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PERSPECTIVE

Indian Economy in the 21st Century: Strategies for Global Competitiveness:

Prem Vrat

RESEARCH PAPERS

**Influence of Destination Personality and Image on Tourist Loyalty:
A Study of a Hill Station in Northern India** :

Komal Nagar

**Customer Perception of Delivered Value: A Study of Consumers
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and Manohar Kapse*

**Internet Banking Services as Tool of CRM:
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Growing Income Inequality in India since the New Economic Reforms :

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SHOBHIT UNIVERSITY, MEERUT

Shobhit University, notified by the Government of India as a Deemed University, under Section 3 of the University Grants Commission Act, 1956, was envisaged and inspired by Babu Vijendra Kumar ji, an eminent agriculturist and social worker from Gangoh (Saharanpur) of U.P. The University stands for going beyond the established standards and for nurturing technocrats and managers that have a global vision and insight in their chosen field, with a focus on the requirement of professionals in the 21st century.

SCHOOL OF BUSINESS STUDIES

School of Business Studies (SBS) is an integral part of the Shobhit University, Meerut. It inherits the academic legacy of the NICE Management College (Established in 1995), and got a fresh window of autonomy in curriculum-designing and flexibility of foreign collaborations, through academic exchange, credit-transfer mechanism, and bringing in increased industry component. The SBS offers MBA programmes with numerous specialisations, including marketing, finance, human resource management, production and operations management, pharmaceuticals marketing, supply-chain management, and insurance and risk management. It also offers M.Phil. in management and Ph.D. programme in major areas of business.

NICE JOURNAL OF BUSINESS

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

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

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

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From the Editor's Desk

I am pleased to place before the readers the present issue of *NICE Journal of Business*. It presents a panorama of research papers, a comment, a bibliography, and book reviews on various aspects of business. The research papers and the short communication pertain to major business areas: *marketing* (customer perception, consumerism and grievance-redress systems, television advertising, CRM), *finance* (mutual funds and investors' behaviour, and the Internet banking), *human resource management* (influence of job satisfaction on organisational commitment), *Indian economy* (strategies for global competitiveness and increasing economic inequality after economic liberalisation), and *tourism* (influence of destination personality and image on tourist loyalty).

Professor Prem Vrat proposes strategic interventions required to enhance India's global competitiveness in the knowledge-driven, global economy. Recognising the key strengths of India's immense intellectual capital, huge demographic dividend potential, robust economy, and the strength and stability, a set of twenty-one strategic interventions are suggested to overcome the weaknesses associated with low quality and productivity of products and services, imbalances in the system, and low global employability of the output of the educational system. The focus is on education, ethics, innovation, energy, entrepreneurship, and a holistic and long-term perspective in decision-making in converting the potential into global competitiveness.

Dr. Komal Nagar assesses the influence of destination personality and image on the tourists' loyalty towards a tourist destination (a hill station in Northern India). Her study has revealed that the tourist loyalty towards a destination is largely influenced by the image of the destination and its 'personality'. The study has also revealed that tourist perception of destination personality has a positive effect on the perceived image of a tourist destination.

Dr. Kanagasabai Kajendra seeks to identify the determinants of the perceived value at the point where the purchase intention for a mobile phone arises in the consumer's mind. By using factor analysis, integrating several key variables of customer value into one theoretical framework, he argues that by enhancing the customer delivered value, a supplier can acquire a competitive advantage, by paying attention to changes in the customer's desired value. He suggests that the vendors take either a reactive or proactive position in relation to the customer's desired value toward mobile phones in his own country, Sri Lanka.

Redressing of consumer grievances is a pre-requisite for ensuring long-term customer loyalty and increasing profit and market share for any business concern. Through a comprehensive review of recent researches on the subject of consumer-grievance redress, Dr. Deepa Sharma gives a critical look at the Western as well as the Indian studies to record the evolution of consumerism, awareness of consumer protection measures, complaining behaviour of aggrieved consumers, impact of their complaints on companies' marketing practices, and the functioning of the grievance-redress systems in India. The author has found that the subject has not attracted due attention of research scholars in India.

A mutual fund mobilises the savings of numerous investors from various segments of population, for investment in diversified portfolio for earning return and capital appreciation. A number of mutual funds are available in India to cater to the investors' needs of liquidity, funds availability, risk-tolerance, and the expected rate of return. Dr. Neelam Dhanda and Ms. Savita Sindhu seek to identify the investor-related factors to be considered by a mutual funds company for developing and promoting the various instruments.

It is necessary to understand the relationship between employees' job satisfaction and organisational commitment. Dr. Babita Agrawal and Mr. Manohar Kapse examine the demographic characteristics that influenced their satisfaction level. They have found that management may increase the level of employee commitment to the organisation by increasing his satisfaction with compensation, managerial policies, and working environment.

With the spread and penetration of the Internet in India, the Internet banking plays an important role in acquiring and retaining bank customers. Through a survey of bank customers, Dr. Shamsheer Singh finds that the Internet banking has not been exploited to its full potential and there is still a need to convert the non-user customers into the users' category, through certain specified measures.

Mr. Amit Girdharwal assesses the impact of India's New Economic Reforms, introduced in 1991, on the distribution of income and levels of living. He argues that despite an appreciable improvement in the growth rate of India's GDP, the Reforms have failed to provide inclusive growth and have led to further increase in the uneven distribution of people's income and levels of living.

The subject of television advertising and its influence on children has received keen attention from scholars, psychologists, and consumer activists across the world, especially in the US and the UK. Dr. Neeru Kapoor's comprehensive bibliography on such a fascinating subject includes standard text and reference books, research articles, and selected unpublished Ph.D. theses from India and foreign universities.

In the section on book reviews, we have four reviews by experts in the relevant fields. The books reviewed pertain to subjects as diverse as project management, media planning and buying, business research methods, and supply chain management.

I express my gratitude to the eminent authors of research papers, short article, and a scholarly bibliography, and to the expert book-reviewers, for their valuable contribution to the journal. Several experts made available their time and expertise in assessing the articles and making critical comments and suggestions for improving their quality. I owe a word of thanks to each one of them.

I must use this opportunity to express my sincere thanks to Mr. Shobhit Kumar, Chancellor; Kunwar Shekhar Vijendra, Pro-Chancellor; and Professor Anoop Swarup, Vice-Chancellor, Shobhit University; for their support and keen interest in this endeavour intended to promote business research.

DPS Verma
Editor

INDIAN ECONOMY IN THE 21ST CENTURY Strategies for Global Competitiveness*

Prem Vrat**

Abstract

This paper examines the intrinsic strengths of the Indian economy that enabled it to sustain its growth rate even during the recent recession that severely hit the developed economies. While the developed world saw a major economic downturn, India could have a growth rate only at a slightly lower rate than that what it had before the recession. The paper proposes a major shift in the way of doing business where its strengths can get leveraged, and it overcomes the weaknesses that come in the way of making it a globally-competitive economy. A set of 21 e-mantras which are crucial to the process of economic recovery and to the gaining of global-competitive advantage is envisaged. An attempt has also been made to identify the major weaknesses plaguing the development and to treat them as opportunities to facilitate the improvement for global competitiveness, leveraging inherent strengths in the Indian economy. The focus is on education, employability, energy, ethics, enforcement of rules and entrepreneurship. If these 21 strategies are practised in a holistic manner and for all the aspects of the economy, India can emerge as a knowledge superpower because it has all the ingredients of being such a nation.

Key words : *Indian economy, Revival strategies, Global competitiveness, Education, Employability*

INTRODUCTION

Recent years have witnessed a cascading downturn in the world economy resulting in tremendous decline in businesses and employment globally, particularly in the developed world. Fortunately, India has remained largely unaffected by this recession, staying virtually at the same level as some of the most developed countries. This feat of survival from recession brings to the fore the inherent strengths in the Indian economy that enabled it to face one

of the worst economic crises of the recent times. In fact, while the developed world was mauled by the meltdown of their economies, Indian economy only slowed down in maintaining its growth trajectory. It suggests that the Indian economy has a sound fundamental strength, which if leveraged properly, can give it a lead over others.

This paper seeks to identify the factors that need to be addressed in achieving that goal. In the absence of these enablers, India may not be able to

* Invited Paper

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show its inherent economic prowess. It provides India an opportunity to reflect and identify its key strategies which will take it towards the goal of making it a developed nation.

About 700 years ago, during the 14th century, India and China together accounted for more than half the world trade. The economic trends, today, kindle the hope that if India develops a right roadmap for facing the global competition, it can once again regain its past glory. China is almost there. The emergence of the 21st century as a knowledge society gives India a core advantage in leveraging its 'demographic dividend' effervescent in its young and inherently brilliant and innovative human capital. Even from the international perspective, the 19th century belonged to Europe, 20th century to America, and now it is the turn of Asia to lead in the 21st century. For this to happen, India and China are obviously the two major economies provided they build on their inherent strengths and overcome the weaknesses blocking their respective progress. It may be hypothesised here that India is not a poor country, but a poorly-managed country. Since the socio-economic systems, being open systems, are 'negentropic', this state of economy can be changed for the better by striving for the twin goals of being a developed nation and a knowledge superpower.

The SWOT Analysis enables us to identify the national strengths and weaknesses and identify the future opportunities as well as threats to exploit the opportunities that globalisation offers by leveraging the strengths and overcoming the weaknesses, treating each weakness as an opportunity to improve. To facilitate the thought process, the author decided to impose a constraint to identify all the major stumbling blocks which hinder the growth of India's economy to reach its full potential. A set of 21 action points (say 21, *e-mantras*, as each of these action points start with the letter 'e') are proposed for revival of the economy in the 21st century. It is envisaged that if all these action points/ strategies are handled in an integrated manner, and implemented with passion, the results should be positive and spectacular.

Economic Development: A Holistic Approach

This is the first keyword. Indian economy has been compared with an elephant, because of a negative perspective of slow growth rate and sluggish response to changes in policies and strategies. There is another angle to look at the elephant analogy contained in the folk story of 'Six Blind Men and an Elephant', wherein the six blind men look at the different body parts of an elephant in their own narrow perspective. Similarly, the huge Indian economy, in the absence of a holistic

Table 1
Macroeconomic Trends: Growth of GDP

Years	Sector				
	Agriculture	Manufacturing	Industry	Services	Total
1980s	4.4	6.9	6.2	6.7	5.6
1990s	3.0	5.9	5.81	7.6	5.8
1992-1997	4.7	9.8	7.6	7.6	6.7
1997-2002	2.1	3.8	4.6	8.1	5.5
2002-2005	0.9	6.7	8.3	8.4	6.6
2005-2006	5.9	9.0	10.1	10.3	9.4
2006-2007	3.8	12.0	11.0	11.1	9.6
2007-2008	4.6	8.9	8.5	10.8	9.0
2008-2009	1.9	2.5	4.0	9.7	6.8
2009-2010: Q1	2.4	3.4	5.0	7.8	6.1
2009-2010: Q2	0.9	9.2	8.3	9.3	7.9

Source: NCAER, 2010

perspective, can suffer perception gaps in shaping the policies due to a narrow thinking. The sector-wise growth of the Indian economy during the past three years is shown in Table 1.

It is evident from the table that some sectors have achieved a good growth rate despite the slow-down, whereas some other sectors, particularly the agriculture sector, have registered a very low growth.

The share of agriculture and the value addition from agriculture over the recent years is depicted in Figure 1.

This reflects an imbalanced growth trajectory and hence an integrated view of the economy as a whole is needed to perceive the massive animal as an elephant.

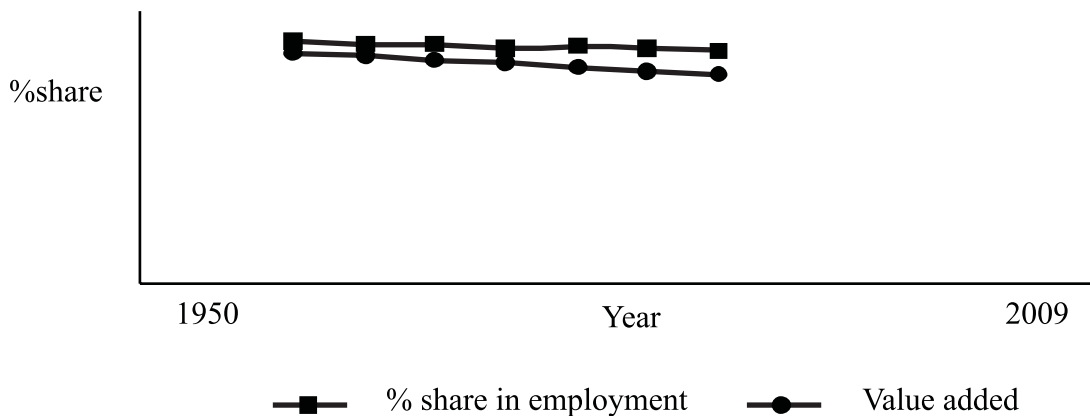
This suggests the need for a co-ordinated, integrated and holistic approach in identifying the problems and solving the issues confronting the Indian economy. In the absence of this, different people with their narrow perspective and a narrow vision and sometimes due to their self-interest may look at the problems and issues through their own coloured lenses.

This often leads to a sub-optimal solution to the problem; and sometimes the solution may be

worse than the problem. Thus, a holistic approach to decision-making by looking at the problem in its integrated framework should be a major focus of all strategic decisions so as to optimise the effectiveness of the solution in the interest of the economy as a whole. In a large system, if managed in an un-coordinated manner, different sub-systems may be working at cross-purposes, nullifying each other's efforts.

In order to be globally competitive, there is a need to develop the systems, thinking almost as a natural habit in the decision-making process. There is also another positive way to look at the economy as an elephant, i.e., a mighty system in terms of its size, stability, solidity, robustness, strength, power and perhaps intelligence. These intrinsic strengths of the Indian economy seem to be responsible for sustaining it through the global recession. Therefore, this analogy can be used to cultivate the holistic thinking and to enable the Indian economy to leverage its sound and robust fundamental strength to have the agility to respond to changes very quickly. One of the major reasons for low quality, low productivity, and hence low competitive ability of Indian manufacturing and service organisations is the lack of holistic perspective in problem-formulation and lack of co-ordinated efforts in solving the problem.

Figure 1
Share of Agriculture in Employment and Value-added



Source: NCAER, 2010

Education

The second keyword for India's transformation is education. Ignored for long, education is the main *mantra* to make India a truly knowledge superpower. This is the most opportune time to do so for various reasons:

This century is often termed as the knowledge-driven century, when India has the advantage because it has the core competence in the form of its demographic dividend. More than 55 per cent Indians are under 25 years of age and a good quality education can make them an intellectual asset of the society. A typical Indian is a very intelligent person who can be very innovative if he/she finds a purpose in it to personally benefit either in terms of money or satisfaction. It is, therefore, important to nurture this talent to make them globally employable. If nurtured well, then they will be assets, who will not only transform India to the status of a developed economy but also prove to be the most sought-after talent pool globally because most of the developed world is ageing and they will have to depend on Indian talent to sustain their own quality of life. However, this is only possible if they are globally employable with quality of hand, head, and heart with knowledge, skills and positive attitude. If India fails to avail this opportunity, the same demographic dividend can be a major curse of the society. Thus, a holistic-value-based education is imperative if India is to avail this golden opportunity. Otherwise, the stakes are very high. Threats are real that it can become a demographic liability instead of dividend.

The Indian parenting is something to be saluted when it comes to affording quality education to their child even at the cost of their own personal comforts. Thus, there is almost an infinite demand for quality education in the country. However, the quality of supply is sadly missing, particularly at the primary/basic education in the rural areas and in the professional education. Due to enormous gap between the quality demand and the quality supply, a large number of players have entered the fray. This has led to serious quality problem and has caused imbalance that needs to be

addressed. Vrat (2009) has addressed these issues in detail and has outlined an action plan to remedy the situation in the context of higher technical education. Faculty shortage is another issue that plagues education in general and technical and professional education in particular. Unless the society creates the conditions, where the best and the brightest prefer to join teaching and research as a preferred career option, this scenario is not going to change. Vrat (2004) has raised these issues and has suggested that the faculty issue being at the core of educational processes, one must address the issue in its totality and focus on faculty development as a key factor in educational institutions. The role of a teacher is not to be confined only to transmitting information in the class rooms but for the holistic development of the pupils to make them not only good engineers, scientists, managers, etc., but good human being as well. A great teacher is perceived by the students as a role model and, therefore, the skill-sets required are: apart from scholarly brilliance, an inspiring communication skill and a role model personality pre-disposition in terms of ethics and moral values, compassion and empathy for the students.

It is time the society looks at education as a nation-building process and not as a drain on the national resources. In a wider perspective, education is what shapes the future of a nation and if educational investments are examined in that perspective, one would find that there is an enormous gap and so much needs to be done. Excellence, equity in access, and inclusion are the three pillars on which education needs to be based. Fortunately, in recent times, this feeling seems to be driving the educational policies but much more needs to be done. The job description of a good teacher is contained in the acronym IIT – Inspire, Involve, and Transform. If that happens, the demographic dividend will surely materialise. There is also a need to develop the value-based global mind-set so that Indians can fit easily in the globalised world. Managing time and respect for self and respect for others is a part of that value inculcation process that needs particular attention.

Figure 2

Proposed Value Grid for Value Mapping

Concern for others	High	Iconic	Ideal
	Low	Inifferent	Individualistic
		Low	High

Concern for self

It is often said that the problem is not with Indian minds, but perhaps with their mind-set. This dichotomy is a major stumbling block in the economic prosperity of a nation. This can be characterised by the Value Grid, proposed in **Figure 2**. At present, if a survey is done, one may find that most people will fall either under 'Individualistic' quadrant or in 'Indifferent' quadrant.

Not all can be expected to be included in the saintly category of 'Icon'. Therefore, let there be at least a balance between the 'Concern for Self' and the 'Concern for Others'. This single change in the mind-set and the required self-discipline can transform India. In the absence of this, there shall be cut-throat individualism. Thus, realistically, the 'Ideal' quadrant, as a balanced concern, reflects a win-win situation of a 'TEAM' (Together Everyone Achieves More). Due to the utmost selfishness in the 'Individualistic' category, one may land up in lose-lose situation of 'MAD' (Mutually Assured Disadvantage) syndrome. Such syndrome can be experienced at busy traffic signals in a metropolis, particularly if the signal lights are not working and there is no traffic controller present. In the chaos that ensues, everyone loses time; wastes fuel, pollutes air, and hurts feelings. A self-disciplined traffic could be a win-win proposition.

Energy

The third keyword is energy. Energy security and self reliance are vital since the state of the development and per capita energy consumption are strongly correlated (Vij, *et al.*, 1988). Most developed countries have reliable, continuous and affordable supply of energy to meet their requirement. In India, the exploitation of renewable sources of energy had been ignored

in the past and the energy options focused on were mostly the fossil fuel-based energy sources, such as coal and petroleum. India is blessed with an enormous amount of sunshine almost throughout the year. Had these sources of energy been exploited economically, India would have been self-reliant on this front and would have the capability to export surplus power to other countries. Renewable energy programme should have been a top-priority energy option because the solar, wind, biomass, geothermal, tidal wave, small hydro and perhaps nuclear energy are not only environment-friendly technologies but also are naturally available resources.

The R and D efforts to develop these energy sources have become an extremely important development agenda. Vij, *et al.* (1988) point out how the waste dimension in the process of energy planning in the country was ignored even in the traditional oil-based energy sector, where the oil being the main goal, the gas that came out as a by-product, was taken as a 'necessary evil' that needed to be flared leading to colossal waste and environmental degradation. If the gas was treated to be as major a product as oil, India would have developed long back, gas-based manufacturing system instead of wasting it. This realisation came rather late and, of course, now the efforts are on to taking care of the gas that comes out along with oil in the process of oil exploration and refining. A holistic long-term energy policy based on renewable resources deserves to be a strong priority area.

Apart from the generation of energy, the energy conservation also needs attention because the kinds of losses that take place in the process of transmission and distribution, as well as theft, pilferage and use of energy-guzzling inefficient equipments and processes in manufacturing

can hardly make Indian manufacturing globally competitive. The energy losses in India can be as high as 30-50 per cent of the generated capacity. It is ironic that energy shortage and wastage are taking place simultaneously. Energy conservation, use of energy-efficient technology, machines, lighting and buildings are vital for ensuring that whatever is generated is put to use efficiently and effectively. Despite so much sunshine, many buildings in India, based on the western culture, are so designed, that even during a shiny day; the offices use the artificial lights extensively. Energy conservation in the real sense should be a priority agenda. The wastage is even more colossal where (particularly in rural areas), electricity is charged at a flat rate. There is often a human tendency to indulge in unacceptable level of waste, particularly if someone else is paying the bill. Sushil and Prem Vrat (1989) have proposed an integrated approach to waste management policy deployment as waste management is a vital, but an ignored problem area in India

Environment and Ecology

The issue of ecology and environment is becoming a centre-stage problem due to the concern the global community is having about the global warming. Global warming is due to the consumption habits and technological options employed, among others. In the Gandhian model of development, the sustainable development meant preservation of resources, both natural and man-made, but the mass production technologies, luxury goods and conspicuous consumption have contributed to the current sorry state of affairs, leading to climate change. The only sustainable model of economic development that needs to be pursued is balancing the development needs and the preservation of natural resources to save the earth's resources for the future generations. There is a wrong notion that only the developed or the developing nations need to address this issue. In fact, it is equally relevant for both the developed and the developing nations that one needs to focus on ecological dimensions in all that is done. However, in the name of environment, we should

not let the development suffer. Vrat, *et al.* (1993) developed a System Dynamics model to address the issue of global warming, where they suggested to address the causes of the problem and not treat only the symptoms of the problem.

Waste elimination, recycling, reuse, refurbishing and waste disposal aspects are vital but are generally neglected. If the waste can be plugged, one may well be able to avoid the shortage and protect the environment. Waste management in India is ignored both in its preventive and corrective aspects, and focusing on this itself can be so powerful an area to increase the competitive edge. There are evidences of enormous waste of almost every resource. Vrat (1979) and Sushil and Vrat (1988), Vij, *et al.* (1988), Saxena, *et al.* (1989) have addressed these issues in details. The best form of waste management is not to generate the waste at all. Thus, there is a need to focus on reverse supply-chain-related issues for quick and efficient waste-recycling to protect the environment, reduce the manufacturing cost and conserve the energy. In recent times, the e-waste of electronic and computer hardware due to high obsolescence rate is becoming a critical issue from the environmental point-of-view. The government, in recent times, appears to be sensitive to this aspect.

Excellence

One of the most powerful *mantras* for survival and growth in a highly global and competitive economy is 'excellence' in whatever is done. Quality, productivity, individual excellence, team excellence, process excellence, and organisational excellence are to be the goals to be pursued with a missionary zeal. Higher efficiency and effectiveness are very important but often neglected components in the work culture or at the best lip service is paid to them. The tolerance for ambiguity and '*chalta hai*' culture is a major stumbling block for India in exploiting its true intellectual potential of being a world knowledge leader. In fact, in the World Economic Forum ranking for global competitiveness index, in most of the rankings based on quality and excellence,

India's rank has been quite low, but in the negative performance indicators such as crime, pollution, and corruption or, in number terms, the rankings are very high. This unfolds the paradox between quantity and quality and needs to be seriously addressed.

Indian firms, therefore, need to address the issue of excellence, quality and productivity on a priority basis. The general guiding philosophy should be that "anything worth doing has quality dimensions in it, and anything that does not have quality dimension is not worth doing". Total Quality Management (TQM) (Khanna, *et al.*, 2009) or business excellence models have to be employed extensively in managing corporate affairs on a massive scale to truly transform the Indian economy. The percentage as a basis of measuring rejections, failures, non-conformance has to be discarded and excellence driven matrices, such as zero-defect, zero-waste, zero-breakdown, zero-accident, and zero-failure have to be the new watchwords for attaining global leadership and the peak potential. This, of course, will not come through empty slogans or by paying lip-service but by sincere and committed leadership, human resource development, benchmarking with the best practices and, above all, a passion on the part of every employee to excel.

Excellence requires a nurturing environment at workplace, recognition of outstanding performers and a transparent performance measurement system that inspires confidence in the process. That alone can motivate people to put in their best efforts (Vrat, *et al.*, 2009). Motivation and commitment are two vital instruments of excellence. Motivation tells us what we do, whereas commitment tells us how well we do it. This message is effectively conveyed by the following equation (Vrat, 2004) which will motivate people to put in their best efforts in search of excellence:

$$E = M * C^2$$

where,

M = Motivation,

C = Commitment, and

E = Excellence

Through this equation, one can gain insight into the process of achieving excellence. If $C = 2$, then $E = 4$ but if $C = 0.5$ (doing a thing in a half-hearted manner), $E = 0.25$. Therefore, excellence and indifference cannot co-exist. One is required to be doubly enthusiastic with the passion to excel. This indeed is a vital pre-requisite which is a major challenge in the Indian scenario. The key to excellence is, therefore, quality of the people and the commitment of the top management. With these two factors in place, one can overcome all resource constraints and evolve right policies and strategies in order to excel. In the absence of these factors, there will be 'blame-game' and explanations why one could not reach the goal but one will never reach the goal. Therefore, these are the two critical success factors the organisations must do all they can to ensure that these conditions of excellence exist. It is a paradox that Indians do wonders while abroad but are not able to achieve the same level of performance with a larger number of similar or even higher caliber people remaining within the country. There is a need to create a nurturing, excellence-driven, enabling work environment and then watch the wonders to happen in the performance levels.

Ethics

Strong ethics, at the level of the individual, family, profession, corporate, and the society are vital for Indian economy to gain global respect, market share and customer retention. There are empirical evidences that, in the long run, only the ethical businesses survive. Shortcut methods might succeed in the short run but they cut short in the long run. Ethics, human values, professional code of conduct and good moral values are vital in the long run. Technology and other professional disciplines, such as medicine, law, and business, can harm the society without good human values and professional ethics. Increase in the technology enabled crimes including cyber crimes in recent times point to the greater importance of ethical behaviour in a technology-driven world. If one compared the ancient Indian scenario with the present situation on the front of the value

system, one will find major value-degradation. If India wishes to revive the economy to reach the level of being a global leader, it needs to instill these finer human values among its people. Recognizing the need of the engineers, managers, and other professionals covered under the technical education banner, the Uttar Pradesh Technical University has recently introduced a compulsory audit course on human values and professional ethics. The idea behind this initiative was to sensitise the young minds about the need for being ethical in whatever they do. Of course, the biggest difficulty is to find those role models among teachers whose very presence in the classrooms inspires because the teacher has to be a role model and living embodiment of these values. Values cannot be taught in a cook-book manner as these are best caught and not taught. Today, due to corruption the black economy may even be dominating the legitimate economy. Only a strong sense of ethical behaviour on the part of everyone can transform India to be a great knowledge super-power.

Employability-enhancement

'Employability' of ordinary graduates in general and of those with professional qualification in particular, continues to remain a cause of serious concern for policy-makers. A recent NASSCOM study had estimated that the immediate employability of IT graduates from the engineering colleges could be as low as 25 per cent. In the case of general education, it might even be lower than that. India can not be a globally-recognised knowledge economy with that dismal level of employability. Under such a scenario, even to talk of the demographic dividend is not a sustainable proposition. On the contrary, the large number of unemployable people can be a demographic liability leading to chaos, tension, crime and social upheaval. The early warning signals of these are already in evidence. This aspect needs to be immediately addressed. This is particularly important for the professional colleges, where the parents who pay higher fees, expect a good quality education with the hope of getting a good job after

graduation. Thus, employability enhancement must be an important issue to be debated in all educational institutions.

It is quite obvious that the education sector *per se* is not in the business of giving employment, but it must have the obligation to impart global employability. High employability will eventually get employment, but with low employability, an employment even if already on hand cannot be sustained. It is advisable that the educational institutions do not promise employment but ensure employability. The institutions have to aim at 100 per cent employability and not merely be satisfied with incremental enhancement from 25 per cent to say 40 per cent, because even if few persons are unemployable, they could create enough tension in the society and it also reflects non-utilisation of the Indian talent. However, the employability depends on the nature of particular type of job, and even training them for social service or entrepreneurship comes within its purview. Employability comprises of capabilities of a person because of which he/she gets hired in any organisation as a value-addition proposition.

Institutions should also focus on the global employability because of the demographic profile of the world that was referred to earlier. This calls for integration of knowledge, skills and attitude. In the skill-sets required, the most critical is the 'attitude'. With a positive attitude, they can solve any problem but with a negative attitude, they will find problems with every solution offered. Thus, a superior intelligence with a negative attitude is perhaps more harmful than mediocrity with a positive attitude. It is proposed for greater insights that the employability can be expressed as an equation:

$$\text{Employability} = \text{Attitude} [x. \text{Knowledge} + (1-x). \text{Skill}]$$

where, x lying between 0 and 1 determines the relative weight for knowledge,

and $(1-x)$ for the skill which may depend on the level of education and the purpose of employment.

In vocational education, skill may get a higher weight. For research, it may be the knowledge. The attitudinal variable may range from -1 to +1. As can be seen from this equation, no one would like to hire an extremely negative person, even if he or she is very knowledgeable and highly skilled. This change of focus on employability calls for a fundamental rethink on the part of the educational process and involvement of all the stakeholders in the teaching-learning process to determine the attributes of the employability required. Without the involvement of employers, one cannot find such attributes. Thus, a close industry-academic interaction in the design and delivery of the courses is an operating necessity to enhance the employability of the student.

Encouraging Exploration and Innovation

This is a major paradox that Indians, as individuals, are very creative and innovative, but at the national level, their creativity index is very low. In a recently published *Global Innovation Indices (GII) statistics* (Dutta, 2010), India ranks 56 among the nations, with a score of 3.06 on a 5-point scale on the global innovation index. However, perhaps at the individual level, Indians could have scored much higher, at times may be 5 on 5. The concept of "Jugaad" (Krishnan, 2010), that is being talked about in recent times is a manifestation of that tremendous creative genius that resides in many, if not most, Indians, where there is a personal benefit from such an innovation. This needs to be leveraged to 'think out of box' to create innovative solutions to India's problems by creating enabling environment so that creativity and innovation flourish.

Research and development creates markets and newer products and thus, can be an engine of economic development. However, the focus on research in Indian industries and even in Indian universities is quite low. China, which was way behind India on publication index some 20 years back, is now so much ahead that it may perhaps be never possible to catch up with it. The best and the brightest persons of the society are not taking up research as a career due to availability

of better compensation elsewhere. At times, taking up research becomes the last option. India will miss a great opportunity if this situation is not changed. It is a paradox that the best Indian brains go abroad and create software and other knowledge products which are then imported at much higher cost. The benefits of encouraging creativity, innovation and research in the country will, in the long run, be far more than its cost and hence will be more economic than importing technology.

Research and innovation, though a major intrinsic strength of India, has not been leveraged due to lack of focus of the industry in hiring research scientists. As a result, some kind of 'Diminishing Calibre Syndrome' appears to be prevailing as one goes up in senior degree programmes in even reputed universities and institutions with excellent calibre visible at the B.Tech. level, but relatively less bright scholars go to higher-level degree programmes because they know that such higher degrees are not going to add better hiring value at least in the short run.

Industry in India does not invest in research, because there the expenditure is deterministic whereas the outcomes are probabilistic. Only a strong focus on research will make Indian industry globally competitive. Another feature of Indian innovation is that most of the research budget is government-funded and the industry as an 'end user' of that output does not spend much out of its own profits on research. A fundamental change in the mind-set is imperative for the research and innovation as these are vital pre-requisites to survive in the global market today.

Exporting Knowledge Products and Expertise

India has to substantially enhance its share of export earnings. The trade imbalance against India was -6.5 per cent of the GDP in the year 2006-07, -7.4 per cent in the year 2007-08, -9.8 per cent in the year 2008-09, may end up -10.2 per cent in the year 2009-10. The export-orientation is important on two counts, firstly, to balance the trade deficits, and, secondly to exploit the inherent demographic dividend. In the manufacturing sector, the country

perhaps, will take time to have a lead over China, which has already taken a tremendous lead in its cost advantage, productivity level, infrastructure, and quality focus. This, perhaps, at the moment does not make India a clear winner over China in the manufacturing sector. Although in the automobile sector, telecom sector and perhaps in pharmaceuticals sector, the manufacturing revolution is happening. However, focusing on export of knowledge products and knowledge workers because of their superior intellect, good English communication skills, and flexibility to speedily adapt to an alien environment, and putting hard work in an outside environment if it enables and compensates for that hard work. The export of products and people may be focussed in the areas of software, books, journals, periodicals, knowledge processes outsourcing, models and algorithms, CDs, DVDs, films, artifacts, paintings, research outcomes through contract research outsourcing, and of course, professionals in any aspect of knowledge society, such as teachers, researchers, engineers, architects, and so on. It calls for focus on educating and training globally employable "Indian talent". Thus, the canvas of IT should be expanded to go beyond information technology, so as to cover all kinds of professionals. That is a new paradigm in IT – Indian Talent, proposed here.

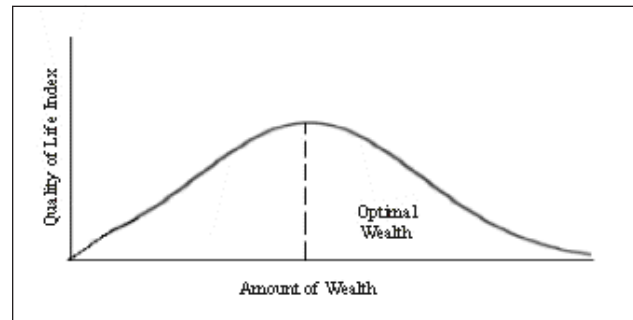
Equitable Distribution of Resources

One of the symptoms of a developed society is the sense of equity in the sharing of its resources and a reasonable gap between the two ends of the spectrum in terms of their economic and social well being. If the quality of life is the goal, too much money or too little money, both are undesirable propositions. A hypothetical relationship between the quality of life and the amount of wealth is shown in **Figure 3**.

Having too little or too much, both erode the quality of life. In India, this is one of the biggest challenges. If it is not overcome, it can disturb the social fabric of the society.

The paradox which the Indian society reveals in terms of the inequality is mind-boggling,

Figure 3
Quality of Life as a Function of Wealth



where the richest of the world and the poorest of the world co-exist side by side. The extremes can be seen in the much-hyped Indian Premier League's (IPL) Rs. 1702-crore bid, reportedly made for the IPL Pune Team, while 500 million Indians survive on a mere Rs. 50 per day. Such gap between the IPL and the BPL (Below Poverty Line) is worrisome, and calls for a balanced and equitable allocation and distribution of resources so that efforts are made to develop all regions, states, and all cross-sections of the society, with a 'judicious' compensation package. Unusually high pay package alone does not guarantee superior performance. This might mean that one may have to put a cap on the compensation of the highly placed and a major push upwards for those who are in the lower rung of the organisational hierarchy. The abnormal gaps in the salary among different professions, levels, and regions can be socially disturbing. Lavish consumption and abject poverty are not signs of a good economy. With extreme inequitable share of resources manifesting Pareto's law of mal-distribution in the society is not a sustainable proposition. This has to be checked even for the purpose of peace, tranquility, a good quality of life, and a good human development index, with greater human happiness.

The human satisfaction in any organisation or society depends, to a large extent, upon the perceived equity, fairness and justice in the organisation or the society. Unreasonable salary differentials cause frustration, reduce the dignity of labour, under-rate or over-rate the jobs and, eventually, lead to low morale, low productivity,

and poor industrial-relations climate. Imbalance of any kind is a sign of disease in a system; only a balanced system achieves optimal results.

There is no job that is too great or too small. The importance of the so-called menial job is released when it is not done at all or not done well. Thus, the extreme anomalies help none. In any case, salary is only a 'hygiene factor' and fat salaries do not necessarily mean great performance, but poor wages certainly mean low productivity and inferior quality, which impact customer satisfaction and competitiveness. India has inequitable distribution of resources. No great economy can afford to have that symptom. However, here it must be noted that equitable does not mean equal but it means fair and rational.

e-Governance

This e-mantra will transform the way one manages administrative and managerial affairs. With the advent of information technology, a fundamental rethink is necessary. It is now possible, about the way systems transact business – be it the government, or the corporates or elsewhere. e-governance, therefore, necessitates a re-engineering of the key business processes to make these IT-enabled. The Internet has, almost in a revolutionary way, ushered in enormous possibilities, having profound impact on the human society which perhaps is unparalleled in the recent human history. These concepts are applicable at the government level; both State and the Centre, corporate level and at any basic entity level. There are enormous benefits and certain challenges too, in adopting e-governance in almost every human endeavour. Gupta, *et al.* (2004) suggested that e-governance has two connotations: the application of electronic means in the interaction between government and the citizens and the government and the business, as well as in internal government operations to simplify and improve all aspects, including the democratisation. The major benefits of e-governance are as follows:

1. Citizens get on-line access to information, which is otherwise difficult to get and it also brings in more transparency in the government systems and processes.
2. Response times both ways are extremely faster and mid-term corrections on policies are possible and are lot easier. There is a check on corruption due to transparency and there are many other technology-driven advantages, e-governance and computerisation can be a powerful strategic intervention.

e-Governance, at the level of corporate, state, national and even at the grass-root level needs to be implemented at the earliest by enabling adequate allocation of resources, training of people, enacting laws to facilitate smooth implementation and curb malpractices and cyber-crimes as a result of introducing e-governance. e-Procurement will eliminate or, at least, reduce the tender mafia menace; reduce collusion and cartel formation; e-tendering, e-business, e-commerce, are derivatives of introducing e-governance through which the policies are quickly and strictly implemented. It is such a vital economic enabler that even if it requires enacting a law to make it mandatory, perhaps it will pay dividends in the long run.

e-Learning

e-Learning has been separately discussed here to highlight its importance in the context of education and its potential in maximising the reach of this powerful medium of teaching-learning process. Given the low GER (Gross Enrolment Ratio) in higher education, e-learning can enhance the availability of good quality education to anyone, anywhere, anytime on anything. It could be either Just-in-Time (JIT) or Made-to-Stock (MTS) through videos. It is a powerful mode to implement the policy to economically enhance the reach of education and make good quality education inclusive and accessible. Thus, with e-learning, the three goals of education – access, inclusiveness, and excellence – can be simultaneously achieved, that too in a cost-effective manner.

e-Learning can be at every level; both in the stand alone mode, as well as in the supplementing mode. The latter is quite effective. e-Learning has started taking shape in India. The Ministry of Human Resource Development initiative, through the NPTEL (National Programme on Technology-Enhanced Learning) is a very promising initiative in the context of technical education, particularly due to acute shortage of talented and committed faculty. e-Learning can and should step up our extension services to share new products, methods and technologies with common people. It can improve efficiency and effectiveness of extension services taking the latest developments in technology and management to people. Extension has also been also one of our weaknesses. Except in agriculture, there is no strong network of extension services in technical institutes. Virtualisation of technical education through e-learning can also focus on more effective extension of technical developments to common people to improve their quality of life.

Another closely-related issue is the knowledge management (KM) which has implications in terms of managing technology, processes and people in a co-ordinated manner, and can also preserve even the tacit ancient knowledge. Given the rich cultural, and educational heritage of India, KM becomes a powerful agenda for development of the economy. Even issues associated with languages, adult education can be economically and effectively handled by leveraging e-learning in the educational programmes at all levels, in all fields of knowledge. However, the issues, like technology dependability, capital investments, change management and unethical misuse of Web and Internet or cellular telephony are the major challenges in its effective implementation. But this has to be done if Indian economy has to be a global knowledge superpower. Technology can be misused but the same technology also enables to nab the culprits.

On-line examination is another major area in e-learning, which can transform the way institutions test and evaluate their students. There are so many phobias associated with examinations

that it is causing stressful distortions in personality profile of learners. On-line examination, conducted in a flexible and facilitating environment, can substantially change that scenario and can handle the menace of copying and cheating, which can negatively impact on students' ethical behaviour.

Entrepreneurship

Indians, individually, are very enterprising. They are quick to adopt a technology, if it is evidently advantageous. They are quick to find an opportunity in every problem. They can easily go wherever the opportunities are and can make a mark in exploiting that opportunity. Majority of the Silicon Valley entrepreneurs in the U.S. are Indians and Chinese. It is necessary to leverage this spirit of innovation, enterprise and hard work that motivates Indians, provided they find a purpose or profit in it for them. Logically, therefore, India should create enabling environment for this native enterprising spirit to blossom by promoting entrepreneurship, put enabling environment, rules, and policies in proper place and in proper perspective. It must also ensure that bureaucratic delays, permit/ license regime and the corrupt practices do not dilute the spirit of entrepreneurship.

A recent survey by the CII indicates that on the basis of average time to register a company, India ranked 81st as compared to the 9th rank of the US. In order to encourage the spirit of entrepreneurship, there is a need to simplify the processes and proactively advise the potential entrepreneurs about the opportunities and threats associated with various business propositions and options. India has enormous native creativity which may not be necessarily linked with jobs alone. There is, perhaps, a need to nurture this creative venture and to become job-givers rather than job seekers. Simultaneously, the institutes must introduce programmes in entrepreneurship at the undergraduate level, graduate level, increase the IPR awareness and facilitation process and create more venture funds, develop idea incubators in technology and business to facilitate the rural youth to convert an innovative

idea into a successful product. Entrepreneurship needs a massive push as compared to what has been done so far.

Exposure to the Best Practices

Benchmarking with the best in the class or emulation of the role model is an effective and a quick method of transformation towards excellence. This saves time, efforts and costs associated with too much experimentation with the reality. Benchmarking is a powerful implementation strategy in TQM.

Benchmarking with the best practices requires exposure to a large spectrum of best practices which have delivered superior performance, so that an appropriate practice, best suited to a given situational context can be adopted. This exposure can be at the local, regional, national and the international level. However, there can be the best practices within the country, within one's own company, around in the neighborhood. Hence, an extensive exposure is called for. Even the global exposure is of vital importance, particularly when it comes to infrastructure, systems and processes, documentation, integrated/co-ordinated planning and implementation, adherence to norms, time schedules, waste disposal practices, discipline, and concern for others. Therefore, one should have an open mind to accept the best practice irrespective of its source, but it must be carefully chosen and if required, be adapted to suit the situation. Blindly copying and transplanting a practice; even if it had done well elsewhere is no guarantee for it to succeed in some other context, because management is situation-specific.

There is a need to cultivate the culture of sharing information, practices and have an open mind to adopt the best course of action. Extensive exposure to best practices and careful adoption to suit in the context is an effective mantra to quickly take the economy to greater heights.

Expenditure Control

In India, even though the cost of labour and materials and the cost of living may be lower as

compared to the developed economies, but due to low productivity, low quality and excessive wastages, the ultimate "delivered-to-customer cost" is not very competitive globally. That is perhaps the reason why on global competitiveness rankings, India ranks quite low despite the cheap labour availability in abundance. Only a major cost advantage drives global investments. India must not lose that capability. However, it calls for utmost focus on cost avoidance, cost reduction, and cost control.

In order to exercise an effective cost control, there is a need to adopt the Total Quality Management (TQM) philosophy and Value Analysis/ Value Engineering (VA/VE) approaches for identifying and then cutting down unnecessary costs that do not add to the customer value. The major elements of this concept are:

1. Elimination of waste;
2. Reduction of variations;
3. Effective materials management to maximise inventory turnover ratio without jeopardising the supply chain objectives;
4. Preventive focus in problem-solving – "A stitch in time, saves nine"; and
5. Employ Pareto's law of 'Vital Few' and give utmost attention to control those costs.

The materials cost some 60 to 70 per cent of the total cost of goods sold, as compared to the 5-10 per cent cost in manpower. Thus, effective materials management provides an enormous scope for cost reduction.

Enforcement of Rules and Law

One of the weakest links in the policy-implementation process in India is the effective enforcement of the rules, plans, policies and the law. As a result, most attempts to alter the state of the economy through strategic policy-interventions fail to get the intended outcome. There is a general tendency to short-circuit a rule to gain a quick advantage. While the compliance of rules is generally low, implementation of plans is weak

and slow. A wide gap exists between intention and the accomplishment. In general, conformance to the customer’s requirements is a measure of quality. However, in India, project schedules have slippages and there are often cost-overruns. Most functions start later than the scheduled time. Even a conference on ‘Time Management’ may start late and end late. There is tremendous tolerance for ambiguity when it comes to managing time.

Speedy and effective delivery of justice through effective grievance-redressal needs a closer look. The backlog of cases waiting for the delivery of justice is itself alarmingly high. The rules and laws themselves need to be re-looked into, but most importantly, whatever has been planned must be effectively implemented. Then only people will have respect for plans, schedules, specifications, norms, rules, and the law. A great and developed economy respects the law and implements it sincerely. India must do it, if it wishes to be that. Justice V.R. Krishna Iyer (2010), writing recently in *The Hindu*, forcefully argues in favour of “a universally-accessible democratic system that can deliver justice in an inexpensive manner and can ensure early finality”, which he perceives to be an essential pre-requisite for India today. Almost all legal experts want stricter implementation of laws and an institutional mechanism to ensure greater transparency, and faster, stricter enforcement.

Promises must be made only when these can be kept. It is better to under-promise and over-deliver, rather than to over-promise and under-deliver. This represents a part of the ancient Indian

value system and these must be cherished and inculcated in children, right from the childhood. Parents, teachers, and other societal stake-holders must awaken to this need. Then only one can create a global market and universal respect for the Indian nation. Learn to follow rules, schedules, queues, norms and see its impact on the society.

This calls for training and sensitisation workshops, for increasing the awareness for enforcing the law. However, on a corrective front, one needs to be a more stringent and quick to deliver. To start with, let punctuality in starting meetings on time, be a starting point. If one cannot manage time, it is doubtful if one can manage anything else more complex or difficult.

Ensuring Right Goals Priority

It is now generally accepted that the most problems in decision-making are multi-criteria in nature. This means that for each alternative, there are multiple goals and outcomes. That is why the ‘Multi-Criteria Decision-Making (MCDM)’ has become a full-fledged discipline in the management science models. However, the presence of multiplicity of goals implicitly means that there is a need to prioritise them from the most important objectives to the least important ones. The entire process of decision-making can be structured through a ‘decision-matrix’ framework as shown in **Table 2**.

Thus, the effectiveness in evaluating the choices depends upon the priority (W_j) or

Table 2
Decision Matrix for
Multi-Criteria Decision-Making

Alternatives	(Objective, Relative Importance)	
	$(O_1, w_1) (O_2, w_2) - - (O_n, W_n)$	Total Weighted Score (TCi)
A1	(P_{ij}) Normalised Pay-off from the ‘i’th alternative to the ‘j’th objective	$TC_i = \sum_{j=1}^n W_j \cdot P_{ij}$
A2		
-		
-		
-		
-		
Am		

importance assigned to the j th objective. Therefore, with wrong emphasis on the priority structure, one may end up taking wrong decisions even with the help of the management-science models.

Emphasis on the right set of priorities is vital to take correct decisions, particularly at the strategic level. To set these priorities rationally, there are numbers of techniques available, such as AHP (Saaty, 1999) and the paired comparison technique.

However, the ground reality is that due to lack of rational approaches, particularly in the context of the implementation of large development projects, many a times one focusses on trivial issues more and ignores the vital ones. This is hypothesised here as the 'Misplaced Emphasis Syndrome', wherein the tertiary objectives become primary and the primary objectives get relegated to tertiary status. With the misplaced priority structure, one ends up missing the main purpose. One can see the manifestation of the 'Misplaced Emphasis Syndrome' in many day-to-day activities in life, particularly in large public systems. Sometimes, the means to an end become the end in itself. The tendency is evident in the following cases:

Case I: In the context of the universal basic education, the concept of mid-day meal was thought of as a means to encourage children in rural areas to attend schools so that this will enthruse parents to send them to schools. Thus, it was a means to an end. But it seems to have become an end in itself, where the entire focus is on the mid-day meal, including the reported incidents of corruption in it. People often talk about the poor quality and quantity of preparation and tastelessness of meals. The entire media focus on the mid-day meals, which puts the primary focus on education behind on the back burner. The adequate availability of quality teachers, academic schedules, teaching learning process, gets relegated to a tertiary objective, as if the mid-day meal was the main objective. Educational consequences of this are not good, as the basic foundation of education at those formative years may get neglected, because of over-enthusiasm about the mid-day meals.

Case II: The other case is from the professional-higher education, with its misplaced emphasis on 'physical infrastructure vs. intellectual infrastructure'. There may be a focus on the five-star buildings and not on the top-grade faculty. One can never achieve what a first-rate faculty even in a second-rate building can achieve. Yet, the faculty related-issue, particularly its talent quotient, does not get primary attention in many cases. Similarly in teaching-learning system, the focus is more on the examination and the placements, and not on the 'employability'. Examinations are only a means to test learning, but in Indian scenario, the means becomes an end.

A fundamental change of the mind-set is called for if one wishes to deliver products and services effectively in a globalised world. By focussing on trivialities, one may ignore the critical issues. Thus, it is important to focus on correct priorities and ensure that the organisations do not feel elated in achieving their tertiary goals at the cost of the primary one.

Education, Research, and Planning (ERP) are perhaps the most fundamental goals in the process of nation-building. Education shapes future generations, research and innovations create economic and efficient solutions to human problems, and planning shows the right path to develop. If plans are effective, these are bound to accomplish the goals. These three should get the highest priority in the national agenda to ensure that the best and the brightest of the society choose these career options as their first preference. One may have to pay a heavy price for ignoring these in the long run. Fortunately, a realisation appears to have dawned recently and one can hope that it is sustained.

If India wishes to really avail this great opportunity of leading in the knowledge economy, it needs to focus on the first things first. By evolving the right-priority vector, one can plan optimally to reach the end objective. If missed due to a 'mix-up' in the priority structure, it would be a great missed opportunity. Hence, there is an urgent need to brainstorm, in order to evolve

the right priority structure for the economy, and ensure there is no major departure from the top-priority goals.

Empowering the People

Excellence-driven organisations, systems and countries give priority to develop and empower their people. In total quality management, the word 'total' means involving everyone from the 'top floor' to the 'shop floor'. Therefore, there is an urgent need to empower people down the line. Involving grass-root people in the planning, decision-making, monitoring, and control is the only effective way of total development. This enthuses people as active partners in the development process. Planning will be more realistic and implementation a lot more easy, if they are involved in the process. Decentralised decision-making at the village level in the development planning, and similarly in other sectors of planning particularly at the operations level in an organisation will be helpful for effective goal achievement.

However, this empowerment has to be real; not on paper. For instance, in the Jidoka system in Japan, the shop floor worker has the power to stop the whole production-line, if he knows that the manufacturing process has started malfunctioning. This way, they can prevent large number of defective items from being produced. Empowerment of front-line salesperson can win customer loyalty through effective and quick redressal of grievances and complaints. The empowerment must be supported by system, policy and logistics support to ensure that it is real.

There is a need to empower the weak, the women, and the wise elements of the society so that they become enthusiastic participants in the process of economic revival. Total development requires total involvement, which is possible only through empowerment of the weaker sections of the society. However, empowerment calls for integrity, wisdom, honesty, sincerity of purpose, education, and placing the nation before self. Thus, empowerment and human resource development

are concurrent processes. Through development of people and empowering them, they can deliver performance expected of them. In the ultimate analysis, the sincerity of top leadership and the quality of people determines the status of development of an economy.

Empathising with the Customer

Customer-orientation is very weak in many Indian organisations. In a competitive world, one lives in the customer-driven society. The lack of customer orientation has been a major hindrance for India becoming a lead global market player. In the most global competitiveness ranking, Indian customer-orientation is very low – almost in the lowest quartile range. However, it is interesting to note that many books and references on quality management quote Mahatma Gandhi about the customer-orientation.

“A customer is the most important visitor to our premises. He is not dependent on us, we are dependent on him. He is not an interruption in our work; he is the purpose of it. He is not external to our business; he is a part of it. We are not doing him a favour by serving him; he is doing so by giving us an opportunity to do so”.

Indian organisations need to take a serious note of these words of wisdom on customer-orientation. If India had paid attention to it earlier, the business in India would have become globally attractive long back. Customer-orientation comes through value orientation. Unless there is high concerns for 'others', customer orientation will remain weak. In that context the concept of the Value Grid mentioned earlier becomes all the more relevant

This calls for understanding of the needs of the customer - both explicit and implicit, and attempting to fulfil these with empathy, concern, and care. It can enable the Indian companies to get a lead role in the 21st century which is increasingly becoming customer-driven. There is no dearth of literature on customer-need assessment, Customer Relationship Management (CRM), customer surveys and feedback, but what is needed first is

to empathise with the customer – both internal and external. Let companies put themselves into the customer's shoes, and then do what they should have done if they were the customer.

Employing Life-Cycle Costing

Business firms in India tend to be quite myopic in their perception and take a short-term view of the situation, leading to ad-hoc handling of immediate problems, ignoring the long-term impact of that short-term solution. As Forrester (1971) opines, the short-term view may adversely affect the long-term one. What looks appealing in the short term may be unattractive in the long run and vice versa. As a result, a series of short-term populist moves can spell disaster for the system in the long run. In this short-vs.-long-term view, decision-makers may generally address the symptoms of the problem rather than the root-cause, and as a result, sometimes the solution they prescribe may be worse than the problem. If one conducted a study on the decline and even 'demise' of once-great organisation, that will support the validation of this view.

While taking a decision to purchase a machine, one may get swayed by its initial purchase price only, and not its life-cycle cost. When a student chooses a career, he may get swayed by the 'package' of salary offered, and not the long-term success in the career chosen, and so on. It is important to reconcile the short-term, intermediate-term, and the long-term goals in problem-solving. The moment an organisation adopts the life-cycle concept in evaluating the alternatives in the decision-making process, the outcome will be surprising.

The so-called shortest route may be quite long. The perceived cheapest vendor may be a very costly proposition. There will be a paradigm shift in one's perspective, the moment one looks at the long-term consequences of one's action. For example, if one looks at the long-term impact of education, there will a paradigm shift in the approach towards education. Seen in the long-term perspective, no amount of

investment in education is too high because the future of a nation is shaped there. Hence, decision-makers should evaluate options on the Life-Cycle Costing (LCC) basis and the costs must be interpreted in a generic sense to capture visible and the hidden, the tangible as well as the intangible.

Eyeing for the Details

An eye for details is critical if the goal is to be achieved. Sometimes, a great event is marred due to a trivial mistake or an oversight. A good manager will be strategic in thought but will have tremendous capacity to look at the details while implementing that decision. In India, many a times, people talk big, and might even be well-meaning in saying so. However, due to lack of eye on details, while implementing, they experience that due to a very minor 'mix-up' or a trivial oversight, a great project gets stalled. In general, people may not link up strategic, tactical and operational plans. As a result, many well-intentioned projects fail to accomplish their goals because their implementation gets 'stuck up' in some 'unforeseen' trivial problems. A detailed operational plan, which would examine all possible difficult spots and take preventive and remedial action, including handling of contingencies, can help realise the strategic intent.

Lack of eye for details, perhaps stems from the fact that low importance is given to operations planning, and the management may get swayed by strategic policy issues. However, it should be realised that it is only at the operations stage – be it manufacturing of goods or rendering of services – that the value-addition takes place. Major success of the Japanese production system is an outcome of detailed operations planning with Poka-Yoke system, where, even by mistake, one cannot make a mistake. Eye for details will ensure performance as per plans. This will improve quality and productivity. A good manager should look ahead, look back as well as look around and look within. An eye for details enhances performance and does not diminish the status of a manager.

CONCLUDING REMARKS: THE PROGNOSIS

This century, being projected to be knowledge-driven, unfolds a tremendous opportunity for India to leverage its demographic dividend in a big way, because it is an opportune time when the situational variables point out the emergence of India as a major economic giant (Pangariya, 2008). This is possible if the issues raised in this paper are seriously examined and a holistic view is taken of the developmental process. India needs to develop its strategic intent to be a lead player in the emerging knowledge-driven society and use its superior collective intellectual strength to cultivate core competences to identify a growth trajectory in which there is a balanced development. The 21-point strategic roadmap, outlined in this paper might serve as a thought-starter for integrated economic development, removing some negative side-effects of the development India has seen in the past sixty years. It is hoped that this paper provides an agenda for a serious debate and research in the systems perspective.

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REFERENCES

- Dutta, S. (2010), *Global Innovation Index 2009-10* (ed.), CII-INSEAD, New Delhi
- Forrester, Jay W. (1971), "Counter-intuitive Behaviour of Social Systems" *Technology Review*, Vol. 73, No. 3, January, pp. 55-68
- Gupta, M.P., Prabhat Kumar, and Jajit Bhattacharya (2004), *Government on Line: Opportunities and Challenges* (New Delhi: Tata McGraw-Hill Publishing Co. Ltd).
- Iyer, V.R. Krishna (2010), "Some Tasks before the Indian Nation", *The Hindu*, March 19, p. 8
- Khanna, V.K., Prem Vrat, B.S. Sahay, and Ravi Shankar (2009), *TQM: Planning, Design and Implementation* (New Delhi: New Age Publishers)
- Krishnan, R.T. (2010), *From Jugaad to Systematic Innovation: The Challenge for India* (Bangalore: The Utprekar Foundation)
- Pangariya, Arvind (2008), *India: The Emerging Giant* (USA: Oxford University Press)
- Saaty, Thomas L. (1999), *Decision Making for Leaders: The Analytic Hierarchy Process for Decisions in a Complex World*, 3rd ed. (Pittsburgh: RWS Publications)
- Saxena, J.P., Sushil, and Prem Vrat (1989), "Development of Policy Guidelines for Energy Conservation in Indian Cement Industry: An Application of Delphic Hierarchy Process (DHP) and Fuzzy-set Methodology", *Proceedings of MCDM Conference*, Asian Institute of Technology, Bangkok, December, pp. 645-660
- Sushil and Prem Vrat (1989), "Waste Management Policy Analysis and Growth Monitoring: An Integrated Approach to Perspective Planning", *International Journal of System Sciences*, Vol. 20, No. 6 (June), pp. 907-926
- Vij, A.K., Prem Vrat, and Sushil (1988), "Energy Demand and Future Options", *Proceedings of the ONGC Conference on Petroleum: Past, Present and Future*, December 6, New Delhi.
- Vrat, Prem (1979), "Waste Management in India: The Need for Organised Systems Approach" *Country Paper presented at APO Symposium on Waste Management*, Tokyo, September
- Vrat, Prem, Y.K. Gupta, and Anjana Gupta (1993), "A System Dynamics Study of Global Warming", *Proceeding of the 17th National Systems Conference (NSC-93)* (ed. P.K. Kalra), December 24-26 (New Delhi: Allied Publishers), pp. 410-414
- Vrat, Prem (2004), "Faculty Development for Excellence in Higher Education: Issues, Challenges and Opportunities" in K. Venkatasubramanian, *Issues in Higher Education* (ed.) (Hyderabad: ICFAI University Press)
- Vrat, Prem, G.D. Sardana, and B.S. Sahay (2009), *Productivity Measurement for Business Excellence* (New Delhi: Narosa Publishing House)