intensive and high labour absorption nature of the MSMEs. They build on the strengths of traditional knowledge and skills of people by bringing together capital, technologies and innovative marketing practices.

¹http://www.dcmsme.gov.in/ssiindia/defination_msme.htm

MSMEs – The Story So Far

MSMEs are not a new concept for India and have been existing since the times immemorial. Some of the names assigned to the MSMEs were cottage industries, handicraft, village industries, and home Industries. There were a variety of occupations, forming a part of the industrial sector of the Indian economy, which included cloth weaving, bee keeping, manufacture of brass artefacts, locks, safes, carpets etc.

Pandit Jawaharlal Nehru laid the foundations of modern India. The goals and objectives set out for the nation by Pandit Nehru on the eve of Independence, namely, the rapid agricultural and industrial development of our country, rapid expansion of opportunities for gainful employment, progressive reduction of social and economic disparities, removal of poverty and attainment of self-reliance remain as valid today as at the time Pandit Nehru first set them out before the nation².

“A number of textile mills is not industrialisation. It is playing with it. Industrialisation is a thing that produces the machines. It is a thing that produces steel.”

Pandit Nehru quoted from Freedom First, Bombay, October 1960.

In 1948, immediately after Independence, Government introduced the Industrial Policy Resolution. This outlined the approach to industrial growth and development. The earliest efforts made by the Government of India to develop and establish SMES date back to 1953-54 when the Ministry of Commerce and Industry invited an International Team through the courtesy of the Ford Foundation in order to suggest measures for the same. As a result of this, the Central Small Industries Organisation and the Small Scale Industries (SSI) Board were set up in 1954 -55. The Board for the very first time attempted to define a SSI –

“A unit employing less than 50 persons, if using power and less than 100 persons without the use of power, and with capital assets not exceeding Rs. 5 Lakhs.”

Over the years this definition went through various revisions where the ceilings on capital investment were raised in order to account for price escalation of capital equipment because of inflationary forces and to enable the growth and modernisation of SSI.

The Industrial Policy Resolution of 1948 was followed by the Industrial Policy Resolution of 1956 that was shaped by the Mahalanobis Model of growth, which suggested that emphasis on heavy industries would lead the economy towards a long term higher growth path. The Industrial Policy Resolution of 1956 had as its objective, the acceleration of the rate of economic growth and the speeding up of industrialisation as a means of achieving a socialist pattern of society. In 1956, capital was scarce and the base of entrepreneurship not strong enough. Hence, the 1956 Industrial

²<http://siadipp.nic.in/publicat/nip0791.htm>

Policy Resolution gave primacy to the role of the State to assume a predominant and direct responsibility for industrial development.

It is essential to accelerate the rate of economic growth and to speed up industrialisation and, in particular, to develop heavy industries and machine making industries, to expand the public sector, and to build a large and growing cooperative sector.

Industrial Policy Statement, 1956

Three decades from 1956 to 1986 can be considered as the growth years for SMEs. Every five year plan and annual plan included measures for improving the competitive strength and self-resilience of the SSIs. One of the highest growth rates registered by the small scale sector was in the year 1978 when the Janata Party, then in power, launched a massive programme to promote SSI. The Industrial Policy of 1977 aimed at curtailing the large sector and emphasised on the growth of the small sector in a big way.

“The main thrust of the new policy will be on effective promotion of cottage and small industries widely dispersed in rural areas and small towns. It is the policy of the government that whatever can be produced by small and cottage industries must only be so produced.”

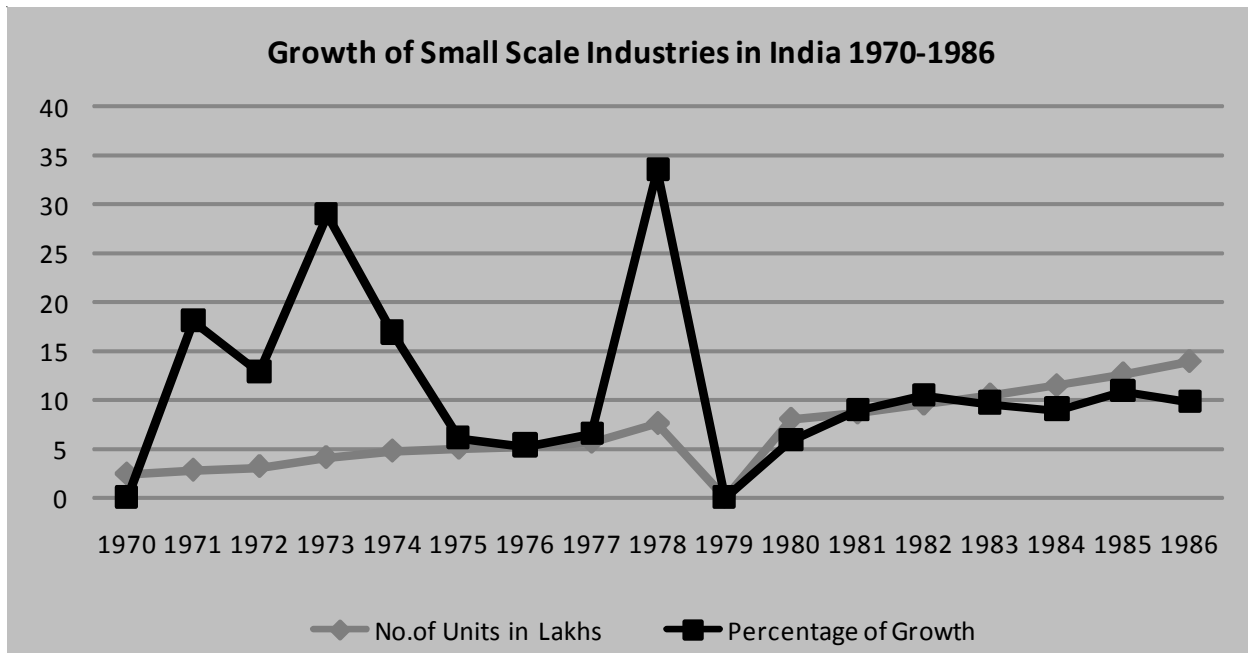
Industrial Policy Statement, 1977

Industrial Policy 1977 classified the small sector into three categories –

- a) cottage and house hold
- b) Tiny sector (Investment in machinery and equipment up to Rs 1 lakh and situated in towns with a population of less than 50,000) and
- c) SSIs comprising industrial units with an investment up to Rs 10 lakhs and in case of ancillaries with an investment in fixed capital up to Rs. 15 lakhs.

The Industrial Policy (1977) categorically stated: “Large Houses would have to rely on their own internally generated resources for financing new projects or expansion of existing ones. The funds of the public sector financial institutions would be largely available for the small sector. Further, even in the case of capital intensive fields where the large industrial houses were dominant, preference would be given to the medium entrepreneurs and the public sector corporations in the future, so that further concentration of economic power might be restricted.”

Figure 2: Growth of Small Scale Industries in India 1970-1986



Source: Official Website of Ministry of MSME, Government of India

Notably this was also the period of exit of high profile companies such as Coca-Cola and IBM from India on the grounds of Foreign Exchange Regulation Act 1973 (FERA) violation and three foreign oil companies like Esso, Burmah Shell and Caltex were persuaded to sell out. The Congress Government came back to power in 1980. The focus of this government was towards integrated industrial development of the small scale along with the large scale. From 1980 to 2003, number of SME units in India grew approximately at a compound annual growth rate of 14 %, total output at 12%, employment at 7 percent, exports at 22% and contribution to GDP increased at the rate of 14 %.³

MSME Development Act 2006

The MSMED Act became operational from 2nd October 2006 after being debated in the parliament for over an year. It was welcomed by the industry with great cheer. Micro industries were given a privileged status along with small and medium and the definitions of small, medium and micro also underwent a change. The classification was now based on investment on plant and machinery and not in terms of turnover and employment (See figure 3 for details)

On 9th May 2007, the President of India, amended the Government of India Rules, 1961 and merged the Ministry of Agro and Rural Industries (Krishi Evam Gramin Udyog Mantralaya) and Ministry of Small Scale Industries (Laghu Udyog Mantralaya) into a single Ministry, namely, “MINISTRY OF MICRO, SMALL AND MEDIUM ENTERPRISES (SUKSHMA, LAGHU, AUR MADHYAM UDYAM MANTRALAYA)”

³SME Development in India: Issues and Policy Concerns, Keshav Das, Institute of Developing Economics

Figure 3: Salient Features of MSMED ACT 2006

Definitions	Memorandum	Statutory Frame
<ul style="list-style-type: none"> • Defines “Enterprise” instead of “Industry” to give due recognition to the Service Sector. • Pride of place to MicroEnterprises. • Investment ceiling for Manufacturing Small Enterprises raised to Rs 5 Crores. • Defines “Medium Enterprises” to facilitate technology upgradation and graduation. 	<ul style="list-style-type: none"> • Two-stage registration process of SSI substituted with optional filing of memorandum with District Industries Centres (DICs) by all micro and small enterprises • Filing of memorandum by Medium enterprises rendering services also optional. • Filing of memorandum by manufacturing medium enterprises with District Industries Centres (instead of the Central Government) 	<ul style="list-style-type: none"> • Provides statutory basis (legally enforceable) to Procurement Preference Policies of Central & State Govts. for goods & services provided by micro & small enterprises. • Strengthens the legal provisions to check delayed payment to micro and small enterprises. • Representatives of enterprises Associations included in the MSE Facilitation Councils for adjudicating on cases of delayed payment. • Provision for ensuring timely and smooth flow of credit to MSMEs. • All Schemes/Programmes of assistance being notified under the Act. • Provides for a statutory National Board for Micro, Small & Medium enterprises to advise the Central Government on matters under the Act.

Source: http://www.and.nic.in/C_charter/indust/MSMED_classification.pdf

Ministry of MSMEs

The Ministry of Micro, Small and Medium Enterprises, Government of India, is the apex body for formulation and administration of the rules and regulations and laws relating to Micro, Small and Medium Enterprises in India.

The vision, mission, objectives and functions of the ministry are as follows ⁴ -

Vision

To have a vibrant Micro, Small and Medium Enterprises (MSME) sector

Mission

Promote growth and development of Micro, small and Medium Enterprises, including Khadi, Village and Coir industries, in cooperation with concerned Ministries / Departments, State Governments and other stakeholders by providing support to existing enterprises

Objectives

1. Support and development of existing MSMEs
2. Creation of new enterprises
3. Support to Khadi, Village and Coir industries
4. Entrepreneurship and skill development of MSMEs and encouraging creation of new enterprises

⁴RFD Results Framework Document For Ministry of Micro , Small and Medium Enterprises (2010-11)

Functions

1. *Facilitation of credit flow to MSMEs*
2. *Promotion of MSMEs through cluster based approach*
3. *Marketing support to MSMEs*
4. *Creation of new Micro Enterprises through Prime Minister's Employment Generation Program (PMEGP)*
5. *Improving competitiveness of MSMEs*
6. *Support to Khadi and Village Industries (KVI) sector*
7. *Support to Coir Industry*
8. *Entrepreneurship and skill development training*

As of March 2011, head of the Ministry is the Cabinet Minister Shree Virbhadr Singh. The Ministry envisages a MSME sector in India which is energetic, pulsating with activity, lively and vital. The purpose of the Ministry is promotion and development of MSMEs, including khadi, village industries and coir sector, through formulation and implementation of policies and programmes, in the areas of credit, marketing, technology, skill development, infrastructure development and fiscal and legal/regulatory matters.

There are various organisations / statutory bodies attached with the ministry such as -

- Coir Board - Kerala
- Office of the development commissioner (MSMES) – New Delhi
- Khadi and Village Industries Commission (KVIC) – Andhra Pradesh
- National Small Industries Corporation Ltd. – Sakinaka, Mumbai
- National Institute of Micro, Small and Medium Enterprises – Hyderabad, AP
- National Institute for Entrepreneurship & Small Business Development- Noida
- Indian Institute of Entrepreneurship - Guwahati

In order to implement the strategies formulated by the Ministry, it is important that all stakeholders come on board. The Ministry proposes to engage the stakeholders by ensuring regular meetings through the existing mechanism of National Board for MSMEs and the governance structures laid down under individual schemes, institutionalizing annual meetings with State/Union Territory Governments, MSME Associations and Banks/ Financial Institutions and establishing a coordination mechanism at the national level across departments.⁵

⁵<http://www.msme.nic.in/Draft-Strategic-Action-Plan-of-Ministry.pdf>

The Ministry has identified certain priority areas such as:

- Strengthening of District Industries Centres (DICs) across the country to improve the delivery of services at the field level
- Strengthening of khadi institutions through implementation of the 'Khadi Reform and Development Programme'
- Encouraging corporatisation of the MSME sector
- Encouraging innovations through setting up of large number of business incubators in educational institutions of repute
- Upgrading or evolving new schemes to assist MSMEs in adapting new technologies, creating product specific technology centres / banks to move the MSMEs forward on the value chain

The MSME sector is a nursery of entrepreneurship, driven by individual creativity and innovation. The Ministry aspires to bring about a healthy growth in this sector, accompanied by enhancement of their contribution to the GDP, manufacturing output, employment and exports and transition of the sector from a predominantly unorganized to the organized sector.

MSMEs – The Global Picture

The MSMEs have been playing a major role in western economies for a long time. In 2008, there were over 20 million enterprises⁶ in the European Union (EU) out of which only about 43,000 were large scale enterprises (LSEs). Hence, the vast majority (99.8 %) of enterprises in the EU are SMEs. They provide more than 65 million jobs and contribute towards entrepreneurship and innovation. World over, different countries use their own definitions to describe what constitutes a SME. According to a study by the World Bank there are more than 60 definitions of small and medium enterprises used in 75 countries surveyed. Some of these definitions are listed in the following paragraphs-

EU defines its micro, small and medium enterprises based on ceilings on head count, turnover and balance sheet total⁷. (Table 1)

Table 1: SME Definition - European Union

Enterprise category	Head Count	Turnover	Or	Balance Sheet Total
Medium-Sized	<250	≤ € 50 Million		≤ € 43 Million
Small	<50	€ 10 Million		≤ € 10 Million
Micro	<10	€ 2 Million		≤ € 2 Million

⁶Annual Report on EU Small & Medium Sized Enterprises 2009 / Directorate General for Enterprise and Industry / EIM Business & Policy Research

⁷http://ec.europa.eu/enterprise/policies/sme/facts-figures-analysis/sme-definition/index_en.htm

In USA, the definition is set by a Government department called the Small Business Administration (SBA) Size Standards Office. Unlike the EU which has chosen a simple definition, USA has identified size standards for each individual NAICS (North American Industry Classification System) coded industry. The firm must not be dominant in its field on a national basis and it must also be independently owned and operated. Based on this criterion the SBA has established the following primary standards for small businesses –

- 500 employees for most manufacturing and mining industries, and
- \$ 7 million in average annual receipts for most non-manufacturing industries

There are many exceptions to this and SBA has established a table of small business size standards⁸ which is matched to the NAICS for industries. The size standard is stated in terms of the number of employees or average annual receipts. An excerpt of this table is given below -

Table 2: Table of Small Business Size Standards (USA) - A Representation

NAICS Codes	NAICS Industry Description	Size Standards in millions of US dollars	Size Standards in number of employees
	Sector 11 – Agriculture, Forestry, Fishing and Hunting		
Subsector 111 – Crop Production			
111110	Oilseed (except Soybean) Farming	\$0.75	
Subsector 112 – Animal Production			
112112	Cattle Feedlots	\$2.5	
Subsector 113 – Forestry and Logging			
113310	Logging		500
	Sector 21 – Mining, Quarrying, and Oil and Gas Extraction		
Subsector 211 – Oil and Gas Extraction			
211111	Crude Petroleum and Natural Gas Extraction		500
211112	Natural Gas Liquid Extraction		500

⁸<http://www.sba.gov/content/summary-size-standards-industry>

Source: Official Website of Small Business Size Standards (USA)

In Australia, a micro enterprise is one that employs less than five personnel, small enterprise, between 5 and 19 personnel and a medium enterprise between 20 to 200 personnel.

The definition of a SME in China is quite complex and can include relatively large firms. In Asia-Pacific Economic Cooperation (APEC) economies, the definition of a SME also varies, but is generally most commonly based on the number of employees. SMEs commonly employ 100 to 500 people but the vast bulks of SMEs, comprising around 70 percent, employ five people or less or are run by self-employed Individuals. SME definition in China also depends on the industry category and is defined based on the number of employees, annual revenue, and total assets of a company. For example in the industrial sector small enterprises are those that employ between 200-2000 people and have sales between 30-300m Yuan or assets in the range of 40-400m Yuan. Those above this are medium enterprises. In construction sector, the employee strength of 600-3000 is considered small and likewise the standard specifications vary according to the sector. This categorisation is governed by the SME Promotion Law of China which was published in 2003.

Malaysia adopted a common definition⁹ of SMEs to facilitate their identification in various sectors and subsectors. This has helped the Government to formulate effective development policies, support programs as well as provision of technical and financial assistance. An enterprise is considered as a SME in each of the respective sectors based on the annual sales turnover or number of full time employees as shown in the table below:

Table 3: SME Definition - Malaysia

Sector	Category								
	Micro			Small			Medium		
	Nos. Of Employees	O	Turnover	No. Of Employees	O	Turnover	No. Of Employees	O	Turnover
Manufacturing, Manufacturing-Related Services and Agro-based industries Micro	< 5		< RM 2,50,000	Between 5 and 50		Between RM 2,50,000 and RM 10 million	Between 51 and 150		Between RM 10 million and RM 25 million
Services, Primary Agriculture and Information & Communication Technology (ICT)	< 5		< RM 2,00,000	Between 5 and 19		Between RM 2,00,000 and < RM 1 million	Between 20 and 50		Between RM 1 million and RM 5Million

Source: <http://www.smecorp.gov.my/node/33>

If we look at the contribution made by SMEs globally to their respective national economies, the picture looks quite vibrant. The 20 million SMEs in the European Union are responsible for approximately 60% of Europe's GDP. Many of the European countries especially the Scandinavian

⁹<http://www.smecorp.gov.my/node/33>

countries - Denmark, Sweden, and Norway are predominantly SME driven economies. For example in Denmark (Santisteban), SMEs represent 99.7% of the total number of companies and account for 66.3% of the employment. Danish business structure is based on more or less networked or clustered SMEs which are geographically concentrated in the peninsula of Jutland and the island of Funen. A few of these clusters are agro-food (meat & milk products) which is the most important industry in Denmark, metal-industry, environment and wind energy and mobile communication.

Belgium is another example of a special kind of a SME country. In structural terms it is a mix of large companies and a very large number of SMEs. Approximately, 83% of Belgian companies have less than 10 employees and 97% of the companies employ less than 50 people. SMEs account for over 70% of the country's GDP. The majority of Belgian SMEs are family businesses and are the most profitable in the EU. Belgium is also the only European country where the profitability of SMEs is considerably higher than that of large companies. These are particularly good niche companies which are often market leaders in their own sectors. Belgium is the world's largest exporter of diamonds and carpets and is the second largest exporter of plant fibres, chocolate and margarine. It is the world number three for glass exports and ranks fourth for the export of eggs, non alcoholic drinks and cars¹⁰.

Switzerland is also a country which thrives on its small and medium sized enterprises. Although Switzerland has numerous major corporations - food giant Nestle, pharmaceutical companies Novartis and Roche, banks Credit Suisse and Union bank of Switzerland (UBS), and insurers AXA Winterthur and Zurich Financial Services - these firms are not really representatives of the country as a manufacturing nation.

"Being a successful chocolate producer in Switzerland means holding your own against international market leaders. The strengths of Stella SA lie in its niche products. Chocolate made from bio-ingredients or sugar-free chocolate. We also produce chocolate for private brands. Only the best, of course! We export 60 per cent of our goods abroad. The markets in the UK, Italy and France are particularly important."

Alessandra Alberti, Chocolat Stella SA, Giubiasco, Director

SMEs in Switzerland employ 1.45¹¹ million people, around 70 per cent of all employees not working for state-run enterprises. 99.7 per cent of Swiss companies employ fewer than 250¹² staff. If people across the world are quizzed on the most popular products associated with Switzerland, the most likely response would be either cheese or watches. Both the responses would be correct but watches are definitely the more profitable ones. Swiss timepieces are generally made in small factories in the watch making "*arc Jurassien*"¹³ that starts in Geneva, extends

¹⁰http://business.belgium.be/en/belgium_in_figures/economic_indicators/trade_balance/

¹¹http://www.swissinfo.ch/eng/country_information/country_profile/Economy.html?cid=5763738

¹² Brochure Switzerland's SME Policy/Federal Department of Economic Affairs FDES / State Secretariat for Economic Affairs SECO / 19/06/2009/

<http://www.seco.admin.ch/dokumentation/publikation/00035/02389/index.html?lang=en>

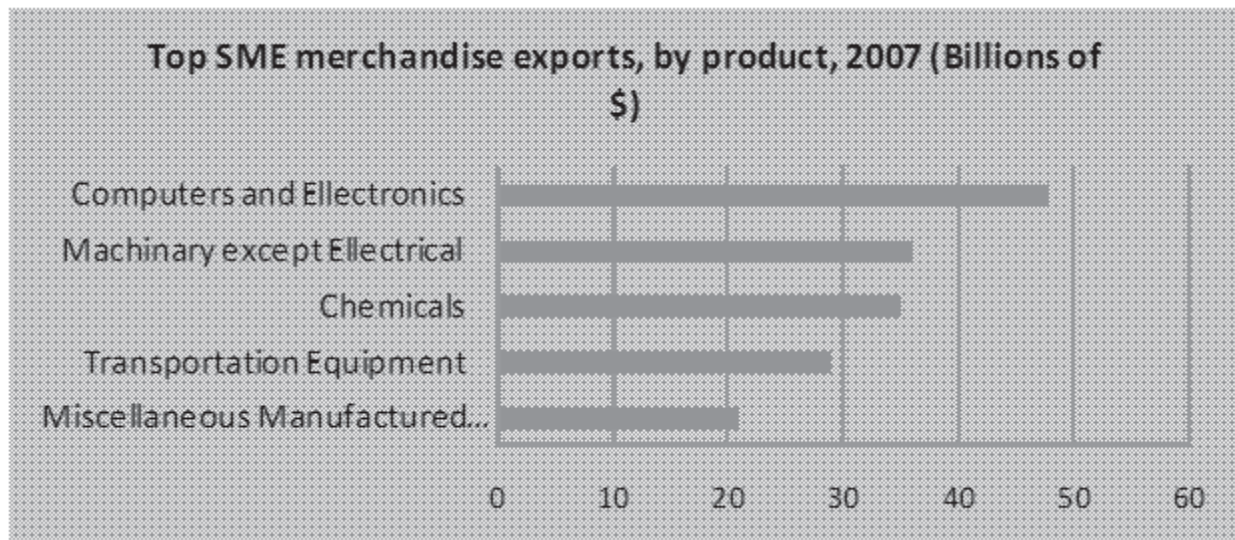
¹³The northwest frontier dividing Switzerland from France

through the rolling Jura hills of north western Switzerland, and ends in the town of Schaffhausen on the river Rhine. Other watch making centres are Neuchâtel, Biel, and Grenchen.

Switzerland is known World over for the high quality of its manufactured products which include motors, generators, turbines, and diverse high-technology products such as precision machine tools and textile machinery. The chemical and pharmaceutical industries which are located in Basel, export to all over the world. Services such as banking, tourism, freight and transport, substantially contribute to the development of international trade of Switzerland.

If we consider the U.S. economy; SMEs account for approximately half (51%) the gross domestic product (GDP) generated by non-agricultural sectors. SME's principal exports are computer and electronic products, machinery, and chemicals (figure 4). Unlike larger firms, SMEs tend to concentrate their merchandise exports to high income destination markets such as Hong Kong, Israel, and Switzerland (figure 5). These exports are mainly labour intensive product categories such as wood products, apparel and accessories.

Figure 4



Source: *Small and Medium-Sized Enterprises: Overview of Participation in U.S. Exports*, U.S. International Trade Commission, January 2010

Figure 5



Source: *Small and Medium-Sized Enterprises: Overview of Participation in U.S. Exports*, U.S. International Trade Commission, January 2010

United Kingdom, Canada and Mexico have also emerged as important export destinations for SME firms in recent years.

Although these countries have been the leading export markets for USA from 2002 to 2007, export growth to these markets has been below average. China and India provided, to the US, above average export growth to the tune of 225.7% for SMEs and 214.9% for large firms. SMEs accounted for 99.9 percent of the 27 million private nonfarm businesses in the United States in 2006. The vast majority of SMEs are firms with fewer than 20 employees. SMEs employed roughly half of the 120 million non-farm private sector workers in the United States in 2006. Employment within SMEs and larger firms grew by comparable rates between 1998 and 2006, and was largely fuelled by employment growth in services and construction sectors¹⁴.

If we look at the Chinese economy, SMEs play a very vital role in generating employment, revenue and innovation. By 2007, China had 42 million SMEs, which accounted for 99.7 percent of the total number of enterprises in the country and roughly 59 percent of GDP. SMEs also accounted for more than 68 percent of China's exports and 75 percent of the new jobs created nationwide each year, while registering more than 65 percent of China's patents¹⁵. To put this in context, Chinese SME exports were equivalent to about double the total GDP of Greece, and about one quarter of

¹⁴Hammer, Alexander, *Small and Medium-Sized Enterprises: Overview of Participation in U.S. Exports*, U.S. International Trade Commission, January 2010, www.usitc.gov/publications/332/pub4125.pdf

¹⁵Hilgers, Lauren, *SMEs in China*, Insight, April 2009, http://www.amcham-shanghai.org/NR/rdonlyres/529FC78D-A33E-4479-88F1-E8014128FCE5/9779/apr09_industry_outlook.pdf

the total GDP of France. This is the result of China's focussed and concentrated efforts towards SMEs which led to a significant change in China's economic landscape since the Asian financial crisis. China privatized its small- and medium-sized businesses and an SME department was created in the State Economics and Trade Commission. There are currently five recognized SME sectors in China – industrial, construction, retail, transportation and hospitality. The Government introduced many economic systems which led to regional development such as the famous 'Wenzhou Pattern' in Rui'an, known for its production of plastics and auto accessories, characterized by numerous private small businesses built on personal initiative and private enterprise. Most SME clusters are based in towns found in the developed areas along the eastern coastal areas of China, such as small towns in the Pearl River Delta and Yangtze River Delta. Chinese silk is a product of one such cluster produced in the 'silk town' of Shengze and three other towns (Suzhou, Hangzhou and Taihu) that were collectively called the major silk towns of China during the Ming and Qing Dynasties.

MSMEs – An Engine of Economic Growth

One of the significant characteristics of a flourishing and growing economy is a booming and blooming Small and Medium Enterprises (SMEs) sector. According to the United Nations Industrial Development Organization (UNIDO), MSMEs make important contributions to economic and social development. In all economies they constitute the vast majority of business establishments, are usually responsible for the majority of jobs created and account for one third to two thirds of the turnover of the private sector. In many countries MSMEs have been the major engine of growth in employment and output over the last two decades. In developing countries they are seen as a major 'self-help' instrument for poverty eradication. In transition economies, they provide the best illustration of the changes in ownership structures, business culture and entrepreneurial behaviour over the past decade¹⁶. Important to this process, is the development of an active private sector, in which SMEs can play a central role. SMEs employ more labour-intensive production processes than large enterprises. Consequently, they contribute significantly towards creating productive employment opportunities, generation of income and, eventually, reduction of poverty. In short, MSMEs have a powerful and profound multiplier effect on the key parameters concerning economic development of country viz. consumption, savings, investment, national income, production and employment. In turn, this multiplier effect contributes to speedy capital formation because of the Keynesian accelerator effect in action.

MSMEs also play a vital role in the growth of the Indian economy and as of 2010, contributed 45% of the industrial output, 40% of exports, 42 million in employment¹⁷. MSMEs create one million jobs every year and produce more than 8000 quality products for the Indian and international

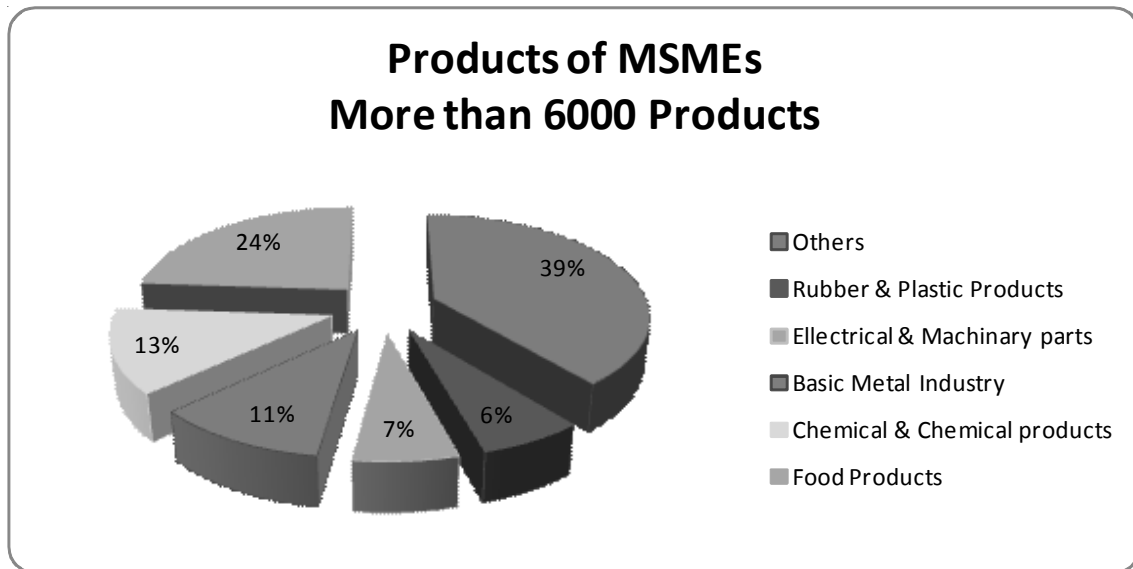
¹⁶http://www.unido.org/fileadmin/media/documents/pdf/Business_Environment/I5hvgghso.pdf

¹⁷International round table on contribution of SMEs to growth of emerging nations
– an initiative by CII and Government of Gujrat (Vibrant Gujrat 2011)

markets. As a result, MSMEs are today exposed to greater opportunities for expansion and diversification across different sectors¹⁸ of the national economy.

The Indian economy is growing rapidly at an average rate of nearly 9% per annum. India's 565 million strong female population is attracting the spotlight towards India and is driving growths in categories such as beauty products, white goods and home appliances. Indian industry is making remarkable progress in various sectors like manufacturing, precision engineering, food processing, pharmaceuticals, textile & garments, retail, information technology, agro and service sectors (Figure 6). SMEs are finding increasing opportunities to enhance their business activities in core sectors.

Figure 6



Source: Annual Report 2009-10, Ministry of Micro, Small and Medium Enterprises, Official Website

Government of India has reserved the following items for exclusive manufacture by micro and small enterprise sector:¹⁹

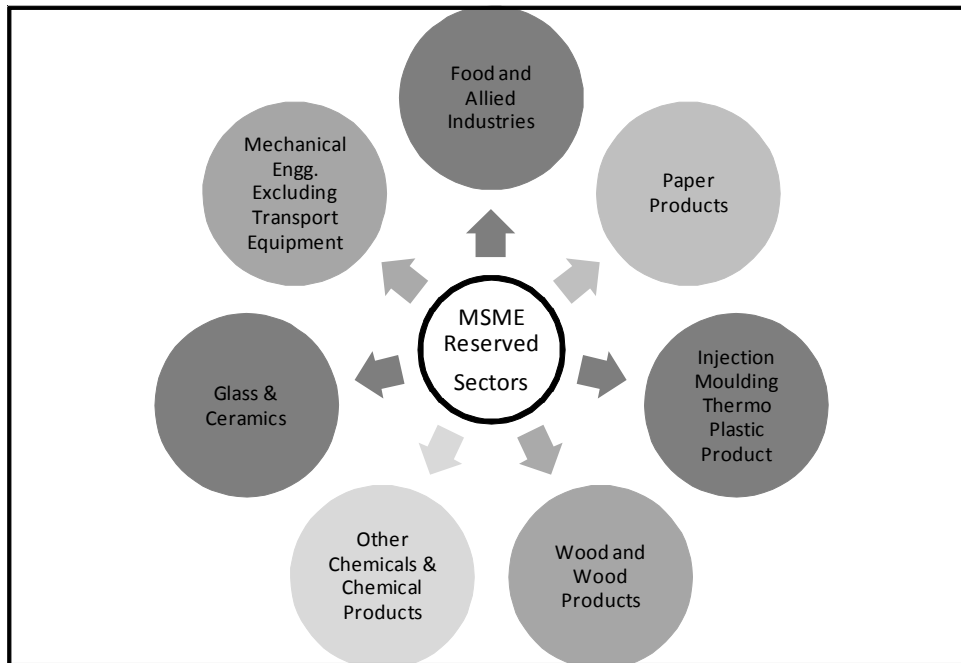
1. Food and Allied Industries: Pickles and chutneys, bread, mustard oil & ground nut oil (except solvent extracted)
2. Wood and Wood Products: Wooden furniture and fixtures
3. Paper Products: Exercise books and registers
4. Injection Moulding Thermo Plastic Product: PVC Pipes, including conduits up to 110 mm diameter, fittings for PVC pipes
1. Other Chemicals and Chemical Products: Wax candles, laundry soap, safety matches, fireworks, agarbatties

¹⁸http://msme.gov.in/msme_aboutus.htm

¹⁹SME Times, 24th Feb 2010, Minister Presents Reserved Items for MSME, www.smetimetradeindia.com

2. Glass & Ceramics: Glass Bangles
3. Mechanical Engineering excluding transport equipment: Steel almirah, rolling shutters, steel chairs – all types, steel tables – all other types, steel furniture – all other types, padlocks, stainless steel utensils, domestic utensils – aluminium

Figure 7: Reserved Items for exclusive manufacture by MSMEs



A special role for SMEs has been earmarked in the Indian economy with the advent of a planned economy since 1951 and the subsequent industrial policies followed by Government of India. This resulted in the development of MSMEs and helped them achieve the following objectives -

1. High contribution to domestic production
2. Significant export earnings
3. Low investment requirements
4. Operational flexibility
5. Low intensive imports
6. Capacity to develop appropriate indigenous technology
7. Import substitution
8. Technology-oriented industries
9. Competitiveness in domestic and export markets²⁰

²⁰www.tradeindia.com/.../special-report/tips_13_feb_2007.html

However, as a result of globalization and liberalization, coupled with WTO regime, SMEs have been passing through a transitional period. With enhanced competition from China and a few low cost centres of production from abroad, many units have of late been facing a tough time. Nevertheless, those SMEs who had a strong technological base, international business outlook, competitive spirit and willingness to restructure themselves have withstood the challenges of change and have been successful in making their own contribution to the Indian economy.

“The SME sector, which contributes almost 40-50% to economic activity, has been an underserved, manipulated and much-abused sector because of a variety of reasons. Because of misplaced regulatory and business compulsions, the sector never got its due. It is my dream that these hidden jewels of the Indian industry shine brighter than ever now, especially when the Indian market place is growing.”

Rajeev Karwal, founder-director, Milagrow Business and Management Solutions

The MSME sector is the second-largest contributor to India’s GDP and the government wants to develop it further by raising Rs 1, 000 Crores for its development²¹ under the 11th five-year plan. A recent Associated Chambers of Commerce and Industry of India (ASSOCHAM) study said that Small and Medium Enterprises (SMEs) are expected to contribute 22% to India’s GDP by 2012, up from about 17% currently.

Table 4: MSMEs Performance: Units, Investment, And Production

Year	Total MSME's in Rupees Lakh	Fixed Investment in Rupees Crores	Production in Rupees Crores Constant prices 1993-94 And 2002-03	Employment in Lakh persons	Exports in Rupees Crores
1993-94	76.40 4.07	1158795 5.63	98796 (7.1)	182.64 (4.46)	25307 42.30
1994-95	79.60 4.07	123790 (6.9)	108774 (10.1)	191.40 (4.79)	29068 14.86
1995-96	82.844.07	125750(1.58)	121175 11.40	197.933.42	3647025.46
1997-98	89.71 4.07	130560 (3.82)	134892 (11.32)	205.86 (4.00)	39248 7.62
1998-99	93.36 4.07	133242 (2.05)	146262.9 (8.43)	213.16 3.55)	44442 (13.23)
1999-00	97.15 4.07	135482 (1.68)	157525.1 (7.7)	220.55 (3.46)	48979 (10.21)
2000-01	105.21 4.07	139082 (3.32)	184401.4 (8.23)	238.73 (4.21)	69797 (28.78)
2001-02	97.15 4.07	146845 (4.90)	195613 (6.06)	249.33 (4.44)	71244 (2.07)
2002-03	100.49 4.07	154349 (5.11)	306771 (8.68))	260.21 (4.36)	86013 (20.73)

²¹www.milagrow.in/.../msme-sector-second-largest-contributor-India's-gdp

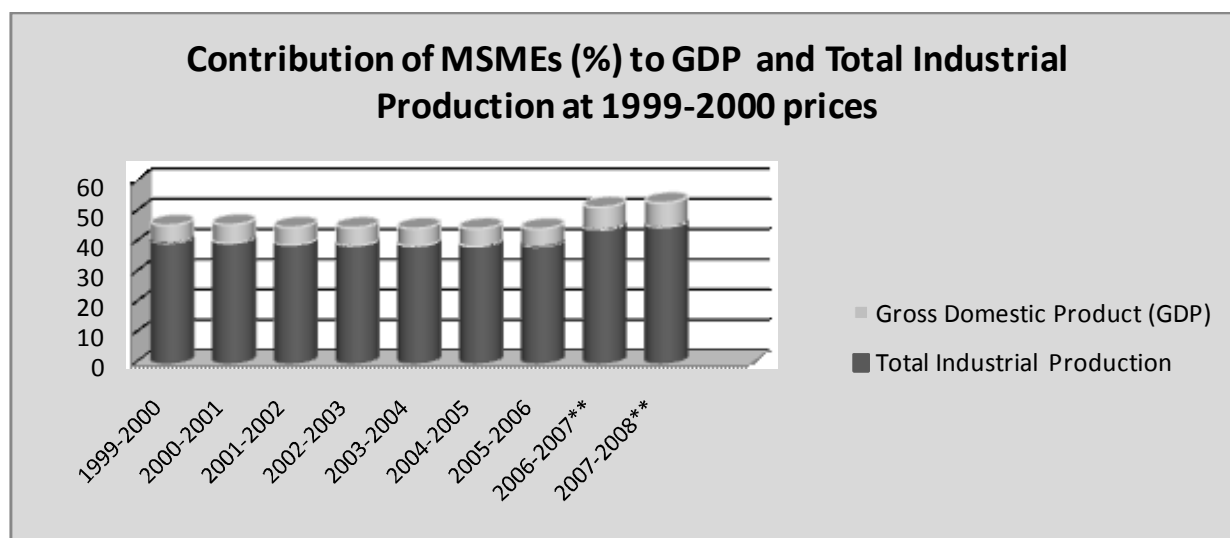
2003-04	113.95 4.07	162347 (5.16)	336344 (9.64)	271.42 (4.31)	97644 (13.52)
2004-05	118.59 4.07	174029 (4.87)	372938 (10.88)	282.57 (4.11)	124417 (27.42)
2005-06	123.42 20.76	178699 (4.98)	418884 (15.83)	294.91 (12.32)	150242 (4.37)
2006-07	261.71 21.50	500758 (111.48)	NA NA	594.61 (42.49)	182538 (101.62)
2007-08	272.79 21.51	558190 (11.47)	NA NA	626.34 (5.34)	202017 (10.67)
2008-09	285.16 4.53	621753 (11.39)	NA NA	659.35 (5.35)	NA NA

Source: Annual Report 2009-10, Ministry of Micro, Small and Medium Enterprises, Official Website

Note: The figures in brackets show the percentage growth over the previous year. The data for the period up to 2005-06 is only for small scale industries (SSI). Subsequent to 2005-06, data of micro, small and medium enterprises has been compiled.

Figure 8 shows the contribution of MSMEs to Gross Domestic Product of India at 1999 – 2000 prices

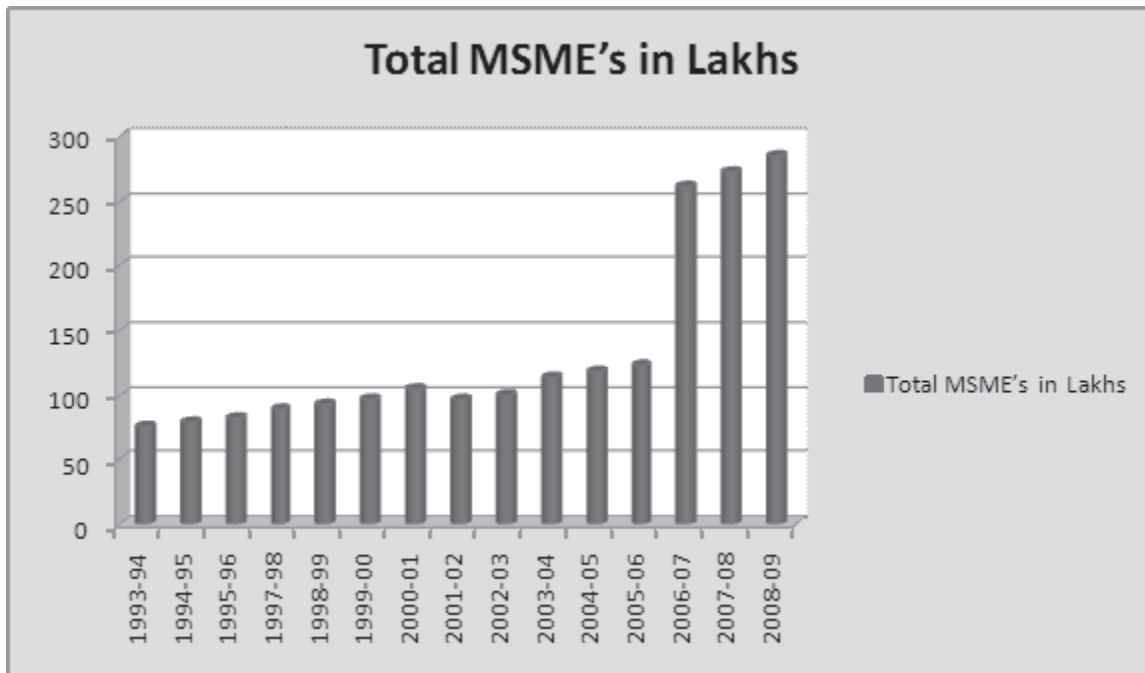
Figure 8



Source: Annual Report 2009-10, Ministry of Micro, Small and Medium Enterprises, Official Website

Figure 9 shows total number of MSMEs in Lakhs since 1993-94

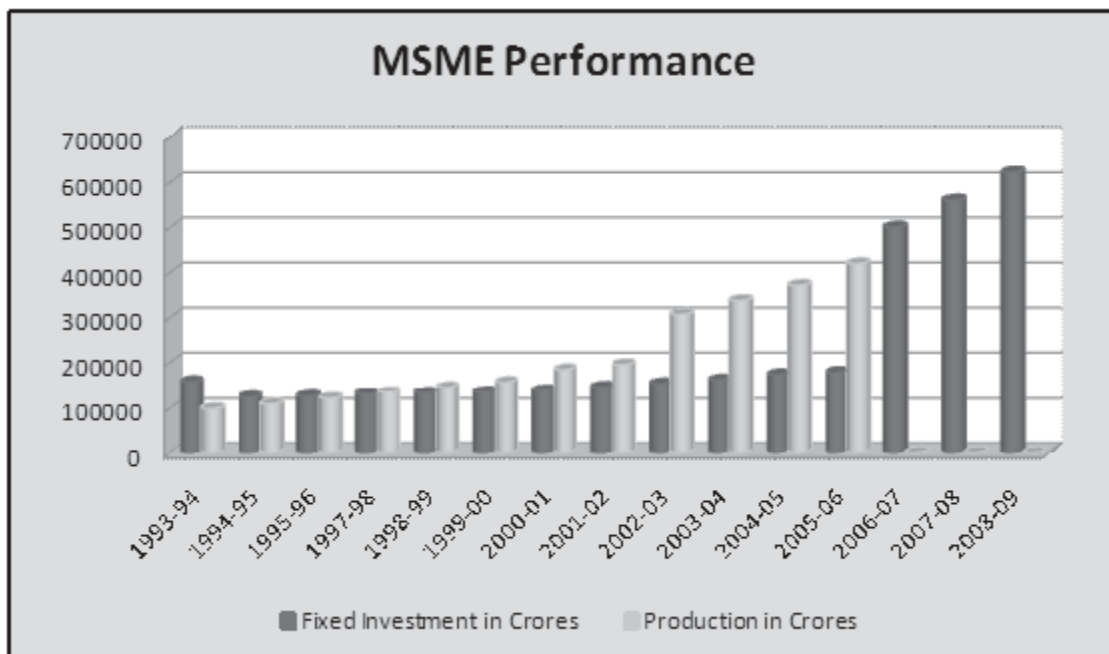
Figure 9



Source: Annual Report 2009-10, Ministry of Micro, Small and Medium Enterprises, Official Website

Figure 10 Shows performance of MSMEs in India in terms of fixed investment in Crores and production in Crores since 1993 - 94

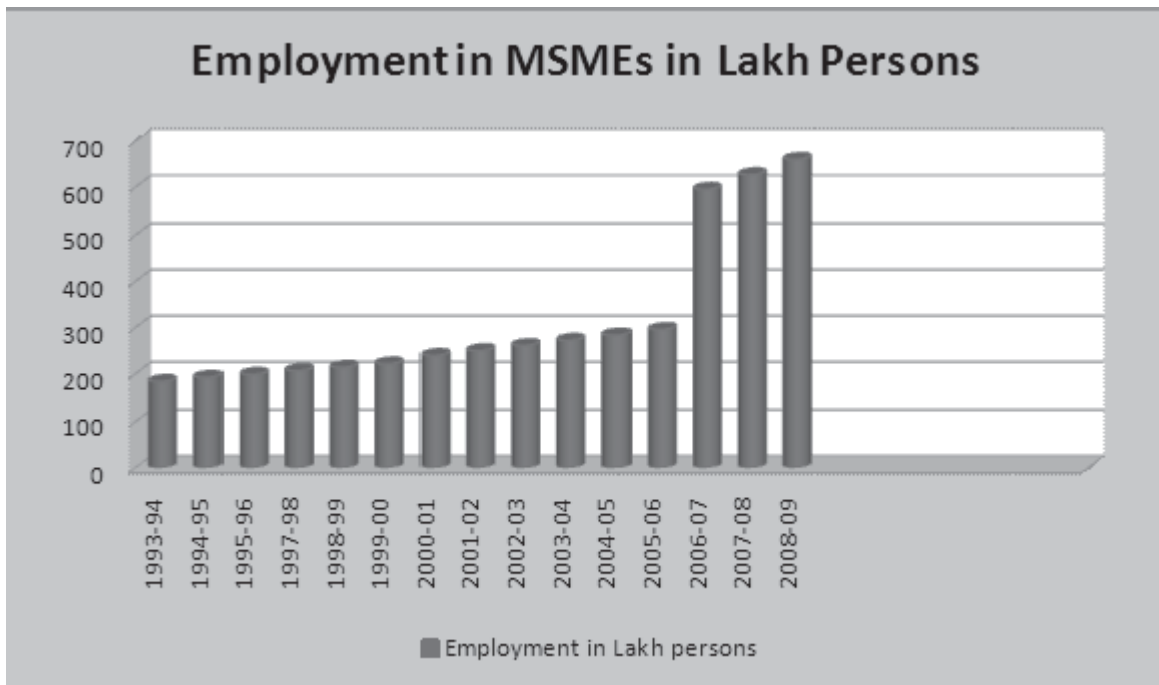
Figure 10



Source: Annual Report 2009-10, Ministry of Micro, Small and Medium Enterprises, Official Website

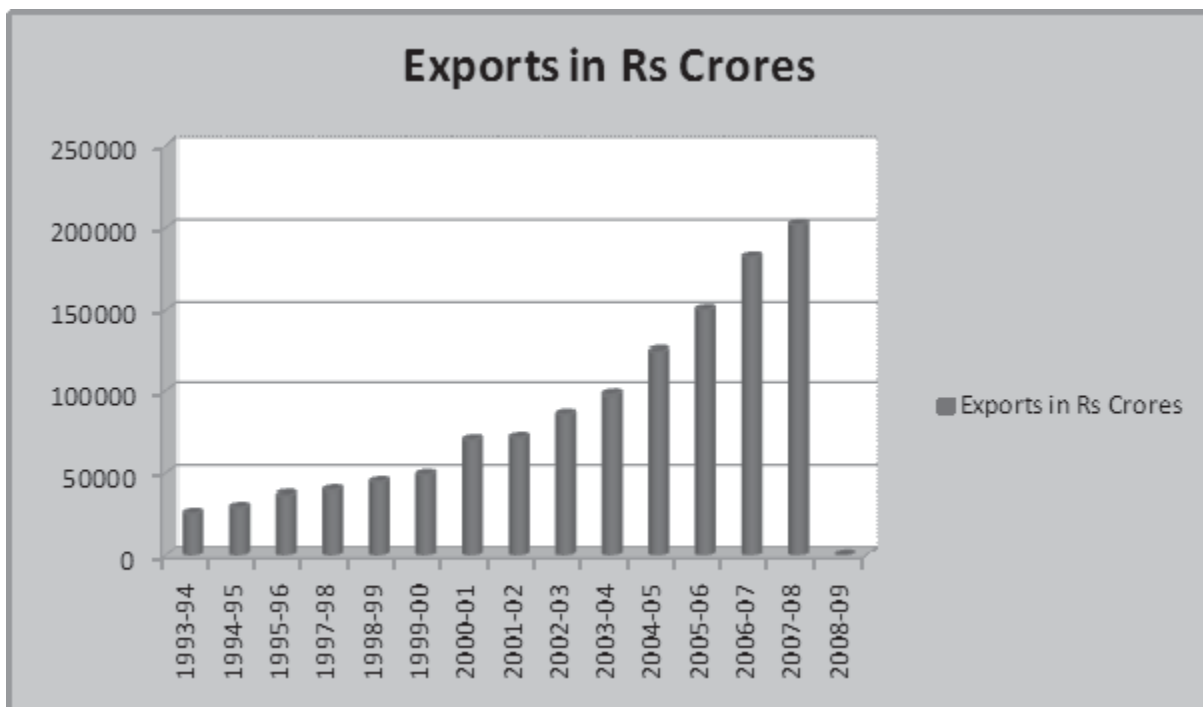
Figure 11 shows the employment generated by MSMEs since 1993-94 in Lakh persons

Figure 11



Source: Annual Report 2009-10, Ministry of Micro, Small and Medium Enterprises, Official Website
Figure 12 shows total exports by MSMEs in Rs Crores since 1993-94

Figure 12



Source: Annual Report 2009-10, Ministry of Micro, Small and Medium Enterprises, Official Website

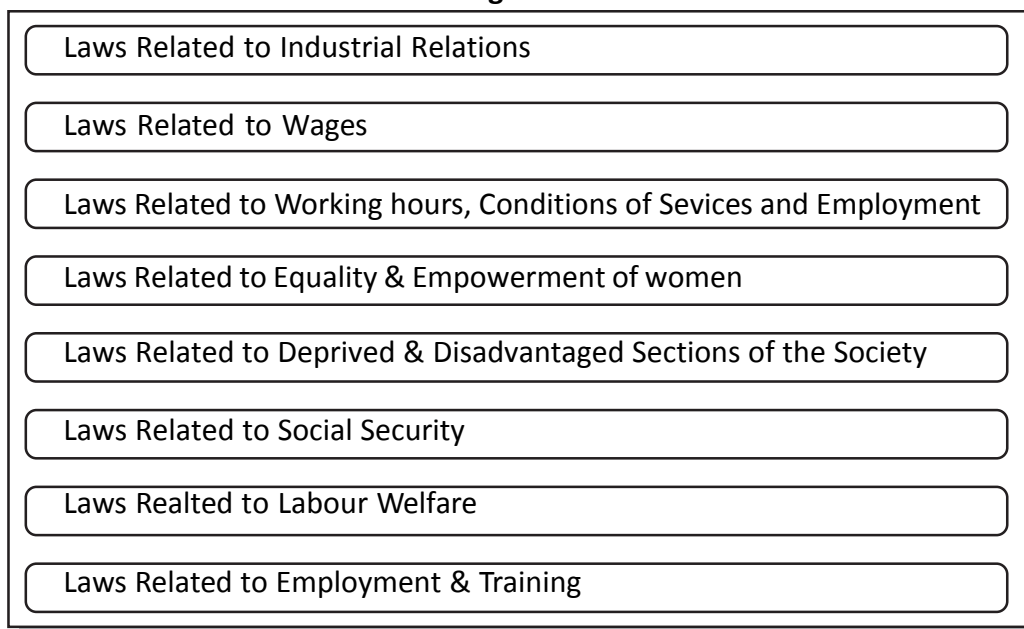
Labour Laws and MSMEs

There are 44 Central Acts governing labour in India. Under the law, SMEs have to implement at least 15 of them, including those covering social security, minimum wages and payment of gratuity and bonus²². Most small units are sole proprietary organisations and lack the infrastructure to implement labour laws. Some of these laws are as follows –

1. Laws related to wages such as - The Payment of Wages Act, 1936; The Payment of Wages Rules, 1937; The Payment of Wages (Amendment) Act, 2005; The Minimum Wages Act, 1948; The Minimum Wages (Central) Rules, 1950; The Payment of Bonus Act, 1965; The Payment of Bonus Rules, 1970
2. Laws related to Working Hours, Conditions of Services and Employment such as - The Factories Act, 1948, The Contract Labour (Regulations and Abolition) Act, 1970, The Shops and Establishment Act
3. Laws related to Equality and Empowerment of Women such as - The Maternity Benefits Act, 196; The Equal Remuneration Act, 1976
4. Laws related to Social Security such as - The Workmen's Compensation Act, 1923; The Workmen's Compensation (Amendments) Act, 2000; The Employees' State Insurance Act, 1948; The Employees' Provident Fund & Miscellaneous Provisions Act, 1952; The Employees' Provident Fund & Miscellaneous Provisions (Amendment) Act, 1996; The Payment of Gratuity Act, 1972²³

Figure 13 shows the some labour laws concerning MSMEs

Figure 13



²²www.livemint.com, 23rd Jan 2011

²³<http://www.iloveindia.com/finance/doing-business-in-india/small-scale-industries.html>

Cluster Initiative

The concept of cluster development offers new insights into the potential role of MSMEs. Many enterprises belonging to one industry, group themselves together into an SME cluster. A cluster may be defined as a local agglomeration of enterprises (mainly MSMEs) which produce and sell a range of related and complementary products and services. The location of such enterprises can span over a few villages, a town or a city and its surrounding areas.

SME cluster can maximize regional accessibility to produce and market by capitalizing on joint ventures, cooperation, alliances and other forms of partnership and networking. A cluster enables enterprises to supply diverse products to customers and also reduces business expenditures by creating a commercial network, improving accessibility. This not only enhances the competitive power of the SMEs, but leads to higher economies of scale, which in turn enhances the host town's economic competitiveness.

Key benefits of a cluster based approach for developing SMEs are:

- Networking among enterprises
- Economies of scale
- Improved bargaining power
- Technology and skill up gradation
- Global visibility and being part of the value chain
- Easier access to finance
- Greater institutional support

In India, UNIDO launched a cluster development programme in 1996. Initially, a mapping study identified 138 clusters²⁴, covering a wide range of products. Subsequently, as the project matured, information flowed in on presence of many more SME clusters from various parts of the country. Around 636 SMEs (industrial) and 6000 artisan/micro enterprises clusters are estimated to exist in India. An example can be a localized leather industry, including leather tanning units, leather finishing units, leather goods producers, leather garment manufacturers, designers, sub-contractors, merchant buyers and exporters.

It is estimated that these clusters contribute 60% of the manufactured exports from India. Some of the major items of exports, e.g., 'Hosiery and Garments', 'Leather and Leather products', 'Diamonds, Gems & Jewelry' have large clusters in more than one location and contribute significantly to the exports. Among the prominent ones is the cluster at Panipat (Haryana) accounting for 75% of the total blankets produced in the country; Tirupur (Tamil (Tamil Nadu) which accounts for 80% of the

²⁴<http://www.msme.foundation.org/folder/Publication/49.pdf>

country's cotton hosiery exports and the internationally known cluster of Bangalore, operating in the software sector.

Small Changes Big Impacts

Kokum fruits are processed to create kokum amsul, ghul and agal. While these products have a good market, yet it was found that a lot of Kokum is wasted as it is left unprocessed, because of low price received from the end products. When the product was inspected, it was found out that it had lot of admixture of dust, cow dung, litter etc and there was incomplete drying of rind which resulted in fungal contamination. This was the major reason for not getting higher prices and not being appreciated by consumers. The Self Help Groups (SHGs) were unified for the first time for this issue under the leadership of Gram Panchayat of Chindar village in 2005. First awareness was created among the members of SHG about the problems of contamination and admixture. Demonstration of hygienic drying was done. The demonstration displayed the use of pyramid shaped bamboo structures with nylon net troughs. The whole pyramid was also covered by black polythene. This structure proved to be very useful for drying of Kokum rind. Its capacity was 50 kg and the concept for dryers became popular in the Chindar village. Due to drying in enclosed system and above the ground, the quality of the kokum rind improved due to fewer admixtures and less loss of anthocyanin pigment in the rind. Local market was readily available for this 1000 kg of amsul processed using this technique. 16 women from 3 Below Poverty Line SHGs received Rs.25000 net profit in the process within 90 days. In 2006, the same technique was used by 9 more SHG in Chindar village and it was also replicated in Aronda and Aros villages of the Sawantwadi block in the Sindhudurg district. This bamboo drier is a known technology promoted by Appropriate Rural technology Institute (ARTI) and produced at the local level by Central Institute of Bamboo and Rattan

Some of the other important clusters worth mentioning are Surat which is the world's next biggest diamond trading centre after Antwerp, Chemical cluster at Vadodra²⁵, Ludhiana cluster in Punjab produces 95% of the country's woolen knitwear, 85% of the country's sewing machines and 60% of the nation's bicycle and bicycle parts. The city of Agra is virtually a footwear City with 800 registered and 6,000 unregistered small and cottage footwear production units

The formation of a cluster may be natural or induced. A natural cluster develops as a result of high demand potential and private initiative. It may also be a result of availability of critical raw material or specific skills, as in case of most traditional clusters. Incentives may be provided for induced cluster development via policy measures, infrastructure availability or a large buying public sector

²⁵<http://www.unido.org/fileadmin/import/userfiles/russof/small.pdf>

unit. The example of a natural cluster based on raw material resources would be 'marble cutting' cluster at Kishangarh in Rajasthan while a demand based cluster would be 'ready-made garments' at Indore and Mumbai. The examples of induced clusters would be automobile component industry at Gurgaon (Haryana) which developed due to the setting up of the public sector car manufacturing unit of 'Maruti Udyog limited'. Yet another example is the petro-chemical based industry at Vadodra due to setting up of 'Indian Petrochemical Industries Ltd', a former public sector undertaking now owned by Mr. Mukesh Ambani.

It is gratifying to note that Industrial Clusters in Mumbai and other urban pockets may soon be granted a special status. According to a senior official of the Urban Development (UD) Department in Mumbai, "Infrastructure upgrade is crucial to facilitate optimal growth of industrial sectors in the state's urban areas."(Times of India 7th February, 2011)

Finance for MSMEs

SME finance is the funding of small and medium sized enterprises, and represents a major function of the general business finance market – in which capital for different types of firms are supplied, acquired, costed and priced.

Microsoft may be a software giant today, but it started off in a typical SME fashion in the US. A dream of a young student was put into action by Mr. Bill Gates with the help of his family and friends. Only when Bill Gates and his colleagues had a saleable product, were they able to take it to the marketplace and look for investment from more traditional sources. While not every small business turns into a multinational, they all face the same teething problems when they are in their infancy stage – finding the wherewithal to enable them to start and build up their business and also test their products/ services.

Government takes policy initiatives to bridge this resource gap. The role of Apex Financial Institutions (AFIs) in the area of micro finance is substantial. In India there are three Apex Financial Institutions each with its own unique approach to micro finance. The process of micro finance was initiated by National Bank of Agricultural and Rural Development (NABARD) through the linkage programme of SHGs (Self Help Groups) by mobilizing their own savings. SIDBI is the second important player, providing bulk lending to Micro Finance Institutions (MFIs). The main focus of SIDBI is to create larger MFIs. Rashtriya Mahila Kosh (RMK) is the third player providing loans to NGOs for lending to women SHGs.

SIDBI was envisaged to be, "the principal financial institution for the promotion, financing and development of industry in the small scale sector and to co-ordinate the functions of the institutions engaged in the promotion and financing or developing industry in the small scale sector and for matters connected therewith or incidental thereto."

The Small Industries Development Bank of India Act, 1989

Witnessing the tremendous growth and potential of the micro finance sector, several other organizations and international agencies have also come in the fray.

Initiatives of Banks

About a decade ago banks showed least interest in financing SMEs owing to a huge number of defaulters and lack of support from the Government. However, modern banks are slowly beginning to realize the huge potential of the SME segment. This is attributed to several factors such as exponential growth of the SMEs since Independence and their contribution to industrial output and exports.

Banks have contributed significantly towards the improvement of SMEs in several areas such as financial viability, profitability and competitiveness of the SMES. However, even today the banking sector has not penetrated to the bottom of the pyramid. This strongly calls for coordinated efforts in the area of financial inclusion to help millions of cash-strapped enterprises. Several public and private banks including the micro finance institutions have come forward in this direction to aid the disadvantaged sections. One such initiative was the formation of Financial Inclusion Corporation of India (FICI) which is a non-banking finance company and brings together the efforts of five financial institutions including banks namely, Life Insurance Corporation (LIC), National Housing Bank, Standard Chartered Bank, Union Bank of India and World Bank's International Financial Corporation.

Reserve Bank of India in its Annual Policy Statement for 2005-06 announced formulation of a scheme of strategic alliance between branches of banks and branches of SIDBI located in the clusters. Under the scheme, banks are encouraged to establish mechanisms for better co-ordination between their branches and branches of SIDBI which are located in the clusters identified by the Ministry of SSI, Government of India, for co-financing of SME sector (including tiny and services sector) on mutually agreeable operational modalities to be worked out by SIDBI and the strategic partner banks. In order to facilitate the credit information on MSMEs the SME Rating Agency of India (SMERA) was launched in 2005 by SIDBI in association with Dun & Bradstreet (D&B), Credit Information Bureau (India) Ltd and leading public and private sector banks.

ICICI along with IFC (International Finance Corporation), a member of the World Bank Group has launched a SME Toolkit which provides comprehensive and easy to use information on a variety of topics.

SME Toolkit - A business consultant for every SME entrepreneur

- Business Planning
- Accounting
- Human Resource
- International Business
- Legal, Insurance, Taxation
- Marketing, Operations
- Technology and Tenders
- Free downloadable software tools such as the 'Business Plan Maker', the 'Website Builder' and a large collection of 'How-to Articles'.

SBI Capital Markets Ltd, the investment advisory arm of State Bank of India, is planning to float a dedicated SME fund with an initial corpus of Rs 100 crores in the near future. According to Rajeev Krishnan, executive vice president, SBI Capital Markets, "The SME fund will be used to rope in private equity investment in SME, which otherwise is facing dearth of capital for furthering its business growth."²⁶ According to RBI Annual Policy Statement, 2010 – 11, the MSMEs of yesterday are the large corporates of today and could be MNCs of tomorrow. Thus the banks and other agencies should take pride while servicing the MSMEs as they are playing an instrumental role in the formation of MNCs of tomorrow.

In recent times in India, Microfinance is emerging as an institution to be reckoned with. In July 2010, there was an Initial public Offer (IPO) launched by SKS Microfinance.

Source: India Microfinance Business News, "SKS Microfinance IPO Price Band – Rs. 850 – 985, www.indiamicrofinance.com, 26th July, 2010"

Challenges for MSME

MSME sector in India, though forms a very important part of the economy and a backbone of Industrial development is as yet, in technological backwaters vis-à-vis advances in science and technology. Some of the problems MSMEs suffer from are-

- Technological obsolescence
- Supply chain inefficiencies
- increasing domestic and global competition
- Fund shortages

²⁶<http://www.business-standard.com/india/news/sbi-capital-set-to-launch-rs-100-crore-sme-fund/403968/>

- Change in manufacturing strategies
- Turbulent and uncertain market scenario
- Lack of emphasis on managerial skills

Markets in the developing countries are characterized to a large extent by limited purchasing power of the average consumer. The enterprises are therefore compelled to produce at the lowest cost in the market, sacrificing the quality aspect. In India, most SMEs work on the designs given to them by domestic or foreign buyers. There is very little innovation in product design development, and even the technology used by the SMEs in India is outdated.

*According to a survey conducted by Progress Harmony and Development (PHD) Chamber for small and medium units located in Uttar Pradesh, Haryana, Punjab, Rajasthan, Madhya Pradesh, Himachal Pradesh, J&K, Uttarakhand, Chattisgarh, Chandigarh and Delhi-
“High tax rates, cumbersome procedures and local regulations, rigid labour laws, deficiencies of finance, technology and marketing hamper growth of SMEs by raising the transaction cost of business.”*

MSMEs have to put in more effort on Research and Development (R&D) and on ways to use technology at par with the international standards so as to address the quality issue. Thus MSMEs are facing a lot of problems in marketing their products. MSMEs find it difficult to create a brand impression and awareness in the minds of urban and other potential buyers about their products and services. Most of the branded goods sold by large companies are manufactured by MSMEs but these small and medium enterprises remain unknown as they lack funds to pay large sums for advertising campaigns and brand ambassadors e.g. most cricket equipment used by well-known Indian players sport logos of big multinational companies (MNCs) who sponsor them, even as many of these bats and accessories are made by smaller companies – especially by MSMEs in Jalandhar. To get around this, a few Jalandhar-based companies are now ready to promote their brands in the forthcoming World Cup and IPL-4 through overseas cricket players, whose endorsement fees are much lower than those of Indian players. The two tournaments will see cricket bats and accessories of major players bearing the logos of Jalandhar companies like BAS and Ranson.²⁷ Furthermore, they should also be provided with the necessary infrastructure that can enable them to deliver efficient and quality goods to their customers.

²⁷<http://www.business-standard.com/sme/storypage.php?autono=423539>

MSME Success Stories

20,000 benefit from MSME development in North East

The Regional Resource Centre for Cluster Development (RRC) of the Indian Institute of Entrepreneurship, Guwahati (an organisation which is under the Union ministry of micro, small and medium enterprises) is implementing several MSME clusters in different trades in the north-east. The RRC was set up by the ministry of MSME in 2008 with the prime mandate of developing micro and small industry clusters in the north-eastern region. Since its inception, more than 20,000 people have been benefited under the cluster development programme.

Among the more notable clusters are the Bairabi bamboo cluster and the Baktawang wood carpentry cluster, both in Mizoram; the Bogulamari jute cluster, the Dhamdhama handloom cluster and the PyrangaEri cluster, all in Assam; Greater Imphal jewellery cluster and the Kouna cluster, both in Manipur; the Tawang carpet cluster in Arunachal Pradesh; and the UmdenEri cluster in Meghalaya.

The bamboo-based products of Bairabi comprise home décor items, baskets, chip board/ply, blinds, furniture and cane hats. Assam's Bogulamari jute cluster manufactures jute products such as bags, hats, doormats, wall hangings, toys and fruit baskets. The Dhamdhama handloom cluster produces a variety of traditional handloom wear. The PyrangaEri cluster in Assam specialises in the rearing, weaving and spinning of Eri silk. Its product range comprises yarn, sheets, mufflers, stoles and dress material.

Business Standard, 25th January 2011

MSME Success Stories

Spirit of Entrepreneurship Jagjit Singh Kapoor Founder, Kashmir Apiaries beekeepers

Honey production, at best, makes you think of a small cottage industry. Often, it's just that one beekeeper that collects honey and delivers it at your doorstep. Jagjit Singh Kapoor, though, has turned it into a global business.

He started with five honeybee colonies in the 1980s and today his Kashmir Apiaries has 50,000 of these across the country, "from the Himalayas to Kanyakumari", as his website says. The company, based in Doraha, Ludhiana, is the largest exporter of honey from India, accounting, may be, for as much as 80% of the country's total honey exports. It has a presence in more than 48 countries. Last year; the company recorded a turnover of Rs 280 crores, with a 35% growth in sales.

In 1995, Kapoor forayed into the export market. It has almost been a continuous surge after that. Today, his company competes with rivals from China and Argentina, the two major honey exporters globally. He sells his honey under four brand names, the biggest of which is Little Bee, and 140-odd private labels, and Kashmir Apiaries is said to be among the world's top five honey processors. Kapoor has also established a R&D centre, which comes up with technical advances and provides skills upgrade and outreach services.

More recently, the company launched under the Little Bee brand a range of products, including honey tea, ginger honey, fruit drinks et al. Several other innovations are in the offing.

Times of India, Mumbai, 19th January 2011

Future Trends

The accelerating pace of globalisation is set to increase the challenges for Indian MSMEs. At the same time if the MSMEs accept the challenge and increase their competitiveness, many opportunities may be on the anvil. It is therefore necessary to provide right policy framework and other support measures which will help in identifying and developing various areas of potential. The need of the hour is upgradation of technology, skill, infrastructure and capacity. To facilitate the raising of equity funds by the MSMEs, the issue of setting up of a MSME Exchange has been under consideration of the Government.

A better management of MSME will also go a long way in the eradication of poverty. This is because, it will not only serve as a source of employment for those involved, but also help to

develop assets that will allow them to rise above the bottom of the pyramid. MSMEs are immediate means of generating income for the poor, improving their standards of living, taking care of their basic social family needs, and paying for their children's education and other needs.

Microfinance is playing an important role in nurturing the enterprise all over the World. However as mentioned in The Economic Times (5th February 2011), "*MFI's need to go beyond their existing business model and plan specific interventions based on the propensity of households to engage in income generating activities.* For households with little propensity to do business, the MFIs intervention will include training and other support to help the households — including those with no formal schooling or language skills — to acquire and practise 'public life skills' to earn more than subsistence wages that only help them to cope with daily life."

As Muhammad Yunus, the founder of the Grameen Bank of Bangladesh, says: "Microfinance is the door through which people can escape poverty."²⁸The Grameen Bank of Bangladesh was setup in 2006 to lend tiny sums to the poorest of the poor who were shunned by ordinary banks. This empowered the people at the bottom of the pyramid and enabled them to set up small and tiny village enterprises to pull themselves above the poverty line.

The Grameen bank is a billion pound business, acknowledged by World leaders and the World Bank as a fundamental weapon in the fight against poverty. Timely help to the poorest of the poor will empower the underprivileged of the World at large to enable the poor to lift themselves above the poverty line.

It is indeed heartening to know that the Government of India has initiated a special campaign known as '*Hamara Khaata, Hamara Swabhimaan*' "for 'financial inclusion' to bring banking to the masses. It is a movement that promises to bring basic banking services to all 73,000 'unbanked' villages with over 2,000 population by March, 2012 to cover the economic distance between rural and urban India." Courtesy: (Press Release by Ministry of Finance Government of India and Indian Banks' Association, The Times of India, 10th February, 2011, p. 7). This initiative will help to catapult the Indian economy into a process of self sustained 'inclusive growth'.

DR VN BRIMS Annual Seminar and Workshop

In order that MSMEs attain and maintain their competitive edge, they should satisfy the following requirements:

- 1) lower average cost of production per unit of output than large units
- 2) less capital per worker than large units
- 3) higher output per worker than large units
- 4) lower wage per worker than large units
- 5) higher surplus per worker than large units

²⁸Yunus Muhammad, Banker of the poor

- 6) higher output per unit of capital than large units
- 7) higher surplus per unit of capital than large units

If most, if not all, of the above conditions are met, MSMEs can be a very powerful medium for optimal utilisation of resources and be complementary to the effectiveness and efficiency of large scale units in particular and the Indian economy in general. The Seminar will attempt to address the above issues by exploring various hypotheses to identify the truth regarding the functioning of MSMEs in India.

Thus, the theme of the annual seminar, 'Management of Micro, Small and Medium Enterprises' (MMSME) organised by the Institute will be discussed from various angles. MSMEs have started playing an ever increasing role in the World economy. Management perspectives in MSMEs are not fully explored. MSMEs are contributing significantly towards the economy, but management principles are not being followed in most enterprises and hence a focussed approach towards handling challenges and hurdles is missing.

The Seminar and workshop on MMSME aims to bring together academia, practising managers, industry researchers, MSME personnel, scholar students, writers and authors to exchange and share their experiences and research results about all aspects of Management of MSMEs. Research papers, articles, case studies will be invited from various stakeholders so that importance and contribution of MSMEs to nations' development may be brought to light. At the same time, the practical challenges encountered by the MSMEs and the solutions which may be adopted will also be discussed

Annual Seminar on MMSME, scheduled on 11th February 2012 will present a galaxy of speakers with multilateral perspectives cutting across different segments of society and Management viz

- 1) MSMEs as an instrument of social, economic, technological and inclusive development of the Indian economy
- 2) The legal framework of MSMEs
- 3) Institutional framework, in the public and private sectors, to promote MSMEs
- 4) MSMEs in the context of liberalisation, globalisation and privatisation
- 5) Managerial issues of MSMEs - marketing, operations, finance, human resources, and information technology
- 6) Quality management in MSMEs
- 7) MSMEs a global comparison

The seminar will bring together the intellectual capital of various stakeholders, thereby generating relevant, valid and new knowledge for the MSMEs, helping them in their transition to the next level on the value chain.



CALL FOR PAPERS
&
NOTE FOR AUTHORS

CALL FOR RESEARCH PAPERS

ORGANISED BY

Vidya Prasarak Mandal's,

Dr. V N Bedekar Institute of Management Studies, Thane.

TOPIC

Management of micro, small and medium enterprises (MMSME)

ABOUT THE SEMINAR

● **Focus Groups (All Concerned with Management)**

1. Academicians
2. Practicing Managers
3. People at the helm of business organizations.
4. All Academic Institutions.
5. Research Scholars
6. Management Students

● **Seminar objectives**

1. Providing a platform to initiate the learning process and the knowledge developed will facilitate value addition to our know how on the same.
2. All focus groups will be encouraged to research upon various aspects for the theme through presentations and other related contributions viz. writings, case studies, video clippings et al.
3. To present a galaxy of speakers on the said theme with multifarious perspectives cutting cross different segments of society and management.

● **Guidelines for paper submission**

1. The original script should be submitted electronically with a word count of not more than 3000 – 5000.
2. The paper can be sent to the following email id: researchcentre@vpmthane.org
3. The text should be submitted in MS word with 1.5 line spacing, margins of all around 2.5 cm or 1 inch with Times new roman 12 font sizes. All papers must be in UK English.
4. The first page of manuscript should have the title of the paper, name of the author/s, complete mailing address, phone number, fax number if any and email address.

5. The figures and tables should be placed in the body of the text as appropriate, numbered consecutively in the text and duly acknowledged.
6. The author warrants that the article is the author's original work, has not been published before. Plagiarism is unethical and unacceptable.
7. An expert committee will screen the abstract based on research content, clarity in concepts and originality of the concept.
8. Decision of the expert committee shall be final.
9. Vidya Prasarak Mandal (VPM) reserves the right to refuse an article where its publication creates legal liability or where circumstances come to light that were not known to the expert committee.

● **Important Dates**

1. Full Paper Deadline: 18th January 2012.
2. Notification of Acceptance and Review: 30th January 2012.
3. Seminar Date: 11th February 2012.

● **Venue**

Vidya Prasarak Mandal's,

Dr. V. N. Bedekar Institute of Management Studies, (DR VN BRIMS) at Thorale Bajirao Sabhagruha, Jnanadweepa, Chendani Bunder Road, Thane (W) 400601.

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