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VIDWAT (विद्वत) in Sanskrit means: know, understand, find out, learn, ascertain, discover, and expound.

"Vidwat – The Indian Journal of Management", published by Dhruva College of Management, Hyderabad, reflects this array of meanings. It is a vehicle for a wide range of researchers from across the globe to bring their insights to B-Schools as well as practising managers.

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Research Papers

.....an editor's dilemma

After a stint in industry for over a decade I moved into teaching at Dhruva College of Management a decade ago. I understand the critical role of an editor and admit that it is never easy to bring out a journal. In this arduous task, I've faced several dilemmas.

Dilemma of quality Vs quantity: The classical vicious circle – "Unless the journal has a good reputation, good contributions will not be forthcoming; unless good articles appear in the journal, it cannot build its reputation" gnaws at my face. The standing of a journal depends on the articles published in it. In our quest for bringing out a journal of quality, we in the Editorial Team have been somewhat stringent on our choice of articles - the acceptance rate is pretty low. Most of the rejections were at the first level, and only those worth considering were reviewed. The reviewers played the pivotal role of quality control. Their comments for improvement, seemingly unsavoury, demonstrate their adherence to quality that ultimately resulted in the selection a very few good articles.

Dilemma of aesthetics Vs activity: Business is pre-occupied with "quality function deployment," "activity-based accounting," and "business process reengineering." But Business process *ipso facto* does not provide value to customers. Even brands *per se* do not. Value is provided only by satisfying customers' experiential needs – their aesthetic needs. Any organisation, in any industry, for profit or not- for- profit, governmental or private consumer, industrial or service can benefit from using aesthetics. I for one toed the line of adhering to aesthetics over activity – though it meant rendering my editorial pursuit tedious and time consuming.

Dilemma of managing Vs contributing: Dr S. Pratap Reddy our founder chairman, being an engineer manager is passionate about contriving things himself as a master craftsman and at the same time lead the organisation as a chieftain of army from the front. His phenomenal experience in the academia has been a crucial resource I could draw upon to manage this mammoth task of bringing out a journal. He could manage to add his own contribution. However, I had to choose between whether to be a good contributor myself or a good editor…and I chose to be the latter.

Knowing what I could not do myself, my hearty thanks to the contributors who made the journal what it is; hopefully it has been worth their time and effort writing for publication in Vidwat.

The Editorial Team also thanks the staff of Vidwat office who strove through the processes of copy-editing, proof-reading, and liaisoning with the printing agencies. The Editorial Team expresses its heartfelt thanks to all the reviewers.

Now that the maiden issue is released, I look forward to readers' critique – both bouquets and brickbats; that is the only way I can vouchsafe *kaizen*.

Dr. Venu Gopal Rao

Editor

Constructing a Sustainable Technological Platform in India

Dr. Vipin Gupta

In this paper, the author investigates how India has strived to construct a sustainable technological platform. The study highlights that India's intended policy since the 1980s was to import foreign technology, and to encourage its exploitation and localization by the private sector. Reflective analysis suggests that the policy intentions were only partly met, as the demands of development exceeded the policy accomplishments. For sustainable technological platform, the emphasis appears to be now shifting to the development of meso-organizations for discovering and connecting the local cultural knowledge with the national and global value chains.

Keywords: **Foreign Technologies and Techniques, Policy Reforms, Information Revolution, Computer Industry**

Introduction

Many scholars have looked at the process of technological learning in the emerging markets (e.g. Westphal, Kim & Dahlman, 1985; Lall, 1987). These studies suggest that the emerging markets should rely on imported inputs and export-oriented growth, and should do so rather heavily during the early phases of technology accumulation. For rapid growth, they need to exploit and build upon the local capacity to assimilate, absorb, and improve upon the foreign technology.

Several problems, however, are associated with the foreign-technology based development, which may lead to a substantial volatility in the economic growth of the nations. The experiences of the East Asian nations over the past decade stand witness to some of these problems. First, foreign technology and techniques may not be appropriate for the climate, culture, and resources of an emerging market. International technologies tend to be capital and scale intensive, and require larger markets and sophisticated infrastructure to support them. Similarly, international techniques tend to be more appropriate for large, professionally managed firms, for activities that can be systematized and routinized (Nelson & Winter, 1982). When applied to activities that require custom applications, they tend to result in rapid escalating costs, and require significant market premium to cover these costs (Gupta, 1998).

Second, foreign technology and techniques are not readily tradable and transferable to the emerging markets. The recognition, application, and improvement of foreign technologies and techniques require substantial prior knowledge and research experience (Cohen & Levinthan, 1991). Technological growth tends to be historically conditioned. Effective improvement of technology is feasible only when a nation has a substantive prior base in related technologies and techniques, and in the disciplines associated with them (Cantwell, 1989). The original developers of international technologies and techniques tend to enjoy well-established markets, and well-endowed resources and capabilities, for rapid, continuous innovation (Porter, 1990). The high costs of technology transfer and assimilation make it difficult for the emerging markets to successfully catch up with the original developers, using the technology and techniques traded or copied from the original developers (Teece, 1977). Also, the original developers have little incentives to transfer their entire package of technology and techniques. One time transfer of technology and techniques also has limited developmental benefits for the emerging markets,since the local firms are rarely able to develop capabilities for fundamental innovation and engineering based on a single generation of know-how transfer. Such capabilities are generated over a period of time by working on multiple successive generations of inter-related know-how (Cantwell, 1989).

Third, only the larger firms in the emerging markets have reputation or resources to be able to purchase foreign technology and to invest in learning of the foreign techniques. Often, it is the government and government supported institutions that seek to play a major role in financing the imports of foreign technology and techniques. Since there are significant subsistence and developmental demands on the foreign exchange reserves of the emerging markets, the governments tend to limit private sector initiatives that strive to import even small amounts of foreign technology (Chandra, 2002). The government-supported institutions have limited, well-defined roles, and are usually unable to invest into the development of complementary set of resources needed to commercialize their versions of the imported technologies.

Given these problems, it is imperative to examine an alternative model that is based on the indigenous endowments of the emerging markets, to allow for a more reciprocal, comprehensive, and sustained exchange of techniques and technologies with the foreign firms, and to enable a broader participation of private firms and individual entrepreneurs in the development process.

Is it feasible and prudent for the emerging markets to set such a vision for their developmental model? In this article, we investigate the experiences of India with the creation of a sustainable technological platform. The analysis is organized chronologically into two eras.

Initiatives to Create A Sustainable Technological Platform

The pattern of initiatives to create a sustainable technological platform is divided broadly into two periods: Pre-1995 (Informatics Revolution), and Post-1995 (Knowledge Revolution).

1981-95 – Informatics Revolution

Just as India suffered from food crisis in mid-1960s, the early 1980s saw India in the midst of a major employment crisis. In light of limited resources, the Sixth Five Year Plan (1980-85) pioneered an integrated rural development model for greatest and deepest possible impact on employment. The problem of educated unemployment in the urban centers was more difficult to tackle, but a series of events unfolded to make informatics, and in particular software, a priority solution for the nation.

Policy Reform in Informatics

In 1984, India's new Prime Minister Rajiv Gandhi, Indira Gandhi's son and Nehru's grandson, laid a vision of taking India into the twenty-first century through a major emphasis on technological advancement, with a central role for the electronics industry including consumer electronics and software.

Rajiv Gandhi rallied political support for liberalizing the emerging computer industry, and for the entry of private firms and of joint ventures with foreign firms. A November 1984 Computer Policy recognized software as an industry, making it eligible for fiscal incentives and bank credit. Body shopping, or the provision of labor-intensive, low value-added programming services, such as coding and testing, at client sites overseas, were also recognized as valid exports.

Educational policy went in hand with the policy reform. The government permitted private investment in IT training, for both short-term specialized courses as well as longer-term basic courses.

Also, the government policy to computerize its departments and enterprises generated large and complex assignments for the local firms, and became a key catalyst for development of software industry. The most notable was the automation of state-owned railways reservation. The average waiting time for the passengers was reduced to less than 20 minutes (Mulhearn, 2000). While the railway reservation project resulted in a dramatic mind set change in favor of the personal computers, in 1985, the Rangarajan Committee decided to computerize all public sector banks, and to use Unix and the Motorola 68020 chip. And immediately, private companies – starting with HCL – raced to introduce Unix systems, ahead of the companies in other nations (Dataquest, 2002).

Evolution of the Private Informatics Industry

The exports of software from India had started in 1974, reaching $4 million in 1980, $28 million in 1985, and rising to $481 million by 1995. Given the weak telecommunication infrastructure, the Indian firms found it more difficult to do large volume body shopping work from India, though the intro level programming salaries in India were only a tenth of those in the US (Mulhearn, 2000).

Rajiv Gandhi invited foreign multinationals, starting with Texas Instruments in 1986, to set up software development units in India through a 40%/51% joint venture, so that they may be able to sell an entire value-added hardware platform in India. By 1992, nearly all major Indian firms had formed a joint venture with a major MNC; though by 2000, most joint ventures had been dissolved and MNCs and local firms were operating largely independently (Dataquest, 2002). In the interim, there was a growing demand for the professionals. Over the 1990s, every year, more than 67,000 computer science professionals were trained by the state educational institutions, and another 200,000 by private institutes (NASSCOM 1999).

With the post 1984 informatics revolution, computer production nearly quintupled, hardware exports more than quintupled, and software exports more than tripled by 1989. In 1989, Indian IT industry's revenues totaled Rs. 10 billion (as opposed to Rs. 750 million in 1980), with HCL reaching the Rs. 1 billion mark.

The 1991 Economic Crisis and Liberalization

In absence of broader reforms, the liberal import regime of the 1980s soon culminated into a major national economic crisis. In 1991, India, after being forced to seek balance of payment aid from the IMF, embarked upon major economic reforms, including dismantling of the 'license raj' system. Tariff rates were reduced from 128% of import bill in 1991, to 29% by 2002 (Salgado, 2003).

Economic Performance

The reforms of the 1990s accelerated the trend of Indian companies doing onsite as well as offshore software projects, so that the share of services in total Indian exports rose from 20% in 1990 to more than 30% in 2002, with a rapid growth in workers' remittances and in IT exports (Thirwell, 2004). The share of services – including hotel & tourism, consulting services, power generation, and telecom – in India's inward foreign direct investment also rose from 5% in 1990 to 59% during 1991-97 (Thirwell, 2004).

1996- – Knowledge Revolution

Science and Technology Policy

During the second half of the 1990s, IT sector's compound annual growth rate topped 40%, against less than 7% for the nation. The software sector alone grew more than 55% annually, and accounted for $3.9 billion of revenues in 1999, constituting 65% of India's total IT revenues. By 2000, a majority of the Fortune 500 companies outsourced IT services from India.

Until 1990s, most public sector R&D institutions had few links with the industry, and were totally dependent on the government for their financing (Krishnan, 2003). Since mid-1990s, a major change occurred, as these institutions applied for international patents, and sought to generate commercial funds by licensing their know-how. Table 1 shows the public sector led in the number of patents and consulting services rendered, and shared honors with the private sector in the imports substitutes developed; the private sector, on the other hand, excelled in the development of new products and new design prototypes. However, out of 8,954 applications filed for patents in India during 1998-99, only 2,247 were by Indians (Sadasivan, 2005)

R&D Output	Institutional Sector		Industrial Sector		Total
	Central Sector	State Sector	Public Sector	Private Sector	
Patents Sealed	300	11	53	187	551
Products developed	531	214	546	6088	7379
Processes developed	289	215	138	1812	2454
Import Substitutes developed	192	11	1528	1753	3684
Design prototypes-developed	343	66	181	1497	2087
Consultancy Services rendered	8602	43511	77	5637	57827

Table 1 - R&D Output by Sector, 1997-98

Despite these developments, studies suggest that in the early 1990s private sector firms put greater emphasis on importing technology (See Table 4), than on the internal research and development. The larger firms, because of their better resources and funds, tended to be more active in importing foreign technology. Increasingly, foreign subsidiaries became more dominant in introducing new technology for expanding into new product areas. As a result, even the leading Indian firms found it difficult to access latest technologies, as the MNCs sought to directly access the Indian market either through trade or local production, instead of licensing these technologies to local companies (Vishwasrao & Bosshardt, 2001).

Year	Foreign collabo-rations approved (No.)	Foreign investment approved ($ million)	Actual FDI ($ million)	Lumpsum payments approved ($ million)	Actual technical payments ($ million)	Capital goods imports ($ million)
1991	976	232	154	429	251	4665
1992	1520	1336	232	784	139	3724
1993	1476	2842	573	1183	318	5343
1994	1854	4526	1048	733	210	6368
1995	2337	9902	2071	2185	397	8589
1996	2303	10321	2969	758	458	8537

Table 2: Indicators of Foreign Technology Acquisition by India

Low levels of R&D by domestic firms became a key policy concern during this period. Studies indicated the significance of such R&D in learning from and absorbing not just foreign, but also domestic know-how. Kathuria's (2001) study of more than 300 firms over 1975-89 found that the presence of MNCs often led to larger gaps in efficiency between the MNCs and domestic firms. However, the domestic firms bridged these gaps when they had strong R&D capabilities, and such capabilities were positively related to the level of a firm's export activities. Other studies showed that during the 1980s, the domestic firms that purchased more of domestic or foreign technologies tended to have higher R&D expenditures (though not vice versa), but during the 1990s technological collaborations were no longer associated with higher R&D expenditures (Raut, 1988; Kartak, 1997; Vishwasrao & Bosshardt, 2001). In fact

Period	Number of new R&D Units
Before 1950	24
First Five Year Plan (1951-56)	13
Second Five Year Plan (1956-61)	27
Third Five Year Plan (1961-66)	48
Annual Plan (1966-67, 1968-69)	37
Fourth Five Year Plan (1969-70)	154
Fifth Five Year Plan	196
Annual Plan (1979-80)	38
Sixth Five Year Plan (1980-85)	278
Seventh Five Year Plan (1985-90)	243
Annual Plans (1990-91, 1991-92)	94
Eight Five Year Plan (1992-1997)	95
Not Available	68
Total	1315

Table 3: New R&D Units Over the Years

the number of new R&D units created fell significantly during the 1990s, as compared to the 1980s, as shown in Table 3.

To facilitate research and development, the government introduced several programs to support the absorption of imported technologies, develop, demonstrate, and commercialize indigenous technologies, and encourage technology-based entrepreneurs. The share of private sector in national R&D expenditures, consequently, rose to 20-25% during the late 1990s, as opposed to 15-20% during the early 1990s (Table 4). Many private companies, such as Reliance Industries, started taking up R&D formally.

Science & Technology		% of *GNP*	Composition of R&D		
Year	Expenditures (Rs. Million)		% Central	% State	% Private
1958-59	229	0.16	95	4	1
1965-66	684	0.27	91	5	4
1970-71	1396	0.33	81	9	10
1975-76	3567	0.47	81	7	12
1980-81	7605	0.58	76	8	16
1985-86	20688	0.83	80	8	12
1989-90	37257	0.86	77	9	14
1994-95	66224	0.73	71	9	20
1998-99	129015	0.81	64	10	26

Source: Department of Science and Technology (2002)

Table 4: Growth of India's Science and Technology investments

Socio-economic Performance

By the late 1990s, the variability in the growth rate and the volatility of inflation rates declined significantly compared to the earlier periods, indicating that the nation's development process was now on a remarkably resilient footing.

Biodiversity and Sustainability Initiatives

In 1998, UNDP helped India prepare the First National Report to the Convention on Biological Diversity. A sense of urgency prevailed with several widely publicized cases of international biopiracy of traditional knowledge of India. Patents had been issued in the US and European union, for instance, on wound healing properties of turmeric, hypoglyceimic properties of bitter gourd, and fungicidal properties of neem, all of which have been part of India's traditional knowledge. The National policy on biodiversity sought to "Ensure benefits to India as country of origin of biological resources and to local communities and people as conservers of biodiversity, creators and holders of indigenous knowledge systems, innovations and practices" (Government of India, 1999). Towards this end, the CSIR's Department of ISM&H (Indian System of Medicine and Homeopathy) created a navigable electronic computerized database of documented traditional knowledge. (Srivastava, S., 2002).

Building on the successes of the Honey Bee Network, the government of India established the National Innovation Foundation in October 2000 to provide institutional support in scouting, spanning, sustaining and scaling up of grassroots innovations, and to enhance technical competence and self-reliance of grassroots innovators, through establishment of green venture promotion funds and incubators and by building linkages with science and technology experts, entrepreneurs, and corporate world.

International Comparisons

Despite considerable progress, India still lags behind major developing nations on most measures of globalization and socio-economic development. Table 5 reports competitiveness for a sample of large developing countries that have liberalized their economies. As is evident, India's growth competitiveness index is lower than China, Mexico and Poland, and is higher than only Egypt.

(Scale of 1 to 7), 2003	India	Egypt	China	Mexico	Poland
Growth competitiveness index	3.90	3.84	4.19	4.12	4.15
1. Macro-economic environment index	3.75	3.70	4.56	3.74	3.83
a. Macro-economic stability sub-index	4.36	4.02	5.05	3.81	4.04
b. Government waste sub-index	3.56	3.44	3.66	2.96	2.71
c. Credit rating sub-index	3.74	3.34	4.49	4.39	4.54
2. Public institutions index	4.26	4.18	4.33	4.35	4.17
a. Contracts and law sub-index	4.65	4.23	3.81	3.70	3.59
b. Corruption sub-index	3.86	4.14	4.84	5.00	4.75
3. Technology index	3.68	3.64	3.67	4.26	4.44
a. Innovation sub-index	2.06	2.71	1.97	2.25	3.20
b. Information & communication technology sub-index	2.87	3.13	3.42	3.95	4.36
c. Inbound Technology transfer sub-index	5.31	4.63	4.57	5.35	4.97

Table 5: India's Comparative Global Competitiveness Index and its Components

Guided by the experiences in the software sector, increasing attention has during this decade been placed on securing a place for India in international research, through participation in the international research value chains. It is believed that India offers and should offer a range of human resources for the increasingly complex multinational operations, and gain a special place for global contract research. It would then be able to graduate from participation in part of the system, and then to bigger systems; helping Indian firms participating in these sophisticated value-adding chains to build up their internal core technological capabilities rapidly and to catch up (Rajan, 2001).

Discussion

This article was analyzed chronologically to aid identification of the origins, formation, and development of the indigenous endowments through internal and external linkages.

In the first period (pre-1995), the nation opened up the economy gradually, and invited private firms to exploit the infrastructure and capabilities created in the public sector. The private firms were able to discover innovative and creative linkages for productively exploiting the public sector infrastructure, to rapidly move on the learning curve of servicing a diverse base of costly foreign technology, and to confidently expand overseas to offer onsite maintenance, testing, and other software and information technology services to the foreign companies. Further, the private sector, after being allowed into the telecom equipment manufacturing, became an important partner helping the government organizations to extend data communication, nation-wide networking, and internet services to the software and other firms. The foreign multinationals helped to catalyze the developmental process, for instance by setting up first offshore software development units in India during the mid-1980s that became certificates endorsing India's capability for reliable offshore development. The multinationals also inspired a strong quality movement, for instance, Motorola's Indian software subsidiary became the first SEI CMM Level 5 certified facility in India. The private firms lagged behind the multinational subsidiaries in terms of their efficiency, especially when they did not conduct much R&D, yet were able to generate rapid gains in efficiency throughout the period. Many private firms engaged in the internal R&D to absorb and exploit foreign technologies, services, and capital goods, or as the government liberalized the market,sought to simply rely on foreign collaborations for accessing technologies.

In the second period (post-1995), the strategy of large private sector firms of relying on the imported technologies, services, and capital goods appears to have run into limits, as the gains in efficiency realized during the previous period matured. Many technology collaborations with foreign firms have fallen apart. Some large private sector firms, such as Reliance, have started putting emphasis on the internal R&D, rather than continuing to depend on the international imports of technological know-how. The public sector firms, on the other hand, have shifted their priorities to making available their own internal R&D results to the firms, not only locally but also globally. The foreign firms have sought to exploit their own know-how by encouraging their Indian subsidiaries to be first to introduce new products – which stands in a stark contrast with the situation in the first period when the foreign firms offered only old and antiquated products in India, and that too with high mark-ups and with high maintenance fees. The domestic firms appear to have attained a high level of maturity in their process capability. In the software sector, more Indian firms are certified at the highest level of process capability maturity than all the overseas firms put together. In most other sectors also, domestic firms have been able to, possibly by virtue of their matured process capability, retain a dominant share of the market, except where they consented to be acquired by the foreign multinationals (as in soft drinks), or where the foreign multinationals have operated in India for a long period in so much they are deemed to be virtually domestic (for instance, Unilever as in detergents and cosmetics).

There has been a shift in the role of the government from a supporter of innovations by well managed private sector enterprises, and then to governance and organization of the distributed knowledge in diverse communities. "The emerging role for the developmental state in the globalized economy is the networking role or support of government to enterprises......to penetrate the linkages of deep integration.....The final results will depend much less on specific policies than on the policy implementation capability of governments and the kind of social organization and governance mechanisms that they build for an economy increasingly dependent on foreign markets, finance, production and technology networks." (Radosovic, 1999)

In the earlier paradigm, the government led basic innovations for the defense and other strategic sectors, and the spin offs for commercial applications, if any, were found later. In this paradigm, the costs of the technologies were huge, and initially technology-rich products were marketed to the corporate sector and targeted at customers with higher incomes and technological savvy. In the new paradigm, which evolved over the 1980s and the 1990s, the governments began sourcing a number of defense systems from the regular commercial systems. The quality of the commercial systems improved so dramatically that new products became accessible more widely to the consumers, not just to the businesses. The governments began seeking cooperation of the private sector for developing dual use technologies, i.e. technologies that could be used for both civil and defense and other strategic purposes (Rajan, 2001). In the fourth phase, yet another paradigm is in making. The academic, research, and the development sector (community groups, non-government organizations) is discovering diverse know how of the local communities, and the commercial value of this know-how is being recognized. The government is seeking to promote awareness of this local knowledge, and to build capacities for national and international exploitation of this knowledge. Thus, over the four phases, there has been a 180 degrees turn in the targeted source of knowledge and innovation.

An integrated approach needs to emerge. There is scope to forge inter-national and multi-national strategic alliances in technological growth, in a way that strengthens the ability to be independent as well as the ability to pursue greater inter-dependence demanded by sophisticated and complex futuristic technology systems. The private sector can help speed and efficiency of action, while the meso development organizations can help broaden and deepen the technological base for exploitation.

In the first phase, the thrust was on nurturing innovative organizations in the private sector, through public sector cooperation and guidance. In the second phase, however, there is a growing awareness about a new category of innovation - grassroots or micro innovations, which involve artisans, farmers, women in households, slum dwellers, tribals, and other unsung heroes who never obtained credit for their creativity. Micro innovations are shared largely through informal networks, though increasingly non-government organizations are seeking to scout, document and commercialize these innovations.

There also needs to be an emphasis on increasing the diversity and depth of micro technological base. The growth of innovation chain requires recognizing, supporting, enhancing, and directing diversity in social, scientific, and management education, mass media, public awareness, and in the art of teaching, learning, and leveraging social, scientific, and management knowledge. Multi-, cross-, and inter-disciplinary knowledge initiatives must be promoted towards this end through stronger participation of the institutions of higher learning. The academic linkages with the corporate, government, non-government, and community organizations and members for developmental purposes are critical to perpetuating technological growth system.

Conclusions

In this paper, the author sought to examine the effectiveness of a developmental model based on institutional technology transfer, where technology flows from overseas to the private sector. The analysis suggested that this model is more viable for the larger firms, who have resources to do complementary research and development for adapting the foreign know-how and capital goods to the local climate, culture, and market conditions. The firms that conduct internal research and development, however, may generate and accumulate their own internal knowledge, and be able to compete with the foreign firms.

A more critical factor appears to be collaboration and strategic alliances, both between the foreign firms and the private sector, as well as between the public sector and the private sector, that helps firms gain an overall strategic awareness of the international technological, organizational, and servicing parameters, and of the national technological, organizational, and servicing endowments. Such strategic awareness allows the firms to leverage and develop indigenous endowments for world-class applications, and exchange in the international markets.

Most importantly, significant opportunities exist to uncover the deep cultural knowledge embedded within the local communities and their work practices, and to tap and develop that for solving unique and hitherto unsolved problems at the national and international levels. These opportunities hold the greatest promise for the large emerging nations, such as India, to play an active and complementary role in the international community. Further understanding and exploitation of these opportunities would allow the poor and low income workforces of the emerging nations to enjoy rapid growth in their incomes and purchasing power, by cashing in on their cultural endowments, without taking away jobs from and without pirating the knowledge of the industrial markets.

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Dr. Vipin Gupta is Associate Professor and Roslyn Solomon Jaffe Chair in Strategy at the Simmons School of Management and Faculty Director of SOM International Outreach programme. He has a doctoral degree from the Wharton School of Business, Pennsylvania, a post doctoral fellowship from Tokyo University and a Post Graduate Diploma in Business Management from the Indian Institute of Management, Ahmedabad. Under his stewardship, Dhruva conducted Global Leadership and Organisational Behaviour Effectiveness (GLOBE) - a Wharton School's path breaking research simultaneously carried out in 72 countries.

Knowledge Democratization: A New Paradigm to Promote Productivity

Dr U B Raju

Dr S Pratap Reddy

Human beings are the centrepiece of all economic activity-for economic activities are their creations and contrivances. Modern organizations are the outcome of human thought and ingenuity - for they are human propelled into thriving entities, economically and socially.

A human being (H) has three distinct dimensions, viz. the hand, the head and the heart, characterized here as the 3Hs. Society progressed based on different eras of the hand, the head followed by era of the combination of the 3Hs. The authors attempt to trace these evolutionary phases of economy pointing out to what is now emerged as knowledge era. It is the burden of this paper to bring out the gradual but definite shift from this current era of knowledge to an era of knowledgization. In turn, the era of knowledgization is unmistakably leading to knowledge democratization.

Democratizing Knowledge is a sure way of bridging the so-called knowledge divide and at the same time, the process endeavours to levelling and converging across different classes of knowledge. Knowledge democratization is a potential, unexplored means of promoting productivity in organizations. It brings in a paradigm shift in organizational theory and practice in terms of transiting and migrating from organizational sovereignty that involves organizational supremacy to people sovereignty that involves people supremacy.

The practical implications of this knowledge democratisation as a means of improving productivity at different levels are its distinct characteristics like better sweep and sustenance, and inclusiveness. The key limitation is the usual challenges encountered because it is predominantly a soft suite of actions. However, Organizations need to examine, explore and engage in this new paradigm of extraordinary promise to pursue, promote and propagate productivity.

Keywords: **Knowledgization, Productivity**

Introduction

Human beings and Economy

Any economic activity is powered by human beings that can be characterized by 3Hs, viz., the hand, the head and the heart. We had the economic era of hand in the good olden days. In the beginning of this era of hand, we had the craftsman, as the pivot and hence we may call this as era of craftsman who did both thinking as well as doing.This was followed by the economic era of machine, thanks to the advent of the so-called industrial revolution. During this era, the thinking and doing were separated as if these were diverse functions of human beings. Thus this created two classes of employees, thinkers and doers.

Then came the era of knowledge pivoted on head. It is also popularly known as knowledge economy, signifying for the first time that knowledge drives the economy. But then this divided both employees and sectors of economy-some employees getting labelled as knowledge workers implying others are not, and some enterprises getting identified as knowledge intensive implying others are not. It resulted in a phenomenon widely referred to as 'knowledge divide'.

This naturally led to an era of people, which may be called 'people economy'. The driving forces of this era are people-all human beings associated with economy, both internal and external to the organizations. And this era has all the 3Hs included-hand, head and heart, obviously an inclusive approach. It typifies the recognition of the 3Hs in every H (human). In fact, it attempts to address the most under-estimated and under-rated discovery-people.

Traditional Vs Knowledge (K) approach

The traditional approach to productivity of organization has been myopic as it harped on individual factor productivities and total productivity only, oblivious to knowledge (K) factor. Knowledge, when factored into each of the traditional resources including humans, elevates the productive capability of these resources to unprecedented levels and this process is designated here as 'Knowledgization' that results in phenomenal improvement in organizational productivity.

The K-approach essentially involves knowledgization of inputs-employees, processes and outputs as illustrated in figure 1.

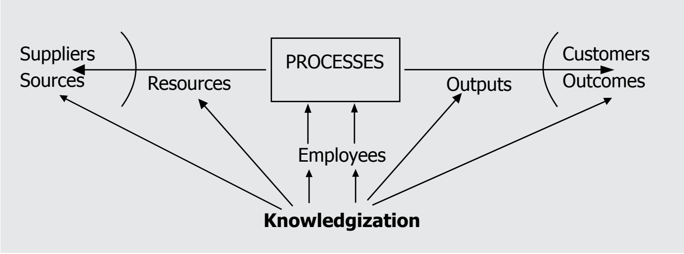

Figure 1: Organizational Knowledgization

K-Push and Pull

Typologically speaking, there can be two ways of attempting knowledgization-one way is to K-Push i.e., pushing knowledge into targeted objects, be it resources, processes, employees, products/services, customers, and suppliers, and the other way is to create K-Pull i.e., exerting knowledge pull on objects. While the K-Push is best suited for knowledgising non-human objects/ resources like goods/services etc, K-Pull will be more appropriate in respect of employees of an organization. In case of suppliers and customers a combination of knowledge push and pull is more suited. This is depicted in Table 1.

Object	K-Push	K-Pull
Coustomers	X	X
Products/Services	X	
Processes	X	
Employees		X
Resources		X
Suppliers	X	X

Table 1: K Push - Pull Appropriateness

Knowledgization and Productivity

There is positive correlation between knowledgization and productivity. As shown graphically in figure-2, its effect on productivity plateaus in course of time. At the trigger points (t_1 and t_2), the organization needs to move up to next level of knowledgization.

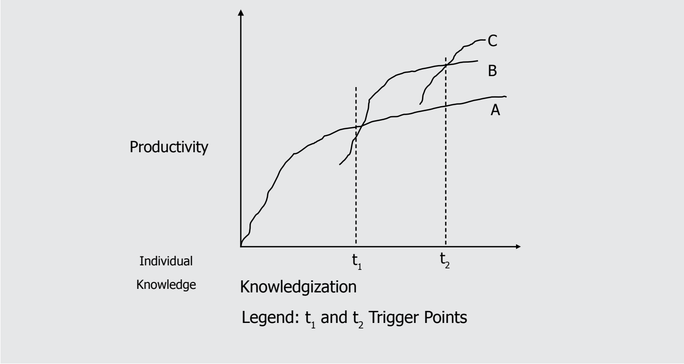

Figure 2: Knowledge-Productivity Realationship

Democratizing Knowledge and Promoting Productivity

According to Davenport and Larry Prusak (2000), knowledge is a fluid mix of data, experience, practice, values, beliefs, standards, context, and expert insight that provides a conceptual arrangement for evaluating and incorporating new data, information and experiences. 'Knowledge democratisation' is a process that involves the application of the concept of democracy in dealing with knowledge that is considered as a supra-resource. The process starts with individual knowledge followed by knowledgization of individuals. The next logical step is knowledgization of people leading to promoting productivity in organizations as illustrated in figure 3.

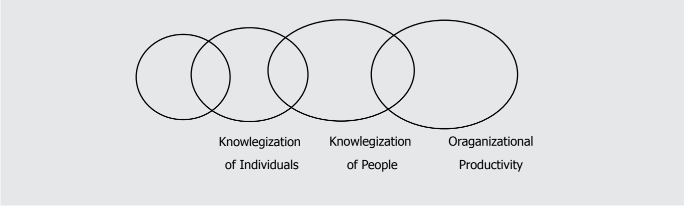

Figure 3: Knowledge Democratization Process

Knowledge divide: Just-in-case (JIC) vs Just-in-time (JIT)

Broadly speaking, all academic and other developmental knowledge is the just-in-case (JIC) type while working knowledge produced for operational performance is the just-in-time (JIT) type. The JIC type process of knowledgization attempts to knowledgize receiver (of knowledge) based on some kind of expectation rather than on the current need. The JIT type knowledgization caters to the realized need for efficient, effective and expeditious process operation. While workers are knowledgized through JIT type knowledge, supervisory category employees are knowledgized through JIC type knowledge, resulting in a knowledge divide that is antithetical to knowledge democratisation. This is shown in figure 4 & 5. Lesser the level difference between upper and lower class knowledge, the greater will be the degree of democratisation.

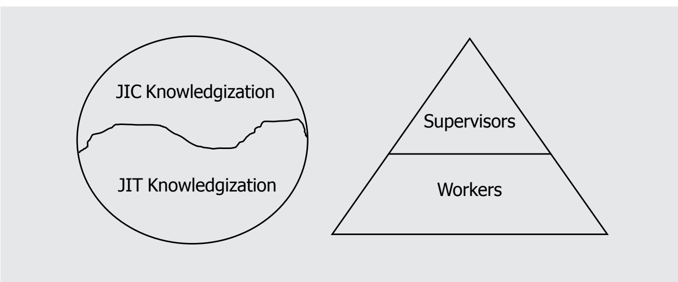

Figure 4 & 5: Just-In Case Vs Just-In-Time Knowledgization

Strategic knowledgization framework

A strategic knowledgization framework is proposed to capture the strategic ways and means of knowledgization in organizations as given figure 6. The two key aspects of the process of knowledgization are knowledge and people. A strategy always has an external as well as an internal dimension.

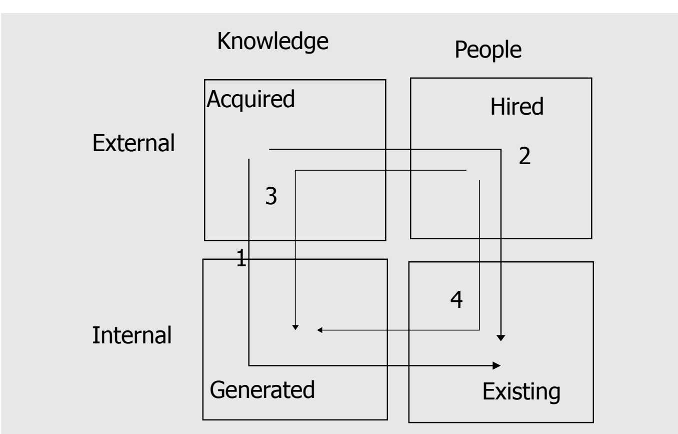

Figure 6: Strategic Knowledgization Framework

- Knowledgization through diffusion
- Knowledgization through training and mentoring
- Knowledgization through derivation and development
- Knowledgization through absorption

Knowledgization focus may be internal or external to the organization. Internal includes resources, processes and employees where as external includes products/services, customers and suppliers. The objects of knowledgization are resources, processes, people etc as mentioned earlier. The means of knowledgization are two fold, viz., technology and people. Knowledge democratization in organizations has two faces, viz., hard assetization and soft assetization. This is illustrated through knowledgization-democratization matrix in figure 7.

Organizational Knowledgization Position Matrix

The four facets of knowledgization of an organization viz., knowledgization of employees, customers and suppliers, processes, and products/services, are comprehensively captured in the form of organizational

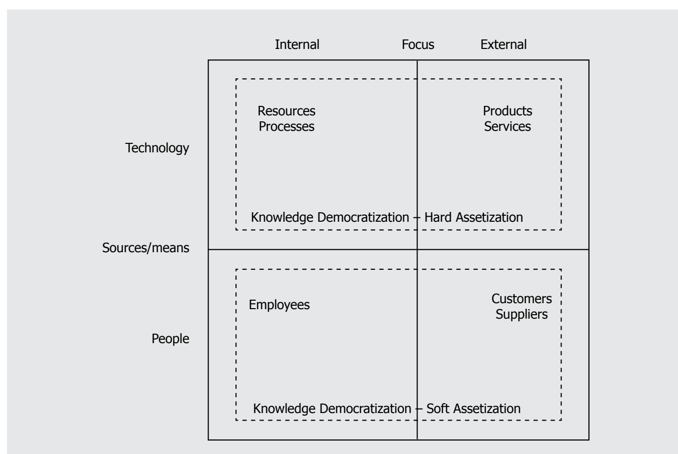

Figure 7: Knowledge Democratization Matrix

knowledgization position matrix depicted in figure 8. As mentioned before, Knowledgization of employees, customers and suppliers, is characterized as soft assetization and knowledgization of processes and products/services as hard assetization. Together, they determine the organizational knowledgization position. The position may range from poor to excellent based on appropriate quantification.

McLuhan's Law and Knowledgization

The well known McLuhan's law (2007) premises that any change or innovation whether in product, service or an idea does the following changes:

- It enhances something.
- It reverses something.
- It retrieves something.
- It makes something obsolete.

Application of this law to knowledgization helps us to decipher and delineate the resultant four-fold changes as illustrated in figure 9. It effectively reverses

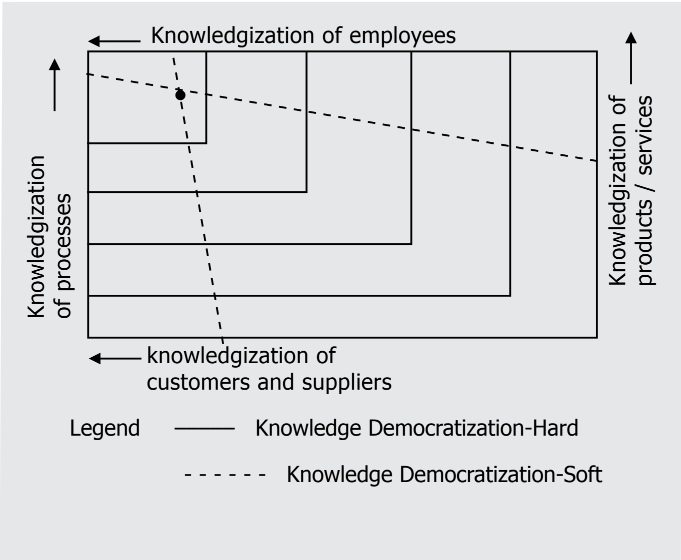

Figure 8 : Organizational Knowledge Position

knowledge divide pointed out earlier and retrieves the undisputable, fundamental truth that a human being is both a thinker and doer. Further, the idea of treating knowledge as exclusive pales into obsolescence. Concurrently, it enhances organizational productivity.

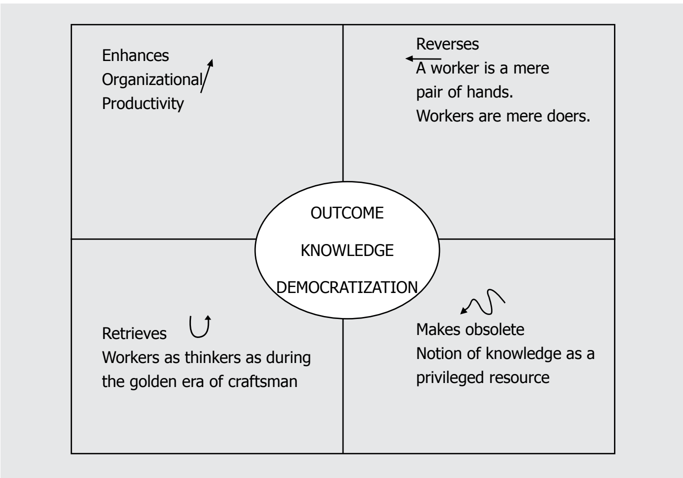

Figure 9: McLuhan's Knowledgization Model

Conclusion

Knowledge resides in people, processes, products and services, systems and procedures. There is a clear case for knowledgization of these objects in order to elevate and enhance their productive capability. The process of knowledgization of these objects results in superior processes, superior products and services, superior systems and procedures, and superior people resources. The proposed 'strategic knowledgization framework' maps the broad modus operandi of the knowledgization process in organizations.

The paper proposes the key idea of 'knowledge democratisation'. Knowledge democratisation attempts adoption and application of democratic concepts like accessibility, capacity and capability in relation to knowledge as a resource. The paper analyses and appropriates knowledge democratisation into two distinct domains, viz., soft and hard. This soft and hard democratisation results in improvements in organizational productivity. Paradoxically, soft democratisation is always harder than hard democratisation. Knowledgization unleashes productivization of organization that gets translated into profitability and sustainability.

Practical Implications

In contrast to the traditional approaches of improving organizational productivity, knowledge democratisation proffers a more potential, pervasive, inclusive, and sustainable way forward to improve organizational productivity. In practice, knowledge democratisation needs a long-term plan that addresses the processes of knowledgization and knowledge democratisation. The plan should, inter alia, aim at creating an organizational environment that is perceived by the relevant stakeholders as just, fair and equitable, conducive and knowledge-promotive. Knowledge democratisation can be successful through neither purely a top-down approach nor purely a bottom-up approach. It needs a varied and distributed approach.

Limitations

The chief challenge in going through the Knowledge democratisation process is one of implementation. As is the case with any soft methods and approaches, knowledge democratisation needs both broad consensus and managerial passion, on a continuing basis and organization-wide. In fact, a prerequisite for its success is effective leadership, more appropriately, distributed leadership for the democratisation of knowledge needs champions across the organization.

Notwithstanding the foregoing limitations, knowledge democratisation emerges as a new paradigm in promoting productivity, at all the three levels, viz., individual, group and organization as a whole.

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Dr UB Raju is an electrical engineer as well as an industrial engineer,turned to management.He worked in Steel Authority of India Ltd (SAIL) in maintenance and industrial engineering functions before switching over to training and other academics.He studied management consultancy practices in UK,USA and Japan under UNDP-Planning Commission fellowship.Presently he is working as the Director of School of Enterprise Management at National Institute for Micro,small and Medium Enterprises (ni-msme), an autonomous institution of Government of India at Hyderabad, India. His areas of interests are Japanese management Practices, Intellectual Property Rights (IPRs) and contemporary Human Resource Management practices.

Dr S Pratap Reddy is a mechanical engineer with a doctorate in management. He was Professor and Director of School of Management Studies at Jawaharlal Nehru Technological University, Hyderabad. He has guided several masters and doctoral students, travelled widely and published extensively on different themes of management and has turned from being an academic to an entrepreneur in management education. He is the Founder Chairman of Dhruva College of Management-an autonomous and accredited premier college conducting MBA programme for the past 13 years at Hyderabad, India. His areas of interest are entrepreneurship, productivity, management education, research and consultancy.

Dear Head Master

….. My son will have to learn, I know that, all men are not just, all men are not true. But teach him also that for every scoundrel there is a hero: that for every politician there is a dedicated leader. Teach him that for every enemy there is a friend. It will take time, I know, but teach him if you can, that a dollar earned is of far more value than five found. Teach him to learn to lose and also enjoy winning. Steer him away from envy, if you can, teach him the secret of quiet laughter.

Teach him if you can, the wonder of books but also give him quite some time to ponder the eternal mystery of birds in the sky, bees in the sun and flowers on a green hill side.

In school teach him that it is far more honorable to fail than to cheat. Teach him to have faith in his own ideas, even if everyone tells him they are wrong. Teach him to be gentle with gentle people and tough with the tough. Try to give my son the strength not to follow the crowd when everyone is getting on the bandwagon. Teach him to listen to all men but teach him also to filter all he hears on a screen of truth and take only the good that come through.

- **Abraham Lincoln**

The Determinants of Forward Premia in Indian Forex Market

Maram Srikanth

This paper explores the behaviour of the forward premia in respect of USD vis-à-vis INR during the five year period between April 2002 and March 2007. During the above period of observation, Indian forex market experienced considerable volatility and forward premia in respect of USD vis-à-vis INR became negative. This is a rare phenomenon given the higher domestic interest rate in India when compared to that of the US. In this connection, the paper tries to find out the factors that determine the forward premia in Indian forex market. It is observed that forward premia in respect of USD vis-à-vis INR depends, to a large extent, on the interest rate differential in the inter bank market of the two economies along with FIIs' net flows, current account balance and to a lesser extent on inflation differential.

Keywords: **Forex Market, Indian Rupee, RBI, BIS, Forward Premia, FDI, BoP**

Introduction

Indian foreign exchange market (forex market hereafter), between April 2002 and March 2007, experienced considerable volatility specifically in respect of US Dollar – Indian Rupee (USD – INR hereafter) market segment. INR was traded at Rs. 48.92 per USD during April 2002; gradually, INR appreciated to Rs. 38.50 per USD by April 2008; from the highs of Rs. 38.50 per USD, the Rupee plummeted and touched a low of 42.67 per USD by June 2008 and is slowly moving towards the Rs. 43.00 mark. The partially convertible Rupee fell by more than 7% to a 13 month low this year reversing a 12% gain in 2007. The South-ward journey of Rupee is attributed to spiraling crude prices, inflation driven by high commodity prices and moderated inflows from FIIs due to slow down in international capital markets creating a demand supply mismatch.

Reserve Bank of India (RBI hereafter) intervenes in the forex market to prevent excess volatility. Further, RBI does a balancing act by liberalizing limits on foreign exchange inflows and outflows from the point of convertibility angle. Now Indian companies can invest overseas upto 400% of their net worth. During 2007-08, RBI raised the limit on the overseas investment by Mutual Funds from USD 5 bn to USD 7 bn. RBI raised the limit on individual remittances upto USD 2,00,000 p.a. Refining Companies are allowed to hedge upto 50% of the volume of imports during the previous year or 50% of the average volume of imports during the 3 previous financial years, whichever is higher.

According to Bank for International Settlements (BIS hereafter) triennial Central Bank Survey 2007, the share of India's daily average forex turnover was at USD 34 billion (increased from 0.3% in 2004 to 0.9% in 2007). USD dominated the invoicing pattern of Indian exports to the extent of 86% in 2007. India's share in world's exports was at 0.52% in 1990 and increased to 1% in 2007. Thus the Indian Forex market has widened and deepened with the transition to a market determined exchange rate system and liberalization of restrictions on external transactions leading to full current account convertibility and partial capital account convertibility.

As all the above mentioned situations do have an impact on exchange rate of Rupee as well as forward premia in respect of USD vis-à-vis INR, they have important implications especially for exporters / importers and other active forex market players including Banks. As the Banks are the most active forex market players with their presence in Foreign Currency deposits as well as loans, they can transmit their influence on interest rates and on forward premia. As forward rate is an outcome of future expected exchange rate, which is a function of price level, interest rates and Balance of Payments, an attempt has been made to find the determinants of forward premia in Indian forex market.

The paper is divided into five sections. Section I deals with the Introduction. Empirical findings are furnished in the Section II. Section III discusses the theoretical explanations that are supposed to determine the forward premia in Indian forex market. The paper tries to find out the factors that determine the forward premia in Section IV while Section V concludes the paper.

Empirical findings

Empirical work on the relationship between forward premia and the spot price in the forex market has been an area of active research for the last two and half decades. Uncovered Interest Rate Parity (UIP hereafter) is an essential component of this relationship which states that the (nominal) expected return on speculation in the forward forex market conditioned on available information is zero and the same is described in the following equation.

Et [st+t - st] = ft - st

Where st is the logarithm of the spot exchange rate st, ft is the logarithm of the forward rate ft contracted at t and matures at t + t. As a consequence, the (log) forward exchange rate is an unbiased predictor of t - periods ahead (log) spot exchange rate. Hence, UIP is also known as "unbiasedness hypothesis".

Sharma and Mitra (2006) tested UIP hypothesis by using the monthly interval data related to forward premia and exchange rate of USD - INR and found that UIP does not hold good for Indian forex market as the slope coefficient is significantly different from one and is negative. They found that the negative slope coefficient means market is expecting a steady appreciation of INR vis-à-vis USD irrespective of the positive forward premia and inspite of higher domestic interest rate in Indian forex market when compared to that of US. Further, they argued that the relationship between spot exchange rate and forward premia in Indian market is very weak - which means that future spot rate of USD vis-à-vis INR is driven by some other factors in addition to forward premia (explained in detail in Section III of this paper).

Determinants of forward premia - a theoretical approach

In the forex market, as per BIS triennial Central Bank Survey 2007, spot transactions account for 31%, forward transactions 6% and the remaining 63% is a combination of spot and forward transactions in the form of swaps. Most of the forex market transactions are through inter-bank market, which accounts for 95% of its share and the rest is through exporters, importers, individuals, arbitrageurs and speculators etc.

Exchange rates, volatile by their inherent nature, pose numerous risks to the forex market players. Exchange rate risk, an offshoot of foreign trade, is to be covered / hedged by the forex market players as a prudential measure. Therefore, forward market segment in the forex market is extremely important particularly for importers and exporters as it helps the traders in hedging the risks which arise due to foreign currency exposure. Hedging literally means building protection for one's property. In forex risk management too, it is used in the same sense. There are several hedging instruments viz., Forwards, Futures, Options and Swaps, available in the market to cover the exchange rate risk.

Forward rates, in free markets, are strictly a mathematical calculation based on interest rate differentials between countries. However, the forward rate so worked out is no indicator of the future trend of the currency values. The relationship between the interest differential and forward margins is a stable one. Should it get disturbed, it will throw open arbitrage opportunities and arbitrage transactions will restore the Interest Rate Parity (IRP hereafter). IRP holds good in a free market wherein exchange and interest rates will be determined purely by forces of demand and supply of the respective currency. However, the interest parity principle does not hold good as far as the forward exchange rate of USD against INR is concerned due to the following factors.

- Capital account convertibility does not exist in India on full scale basis, though Indian citizens / investors are enjoying full current account and partial capital account convertibility.
- Foreign Direct Investment (FDI) and Portfolio investments are long term and short term investments respectively from Foreign Institutional Investors (FII). Though long term investments may not affect the forward premia much, certainly the short term

investment flows from FIIs do affect the forward premia.

- Inflation differential affects the forward premia mainly through demand for and supply of currencies. When Indian inflation is more than that of the US, Indians tend to import more goods and services from US which would result in deficit in Current Account. This will exert upward pressure on the exchange rate both on spot and forward rate of USD vis-à-vis INR.
- RBI's regulations in respect of ECB / FCCBs and ADR / GDRs also have considerable impact on forward premia. For repayment of ECB / FCCBs, forward contracts would be booked in advance, which drive the forward premia upwards. As per RBI's statistics, Indian companies borrowed nearly USD 31 billion overseas during the FY 2007-08 as against USD 25 billion in the previous FY 2006-07.
- As India does not have any established inter-bank term money market and MIBOR is not considered as a benchmark lending rate in the domestic market on the lines of LIBOR in the international market, arbitraging opportunities may arise for the international investors, which increase the forward premia.
- Forward premia will also be affected by huge positions in USD - INR derivatives viz., Mumbai Inter-bank Forward Offer Rate (MIFOR), Interest Rate Swaps (IRS) and Non Deliverable Forward contracts (NDF).
- Large payments by Indian oil companies for import of crude would escalate the current account deficit and affect spot rate more than the forward rate. Though Indian oil companies don't cover their import payables much in the forward market beyond 3 months, their transactions, expectations about the future movement of USD vis-à-vis INR certainly affect the forward premia.
- RBI's intervention and Government's policy towards forex market have an impact on the prices of forward contracts. RBI through its sterilized intervention measures, absorbs the excess liquidity in the forex and money markets. When RBI buys / sells USD in the spot market and sells / buys the same in the forward market, forward premium will be decreased / increased.
- If there is no sufficient liquidity of Dollars in the spot market, banks, generally, to meet the needs of their custodial clients, undertake swaps wherein they buy Dollars in the spot market and sell Dollars in the forward market, which exerts downward pressure on the forward rate of the Dollar resulting in forward discount against Rupee.
- Apart from the above factors, forward rate is influenced by various factors including the actions, expectations, perceptions and positions (speculative, trading and proprietary) of forex market players. Forward rate will be affected immediately because of 'any news' that has financial bearing on economic conditions or even political stability.

The findings of the study

To find out and confirm which of the above mentioned factors influence, on quantitative terms, the forward premia with respect to USD vis-à-vis INR, an exploratory study has been undertaken. The study is based on a) forward premia (annualized) of USD vis-à-vis INR b) Interest Rate Differential between one month MIBOR (Mumbai Inter Bank Offered Rate) and one month LIBOR (London Inter Bank Offered Rate) c) Inflation Differential between Indian and US economies (i.e., WPI for India - CPI for US economy) d) Current Account Balance with lag effect and e) FIIs' net flows in Indian Capital Market.

To determine the factors that affect forward premia in Indian forex market, the following regression analysis has been done by using SPSS package.

Forward Premia (Y) = F [Interest Rate Differential (IRD), Inflation Differential (IFD), Current Account Balance with lag effect (CABle), FIIs' Net Flows (FIINFs)]

Monthly interval data in respect of the above factors have been taken between April 2002 to March 2007 (Source: RBI, and BIS). Regression results are shown in table1.

As per the Regression statistics, R Square, a measure of multiple correlation, is 0.595 which indicates that 59.5% of the observed variability in forward premia is collectively explained by the four Independent Variables viz., IRD, IFD, CABle and FIINFs. It also shows that the model fits reasonably well in predicting forward premia in respect of USD vis-à-vis INR in Indian forex market.

The relationship between Forward Premia and interest rate differential was captured in Chart I. Both the variables have a strong relationship in the period of observation except between November 2002 and

Particulars	Partial regression Coefficients	Standard Error	t-statistics	Sig.
Constant	-1.009	0.497	-2.031	0.047
IRD	1.102	0.156	7.077	0.000*
IFD	0.026	0.033	0.811	0.421*
CABle	-0.232	0.048	-4.840	0.000*
FIINFs	-0.517	0.218	-2.366	0.022*

Significant at 5%

R Square	0.595
Adjusted R Squre	0.565
Std. Error of the Estimate	1.14155
Durbin - Watson D	1.084

Table 1:Regression Statistics

June 2004. For the first time, the forward premia became negative in October 2003 and turned positive only in January 2004 despite MIBOR was higher than LIBOR during the above period. The beta coefficient of interest rate differential is 1.102 which shows that forward premia will change by 1.102 units if there is a change of one unit in interest rate differential. As the slope (coefficient) of Interest Rate Differential is higher than that of any other independent variable, it has major impact in determining forward premia.

Chart II illustrates that forward premia has a weak relationship with inflation differential. The beta coefficient of inflation differential is 0.026, the lowest absolute value, tells us that it is a poor predictor of forward premia, on relative terms. Further, it was also tried whether interest rate differential alone, as a regressor, will predict the forward premia. However, regression statistics have not come out favorably which indicates that apart from interest rate differential, there are supply side as well as demand side factors viz., IFD, CABle and FIINFs which affect the forward premia significantly.

In Chart III, Balance of Payments (BoP) Current Account quarterly balance (with lag effect) was distributed equally for intervening months for regression analysis due to non - availability of monthly data. Though the relationship between CABle and FP is not strong, there is a co-movement during the period of observation. Research indicates that the influence of RBI's intervention (net of sales and purchases of USD in the forex market) do not have any significant impact in determining forward premia and it only helps in smoothing the volatility in forward premia.

Chart IV depicts the movement of FIINFs with forward premia between April 2002 and March 2007. They have inverse relationship which means that forward premia tends to increase if FIINFs decrease.

When we see the relationship between dependent variable (FP) and other four independent variables during the period of observation, it is seen that IRD has the direct relationship with FP whereas IFD has the little impact on FP. Two independent variables viz., CABle and FIINFs are having inverse relationship with forward premia.

The variable 'FIINFs' has been used as a predictor of FP since most of the FIIs involve in periodic booking of profits by churning out / liquidating their portfolio in Indian Capital Markets based on favourable market conditions. Besides, FIIs also encash on arbitraging opportunities - by investing in Indian financial markets now and repatriating the same at a later date. Forward Premium for USD vis-à-vis INR will increase when FIIs rush to buy USD in the forward market at the time of repatriation of their funds.

The relationship between actual forward premia and predicted forward premia exhibits a good co-movement of both variables. Besides, standard errors in the regression statistics are relatively on the lower side which indicate that the independent variables fit well for the regression model. The Durbin Watson D statistics stand at 1.084, in the regression run for the observed period indicates the possible presence of serial correlation. This leaves further scope for exploratory analysis in this area. Correlation and Collinearity statistics of the model are furnished in table 2.

As can be seen from the correlation statistics, IRD has the highest correlation with forward premia, which shows that it has maximum influence in determination of the latter. CABle has the maximum negative correlation

Details	FP 1 M	IRD	IFD	CABle	FIINFs
FP 1 M	1.000	0.599	-0.189	-0.228	-0.130
IRD	0.599	1.000	-0.628	0.315	-0.192
IFD	-0.189	-0.628	1.000	-0.525	0.308
CABle	-0.228	0.315	-0.525	1.000	-0.416
FIINFs	-0.130	-0.192	0.308	-0.416	1.000

Variable	Tolerance	VIF
IRD	0.606	1.651
IFD	0.483	2.071
CABle	0.653	1.532
FIINFs	0.816	1.226

Table 2: Correlation Statistics

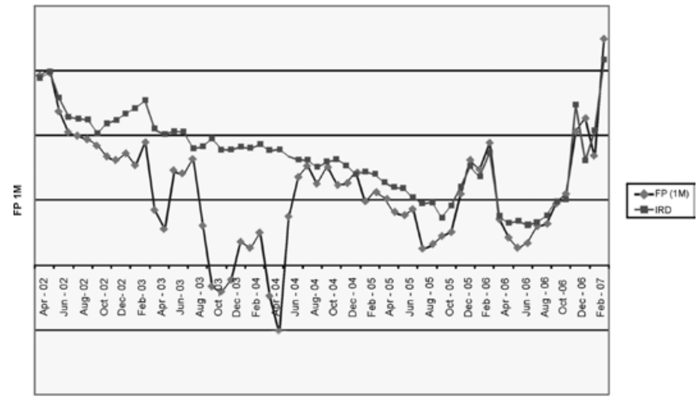

Chart I: FP-IRD Relationship

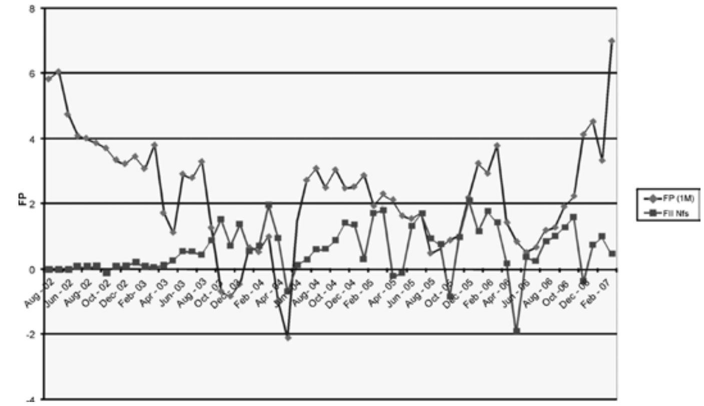

Chart II: FP-ID Relationship

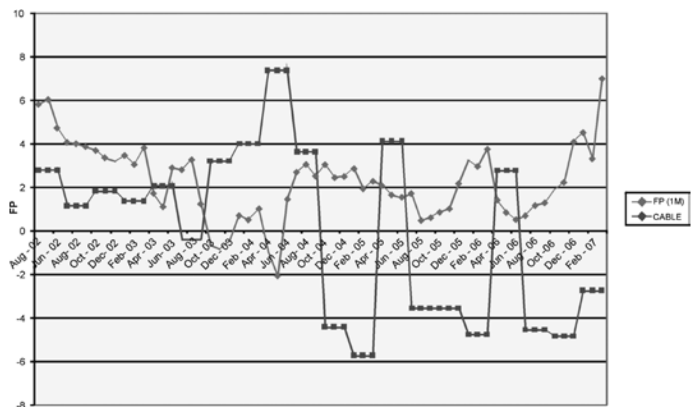

Chart III: FP-CABle Relationship

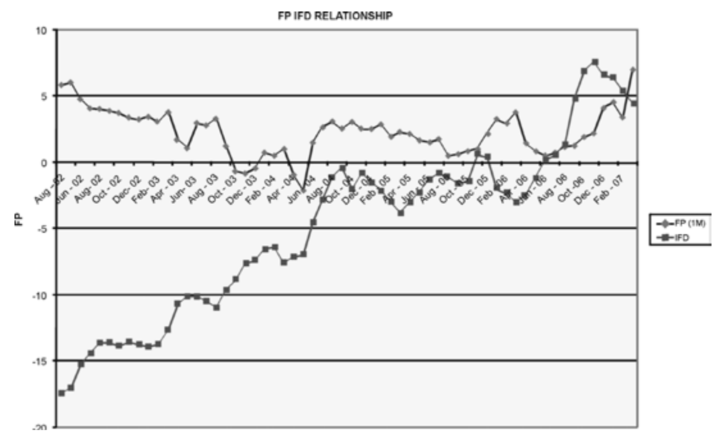

Chart IV: FP-FIINFs Relationship

(absolute value) with IRD, since Current Account Balance was negative for most part of the observed period. As none of the correlation coefficients exceeds 0.70, the variables do not have any multi-collinearity problem. Collinearity statistics further corroborate this interpretation as tolerance level is more than 0.20 for all the independent variables.

Conclusion

Indian forex market, between 2002 and 2007, experienced considerable volatility with respect to USD - INR market segment. Forward premia, at times, turned negative despite the fact that domestic interest rate in India are higher when compared to that of in US. To study this rare phenomenon, interest rate differential, inflation differential between India and US economies, FIIs' net flows into Indian stock market and current account balance (with lag effect) were studied by using regression method. Research indicates that the effect of RBI's intervention in forex market is minimal and it only helps in smoothing the volatility in forward premia. It is found that the forward premia in Indian forex market, to a large extent, is being determined by Interest Rate Differential along with FII Net Flows, Current Account Balance and to a lesser extent by Inflation Differential. The findings have critical implications for policy makers in respect of interest rates, foreign direct investment and foreign trade.

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Maram Srikanth is senior manager – Corporate & Industrial Finance, Andhra Bank. He holds a Bachelor degree in Commerce from Andhra University and Masters in Finance from JNTU. He is currently pursuing Ph.D at JNTU under the guidance of Dr. Braj Kishore, formerly professor & dean, Osmania University. This paper is part of his research.

Dear colleague

It's half past 8 in the office but the lights are still on... PCs still running, coffee machines still buzzing... And who's at work? Most of them ??? Take a closer look...

All or most specimens are ?? Something male species of the human race...

Look closer... again all or most of them are bachelors...

And why are they sitting late? Working hard? No way!!! Any guesses???

Let's ask one of them... Here's what he says... "What's there 2 do after going home...Here we get to surf, AC, phone, food, coffee that is why I am working late...Importantly no bossssssss!!!!!!!!!!"

This is the scene in most research centers and software companies and other off-shore offices. Bachelors "Time-passing" during late hours in the office just bcoz they say they've nothing else to do... Now what r the consequences...

"Working" (for the record only) late hours soon becomes part of the institute or company culture.

With bosses more than eager to provide support to those "working" late in the form of taxi vouchers, food vouchers and of course good feedback, (oh, he's a hard worker... goes home only to change..!!). They aren't helping things too...

To hell with bosses who don't understand the difference between "sitting" late and "working" late!!! Very soon, the boss start expecting all employees to put in extra working hours.

So, My dear Bachelors let me tell you, life changes when u get married and start having a family... office is no longer a priority, family is... and That's when the problem starts... b'coz u start having commitments at home too.

For your boss, the earlier "hardworking" guy suddenly seems to become a "early leaver" even if u leave an hour after regular time... after doing the same amount of work.

People leaving on time after doing their tasks for the day are labelled as work-shirkers...

Girls who thankfully always (its changing nowadays... though) leave on time are labelled as "not up to it". All the while, the bachelors pat their own backs and carry on "working" not realizing that they r spoiling the work culture at their own place and never realize that they would have to regret at one point of time.

So what's the moral of the story?? * Very clear, LEAVE ON TIME!!!

* Never put in extra time " unless really needed "

* Don't stay back unnecessarily and spoil your company work culture which will in turn cause inconvenience to you and your colleagues.

There are hundred other things to do in the evening.. Learn music... Learn a foreign language... Try a sport... TT, cricket.........

Importantly,get a girl friend or boy friend, take him/her around town...

* And for heaven's sake, net cafe rates have dropped to an all-time low (plus, no fire-walls) and try cooking for a change. Take a tip from the Smirnoff ad: *"Life's calling, where are you??"*

Please pass on this message to all those colleagues and please do it before leaving time, don't stay back till midnight to forward this!!!

IT'S A TYPICAL INDIAN MENTALITY THAT WORKING FOR LONG HOURS MEANS VERY HARD WORKING & 100% COMMITMENT ETC.

PEOPLE WHO REGULARLY SIT LATE IN THE OFFICE DON'T KNOW TO MANAGE THEIR TIME. SIMPLE !

Narayan Murthy - Infosys

Post-Merger Organizational Change and Occupational Stress:

Study with Specific Reference to Type A and Type B (Personality) Bank Managers in Private Sector

Dr. M. Dileep Kumar

The purpose of this research is to: first, determine the influence of mergers and acquisition on job stress, and second, to investigate whether the type A behaviour and Type B behaviour moderates the relationship between organizational stress variables on personality. The sample consisted of 100 bank managers. Analyses using Critical ratio revealed that Organizational Stress variables (Job Requirement Capability Mismatch, Role conflict, Role Ambiguity and Feeling of Inequality) had significant and positive effects on Type B (Personality) Bank Managers compared to Type A (Personality) Bank Managers. In addition to that, the study discussed implications of job stress due to mergers and acquisition at individual, and organizational level. The investigator envisages, through the findings, a better organizational management through strategic HR interventions during merger.

Keywords: **Banking sector, Bank Managers, Type A & Type B Personality, Mergers, Occupational Stress**

Introduction

The 90s saw radical policy changes with regard to fiscal deficit management and other structural changes in India. The banking sector was no exception. During the past decade, the banking sector experienced rapid changes at the policy level coupled with globalization and liberalization. There was heightened competition due to the entry of multinational banks, downsizing, introduction of new technologies, etc. These changes compelled the banking sector to reform and adjust to the fast changing environment. Many Indian banks either downsized their work force or merged with much stronger competitors.These mergers led to positive and negative fallouts. One such negative fall out was the increased level of occupational stress on managers working in these banks.

Davy et al. (1988), in their study, identify two sources of stress: first, mergers are a source of profound change for the organization, and change, in any shape or form, is likely to be a source of stress for the employees as it places special demands on them. As it is well recognized, excessive stress increases job dissatisfaction and this, in turn, is associated with a number of dysfunctional outcomes including increased turnover, absenteeism and reduced job performance. Secondly, the main source of stress in the merger / acquisition process is the uncertainty surrounding organizational and personnel changes that follow them. It is often these uncertainties, rather than the actual changes themselves, that are more stressful to employees.

Many challenges in the work environment, characterized by heightened competition, pressures on time, technological developments, conflicting demands from organizational stakeholders (Hall & Savery, 1986), increased use of participatory management and computerization (Murray & Forbes, 1986), greater uncertainty and other reasons have resulted in higher job stress.

The mergers, especially in the banking sector, changed the working environment for the bank employees. The implications of the transformations not only affected the social, economic and psychological domains of the bank employees but also led to serious organizational stress. Stress according to past studies varies with personality types and impacts them in different ways. The present study is undertaken to understand specific problems of Type A and Type B (Personality) Bank Managers in their approach to manage the stress in the wake of mergers. This article also sheds light into the pathogenesis of various problems related to mergers in the arena of occupational stress and its impact on Type A and Type B Personality Bank Managers.

Review of literature

Stress represents a dichotomy. It is both an asset and an anathema. It is neither possible nor desirable to eliminate stress from life. Stress is a part of motivation, which when kept within tolerable limits represents a driving force to achieve and accomplish individual goals. However, when internal or external circumstances create either too much or too little stress, the result will be a decrease in performance and ultimately a breakdown in health.

Selye (1936) first introduced the concept of stress into the life sciences in 1936. He defines stress as "the force, pressure, or strain exerted upon a material object or person which resist these forces and attempt to maintain its original state." It can also be defined as "the nonspecific response of the body to any demands made upon it." (Selye, 1976)

Beehr and Newman (1978) define occupational stress as "a condition arising from the interaction of people and their jobs and characterized by changes within people that force them to deviate from their normal functioning." Stress can be caused by environmental, organizational, and individual variables (Matteson & Ivancevich, 1999; Cook & Hunsaker, 2001). Organizational variables have been known to create stress for employees at the workplace resulting in job stress (Greenhaus & Beutell, 1985).

Steers (1981) in his study states that, "occupational stress has become an important topic for study of organizational behaviour for several reasons (1) Stress has harmful psychological and physiological effects on employees, (2) Stress is a major cause of employee turn over and absenteeism (3) Stress experienced by one employee can affect the safety of other employees and (4) by controlling dysfunctional stress, individual and organization can be managed more effectively."

Spielberger & Vagg (1999) point to an increasing interest shown by researchers to study stress at the work place in the last decade. They emphasize that stress is a major problem with extensive costs on individuals, organizations and society.

The work environment includes a constellation of psychological factors, which are likely to interact in different ways in different jobs for different people. Because there is such a wide range of factors, which contribute to the experience of stress, many researchers have sought to categorize them (eg:Cooper and Marshall, 1976, 1978 [5 categories]; Quick and Quick, 1984 [4 categories]; Burke, 1988 [6 categories]; Sutherland and Cooper, 1988 [6 categories]; Kasl, 1992 [10 categories]). There is considerable overlap between these taxonomies but the work of Sutherland and Cooper's (1988) helps to summarize them as : Factors intrinsic to the job eg: Physical demands [noise, vibration, temperature variation, humidity, ventilation, lighting, hygiene, climate] Task factors eg: shift/night work, workload, long hours, new technology, repetitiveness, monotony and boredom and experience of risk and hazards. Role of the individual in the organization eg: role conflict, role ambiguity, responsibility [for people and/ or things]. Relationships and interpersonal demands eg: with supervisors, colleagues and/or subordinates. Career eg: job insecurity, status incongruity [under/over promotion]. Organizational structure and climate eg: participation in decision-making

Stress has usually been identified as a negative phenomenon because of its various manifestations (Selye, 1956; Selye 1973; Gibson, Mc Grath & Reid, 1989):

- its effect upon rates of absenteeism, job changes, illness and death rates within a profession;
- recognized medical "stress markers" such as the levels of blood pressure and pulse rate, cholesterol, adrenaline and noradrenaline, free fatty acids, triglcerides and cortisol;
- recognized behavioural "stress markers" such as A-type behaviours, deterioration or breakdown in mental or physical health.

Cooper (1974) reported that "stress develops when an individual feels he is not competent to undertake the role assigned to him effectively. The individual feels that he lacks knowledge, skill and training on performing the role. Unless adequate training is provided, potentially stressful situations may develop when new technology is introduced into the work place and the employees are unable to carry out the given tasks."

Lazarus and Folkman (1980) substantiate the discussion that "stress will generate among human beings where a particular relationship between the person and the environment, that is appraised by the person as taxing or exceeding his/her resources and endangers his/her well being.

Merger and Stress

Buono and Bowditch (1989) mention that, "during mergers and acquisitions activity, rumor mills and the grapevine work overtime, leading to more anxiety and, in many cases, counterproductive behaviors. Often based on fears rather than reality, these rumors can significantly exacerbate employee anxiety, tension and stress." This anxiety and uncertainty are usually leading to dysfunctional outcomes.

Ashford et al. (1989) found empirically that "the greater the number of changes in an organization, greater the perceived job insecurity by the employees and in turn, this perceived job insecurity is negatively related to organizational commitment, trust in organization, job satisfaction and ultimately job performance."

Buono and Bowditch, (1989) indicate that Mergers & Acquisitions (M&A) appear to be particularly stressful forms of organizational changes that induce a series of dysfunctional individual outcomes in the employees of the firms involved. During merger and acquisition activities rumor mills are overly active, leading to more anxiety and counterproductive behaviors. Often based on fears rather than reality, these rumors can significantly exacerbate employee anxiety, tension and stress."

Panchal and Cartwright, Mork et al. (1989, 2001) carried out an empirical research, results of which support the assertion of elevated stress levels following mergers and acquisitions.

The employees of the Acquired firms, finding themselves "sold" as a commodity, may suffer from feelings of worthlessness, and also feel inferior because of loss of autonomy and status. The imbalance of power inherent in the acquirer/acquired relationship has also been shown to affect behavioral outcomes. Schweiger, et al. (1987) found that 58% of managers in an acquired firm are gone within 5 years or less of an acquisition.

Covin et al. (1997) in their study indicate that "employees of an acquired firm will feel the impact of a merger more strongly and that this impact will be associated with specific attitudinal and behavioral outcomes. Cartwright & Cooper (1993) state that even though the acculturation process might have been smooth, the merger induced a higher level of stress and deterioration in the mental health of employees."

Brook (1973) reported that "qualitative changes in the job create problems of adjustment among employees. The interpersonal relationships within the department and between the departments create qualitative difficulties within the organization to a great extent."

Cooper and Marshal (1978) indicate that "role conflict exists when an individual in a particular work role is torn by conflicting demands or doing things he or she does not want to do or does not think of part on part of job satisfaction."

Type A and Type B Personality

Friedman and Rosenham (1966) define Type A personality as "an action emotion complex that can be observed in any person who is aggressively involved in a chronic incessant struggle to achieve more and more in less time and if required to do so, against the opposing efforts of other things or other persons". The Type A personality is characterized by feeling a chronic sense of time urgency and by an excessive competitive drive. Some of the more outstanding characteristics of Type A's include:

- Always in haste
- Feeling of impatience
- Obsessed with success
- Persistent inability to cope with leisure time.

Type B personalities, on the other hand, can be identified by the following characteristics:

- Never suffer from a sense of time urgency
- Play for fun and relaxation
- Can relax without guilt
- No need to display either their success or accomplishments.

The evidence links these two distinct personality types with diverse behaviours and different performance outcomes depending on the requirements of the job."

Type A behaviors are generally seen in individuals who race with time and who are led by success. They work fast, talk fast and try to do several things at once. They are impatient and angry. Since they cannot bear to wait, they tend to interrupt the conversation; they try to lead all of their interpersonal interactions. Type A's use "quantity" (Money, achievements, responsibilities, etc.) as an indication of their success and they value quantity rather than quality (Mueser et.al., 1987, Bluen et.al., 1990). They are highly competitive (Keenan and McBain 1979, Powell 1995). Those who have the opposite characteristics are specified as Type B's. Type B's are said to be more comfortable, more easygoing, less competitive and less aggressive. Lazarus (1994), states that Type B's also experience stress, however, they are less panicky when they are faced with challenges and threats.

Effect of stress on Type A and Type B Managers

Past studies have indicated the potential impact of personality traits on job stress. People with "Type A" personalities, for example, are rushed, ambitious, time-conscious and driven. Studies suggest these traits, if not properly managed, can create stress-related illnesses. In contrast, the "Type B" personality is a much more relaxed and less time-conscious driven person. Type B personalities are able to view things more adaptively. They are better able to put things into a perspective, and think through how they are going to deal with situations. Consequently they tend to be less stress-prone." (Goldberg, 1993; Deary & Blenkin, 1996; Snyder & Ickes, 1985).

Keinan and Tal (2005), in their study, tested the predictions derived from Glass' model (1977), which argued that "Type A behavior is a coping response to the threat of control loss. Based on attribution theory, which suggests that people engage in attribution processes to obtain or maintain a sense of control, Type A's would form more causal attributions than Type Bs, and that this difference between the two types would be greater under high-stress than under low-stress conditions."

Meyer Friedman's (1979) research on personality indicates that "the Type A personality is the most stress-prone. The more common characteristics of Type A people are excessive competitive drive, impatience, and a significant sense of urgency and time. They tend to accomplish too much or become involved in too many activities. To compensate, they try to put more and more into less and less time. Type A people do this in a number of ways. The two most common ways are, to create suspense for themselves if none exist and to use quantity rather than quality as their measure of success. For many, their drive puts them on the edge of habitual hostility. They normally have few sources of diversion outside their work and tend to feel somewhat guilty if they are not working. They bring to their "playtime" the same competitive drive —whether they are playing monopoly with their children or a game of tennis or golf with friends; they go all out to win. This competitiveness, of course, discounts the benefits of play and relaxation, and makes stress a constant companion."

Kiev and Kohn (1979) conducted a study to determine managers' perceptions of what they find most stressful on the job and the methods they use to cope effectively. The following are leading causes of stress on the job as perceived by the managers surveyed, in order of significance: heavy workload and its concomitant time pressures and unrealistic deadlines; the disparity between what must be done on the job and what the manager would like to accomplish: the general organizational "political" climate; and lack of feedback on job performance.

Kiev and Kohn (1979) in their study reveal that "Type A managers experienced more stress on all surveyed factors than Type Bs. Significantly, Type A managers stated that they were often confronted with heavy workloads and unrealistic deadlines, while the Type B managers perceived the very same jobs quite differently."

Extraversion has been found to have a negative relationship with job stress (Birch & Kamali, 2001). According to Burke (2001) individuals high in extraversion are cheerful, outgoing, and adventurous, which are likely to enable them to handle stress. People with extraversion traits tend to view their actions as positive, emotionally satisfying, and effectual (Moberg, 2001). Given their ability to interact socially, one would expect extroverts to experience more positive emotions, which would be reflected in favorable job attitudes, and lower levels of job stress. Snyder and Ickes (1985) also noted that "individuals high in extraversion tend to be more enthusiastic and energetic and be able to cope effectively with stress. In work settings, individuals high in extraversion are more physically and verbally active, and tend to be more friendly and outgoing around others (Costa & McCrae, 1985).

Williams (1994) claims that "people who do not show the Type A Behaviour pattern seem more able to cope with pressure than Type A's and do not perform any worse."

Ho (1995) examined executives in the service sector – insurance, financial and banking – in terms of the level of stress experienced, coping styles, and personality (Type A / Type B). He tested the relationship between personality type, perceptions of stress and psychological wellbeing. Although Type A executives reported a significantly higher level of stress than Type B executives, they were not psychologically less healthy than their Type B counterparts. Executives across the three industries did not differ in terms of reported stress; executives in the financial services sector tended to be more worn out and uptight than executives in the banking and insurance sectors. Work overload, role ambiguity and relationships with colleagues were cited to be the major stressors.

The introductory part and the review of literature indicates that there are differences between Type A and Type B personalities and the manner stress has an impact on them also differs. The study also tries to analyse the impact of mergers and acquisitions and their impact on Type A and Type B personality types and more specifically on Bank Managers in the private sector.

Rationale for the study

Past research by (Buono and Bowditch, 1989; Ashford et al 1989; Panchal & Cartwright, 1989; Mork et al 2001; Schweiger et al 1987; Covin et al 1997) on the impact of mergers indicates that they develop both psychosocial problems to employers and employees. They lead to attitudinal and behavioral problems. Mergers and Acqusitions appear to be particularly stressful forms of organizational changes that induce a series of dysfunctional individual outcomes on the employees in the firms affected.

Hence, this particular study tries to understand the level of stress on managers in private banks soon after the mergers and acquisitions, specifically by studying Type A and Type B Bank Managers who are varied in their perceptions and attempt to cope with the merger change process.

Statement of the Problem

In this study, the problem was identified as - What would be the effect of Post Merger Organizational Change and Occupational Stress with specific reference to Type A and Type B (Personality) Managers in Private Sector banks.

Objectives of the study

- To understand the level of organizational stress of Type A and Type B managers in private banks.
- To make a comparative analysis of organizational stress of Type A and Type B managers in private banks.
- To study the moderating effect of the nature of work (position) on stress of Type A and Type B managers in private banks.
- To study the moderating effect of the different years of service on stress of Type A and Type B managers in private banks.
- To suggest adequate stress management measures that help the managers to cope with the change management

Hypotheses

Based on the rationale of the study the following hypotheses are formulated.

- There will be significant difference between Type A and Type B Bank managers in their stress levels.
- Stress will be higher among Type A Bank Managers compared to Type B Bank Managers.
- Nature of work will moderate the effect of organizational culture on value expectancy behaviour.
- Different years of service will moderate the effect of level of stress on Type B and Type B managers.

LEVELS		YEARS OF SERVICE 0-6 YEARS (N)	7-13 YEARS (N)	14-20 YEARS (N)	TOTAL
NOW* TL	TOTAL	10	10	05	25
		10	10	05	25
	TOTAL	20	20	10	50
NOW* LL		10	10	05	25
		10	10	05	10
	TOTAL	20	20	10	20
TOTAL					100

NOW* (Nature of Work – Position – Top and Low Level)

Table1: Population and Design of study

The population selected for this particular study includes managers of those banks, which were recently merged with larger banks in private sector. The study considered only the male managers in middle and lower level in the organization. The study did not consider female population due to their inadequate representation in the banks chosen for the study. The study follows descriptive research design.

Sampling

Managers of 10 private sector banks were selected from Bangalore city. The study followed proportionate probabilistic sampling method to arrive at a representative sample size. The study shortlisted 100 managers, 50 managers in the Type A category and 50 managers in the Type B category. They were categorized based on a questionnaire that measured personality characteristics (Bortner,1969).They were further divided into top level and lower level managers based on years of work experience.

Tools of data collection

Tool 1: Tool to measure Job stress

The study administered two Standardised questionnaires (Shailendra Singh,1990) to asses the level of stress on bank managers. The stress questionnaire consisted of 10 sub dimensions: Lack of group cohesiveness (3 items), Role conflict (5 items), Role ambiguity (4 items), Feeling of Inequality (3 items), Role Overload (5 items), Lack of Supervisory Support (3 items), Constraints of Rules and Regulations (2 items), Job Requirement Capability mismatch (3 items), Inadequacy of Role Authority (2 items), Job Difficulty (2 items).

Although the number of questions vary in each sub dimension, equal weightage has been given to all of them. Responses were recorded on a five point scale ranging from "true to almost no extent" having one point to "true to a very great extent", with five points. To arrive at the sub dimension scores, the total of each of the items in the sub dimension were added.

SI No	Job stress Variables	No. of items	Theoretical range	Standardised alpha
1	**LCG**	4	4-20	0.80
2	**RC**	5	5-25	0.81
3	**FI**	3	3-15	0.90
4	**RA**	4	4-20	0.71
5	**RO**	5	5-25	0.83
6	**LSS**	3	3-15	0.83
7	**CRR**	2	2-10	0.61
8	**JRCM**	2	2-10	0.63
9	**IRA**	3	3-15	0.65
10	**JD**	2	2-10	0.79

Table.2: Sub dimensions - Dependent variable 'Stress'

Tool 2: Tool for Personal information

To obtain the personal details about the managers in private sector banks, a personal data sheet was used. The personal data sheet consists of the name, age, gender, marital status, education, area of service, occupational designation, years of service, training programmes attended and extra curricular activities. The variables selected for the study are discussed below.

Role Conflict

Role conflict can be defined as behaviour pattern expected of a person undertaking a particular task or position in an organization. It is thus defined as condition of job stress where employees are expected to perform according to contradictory demands and tasks assigned to them.

Role Overload

Role overload can be defined as a condition of job stress where the requirements of the role exceed the capabilities of the individual performing it within the assigned time and resources.

Role Ambiguity

Role ambiguity can be defined as a condition of job stress where employees are not provided necessary information to carry out the job and in which there is uncertainty surrounding the requirements of a particular role.

Lack of Group Cohesiveness

Lack of group cohesiveness can be defined as a condition of job stress where employees do not get along very well or stick together either physically for group decisions and activities.

Feeling of Inequality

Feeling of inequality is defined as a condition of job stress where employees feel that the rewards provided to them are not proportionate to the efforts done by them compared to their counter parts within and outside the organization.

Lack of Supervisory Support

Lack of supervisory support can be defined as a condition where the employees perceive the role of leadership as passive or discouraging times when they need support and encouragement in carrying out the job assigned by their superiors.

Constraints of Changes, Rules and Regulations

Constraints of changes, rules and regulations can be defined as a condition of job stress where the employees experience problems in coping with technological and administrative changes as well as rigid rules and policies.

Job Difficulty

Job difficulty can be defined as a condition of job stress where the employees feel their assignments quite difficult and taxing their ability.

Inadequacy of Role Authority

Inadequacy of role authority can be defined as a situation of job stress where the employees perceive that they are not delighted with adequate authority to discharge their responsibilities.

Job Requirements - Capability Mismatch

Job requirements capability mismatch can be defined as a condition of job stress where the employees feel that the abilities significantly do not match with the requirements of the job.

Analysis and Results

Table 3 indicates significant differences between Type B (Personality) Bank Managers and Type A (Personality) Bank Managers in their levels of stress.The table also indicates that Type B Managers have high mean score (86.09) compared to Type A Bank Managers (74.04), in relation to occupational stress. This shows Type B (Personality) Bank Managers have high-level of occupational stress during mergers and acquisitions compared to Type A (Personality) Bank Managers.

SI No.	Variable	N	Type A		Type B		CR
			Mean	SD	Mean	SD	
1	Total Stress	100	74.04	08.4	86.09	9.20	5.97**

Table 3: Comparison of mean scores (Type A Vs Type B)

Table 4 below indicates that among the selected occupational stress variables, Job Requirement Capability Mismatch has the highest mean value of (16.2) followed by Role Conflict (11.81) and Feeling of Inequality (10.49) among Type B (Personality) Bank Managers. Similarly among Type A (Personality) Bank Managers these variables have the high mean scores with 12.6 (job Requirement Capability Mismatch), 9.1 (Role Conflict) and 9.08 (Feeling of Inequality)

Varibles	Type A		Type B		CR Value	DF	P
	Mean	SD	Mean	SD			
LCG	6.51	1.5	5.96	1.61	2.45	98	0.01
RC	9.1	0.6	11.81	0.56	2.54	98	0.01
FI	9.08	0.56	10.49	1.62	3.89	98	0.01
RA	7.21	1.4	9.68	0.88	1.25	98	>.05
RO	5.81	0.58	6.92	1.29	0.44	98	>.05
LSS	5.21	0.74	5.72	0.88	5.85	98	>.0.1
CRR	5.51	0.89	4.41	0.41	2.91	98	0.01
JRCM	12.6	1.76	16.2	1.16	6	98	0.01
IRA	6.8	0.9	7.7	0.89	2.4	98	0.01
JD	6.21	1.06	7.2	0.7	2.17	98	0.01
Total stress	74.04	8.4	86.09	9.20	5.97	98	0.01

Table 4: Comparison of mean scores across sub dimensions

respectively. Lack of Supervisory support got the lowest mean score in Type A (Personality) Bank Managers and constraints of rules and regulations received the lowest mean score in Type B (Personality) Bank Managers. Though significant difference is observed in all stress variables between Type A (Personality) Bank Managers and Type B (Personality) Bank Managers, the mean scores indicate less difference between the two types.

Major findings

There is significant difference in the level of occupational stress between the Type A and Type B managers in private sector banks.

Occupational stress is found higher among Type B Bank Managers compared to Type A Bank Managers of private sector banks.

Among different occupational stress variables Job Requirement Capability Mismatch, Role Conflict Feeling of Inequality and Role Ambiguity contribute more to the occupational stress among both Type A Bank Managers and Type B Bank Managers.

The Nature of Work (Position) does not have any moderating effect on stress.

'Years of Service' does not have any moderating effect on stress.

Discussion

This section incorporates a discussion on the major stress factors, which are widely recognized in past research and are in tune with the hypotheses formulated for this study.

One of the hypotheses' stated that 'stress would be higher among Type A Bank Managers compared to Type B Bank Managers (table no.4). The findings of the study reject the hypothesis. It is seen that Type B managers experience greater stress than Type A. The analysis of stress between Type A (Personality) and Type B (Personality) Bank Managers indicates that in both sectors the Job Requirement Capability Mismatch, Role Conflict Feeling of Inequality and Role Ambiguity are the major stressors.

The study indicates that the Type B Bank Managers have high stress related to Job Requirement Capability Mismatch compared to Type A Bank Managers (p=>.05). Job requirements capability mismatch can be defined as a condition of job stress where the employees feel that the abilities significantly do not match with the requirements of the job. Type B Managers by their very nature are very relaxed and never indulge in activities unless such exposure is demanded by the situation. It has been observed in literature that a merger or acquisition necessitates more time consciousness, updation of skills and knowledge, high competency, technical know how, multi-skilling etc., among members to cope with the organizational change process. Type B Managers have less time urgency and are impatient to learn and update their skills that are in tune with the required organizational changes. Before they take a decision, Type B Managers will think more on the outcome and its impact. This time lag develops obstacle in the updation of knowledge, skills and aptitude and it develops incompetence to take higher responsibilities.

Stress develops when an individual feels he is not competent to undertake the role assigned to him effectively. The individual feels that he lacks knowledge, skill and training on performing the role. Unless adequate training is provided, potentially stressful situations may develop when new technology is introduced into the work place and the employees feel unable to do the given task. (Cooper, 1974). Managers may have fear and anxiety related to the uncertainty attached with the organizational changes. Higher the uncertainty and the rumours they hear from their co-workers higher the stress they may feel at work. Buono and Bowditch (1989) rightly point out in this context and mention that, during mergers and acquisitions activity, "rumor mills and the grapevine work overtime, leading to more anxiety and, in many cases, counterproductive behaviors. Often based on fears rather than reality, these rumors can significantly exacerbate employee anxiety, tension and stress". This anxiety and uncertainty are usually leading to dysfunctional outcomes.

Type A Bank Managers are found less stressed on the Job-Requirement Capability Mismatch in the study. Type A Personalities have the readiness to accept the new roles and responsibilities since they are the people having the attitude towards risk taking and facing challenges. Since they cannot cope with leisure time they usually prepare themselves towards the expected competency of the organization for new roles and responsibilities. They do not consider merger and acquisition as a threat and rather take it as an opportunity for advancement. They don't have any fear and anxiety towards change since they have better risk and conflict tolerance. They are well prepared to cope with the merger changes with their capabilities, skills, and knowledge. Due to these, Type A Bank Managers are less stress related to Job Requirement capability mismatch.

The second major finding on organizational stress factor Role Conflict indicates that Type B Bank Managers are having high Role Conflict (p=>.05) compared to Type A Bank Managers (table no.4). Merger necessitates members to work with multi task and multi skills. A person having different skills and functional knowledge has to work with different portfolios and functional responsibilities, even though he didn't like to engage in it. Cooper & Marshal (1978) state that 'role conflict exists when an individual in a particular work role is torn by conflicting demands or doing things he or she does not want to do or does not think of part on part of job satisfaction.

While the findings related to Type A Bank Managers indicate that they are less concerned about role conflict, these findings lead us to believe that their basic attitude helps them to cope with the change process during merger. Their attitude towards risk taking is in tune with their friendliness and open nature towards their superiors, that helps them to get better understanding about their required roles and skills in the wake of mergers and organizational change process. According to Burke (2001), individuals high in extraversion are cheerful, outgoing, and adventurous, which enables them to handle stress. Their sense of urgency, proactiveness, high sociability, risk tolerance and adaptive nature help them to cope better with the organizational changes during merger.

The third finding on organizational stress factor indicates that the Type B Managers have high stress related to Feeling of Inequality (p=>.01) compared to Type B Bank Managers. Feeling of inequality is defined as a condition of job stress where employees feel that the rewards provided to them are not proportionate to their efforts as compared to their counterparts within and outside the organization. The merger necessitates more structural rearrangement within the organization. The structural rearrangement is not only in their positions and responsibilities but also in the compensation packages and rewards that they received from the organization. Poduval (1991) in his study reported that 'feeling of inequality exists when workers feel that their counterparts within the organization and elsewhere are receiving better compensation package for the same contribution by way of efforts and performance.' This creates sense of inequality among members in the organization. Type B Managers' feeling of inequality may be related to the their feeling of inferiority they perceive about their present position, responsibilities and compensation package compared to those within and outside the organization in the same capacities and abilities.

The study also found significant differences (p=>.05) between Type A Bank Managers and Type B Bank Managers on the factor of role ambiguity. Role ambiguity can be defined as a condition of job stress where employees are not provided necessary information to carry out the job and in which there is uncertainty surrounding the requirements of a particular role. Khan (1964) views that role ambiguity exists when an individual has inadequate information about his work role, i.e., where there is lack of clarity about the work objective associated with the roles about the work colleagues, expectations of the work role and about the scope and responsibility of the job. Curtailing of information across the functional level may develop high fear, anxiety and tension among members related to the new change process. They develop high concern towards their new roles and feel uncertain about their future.

Lazarus and Folkman (1980) also substantiate the above discussion that stress will generate among human beings where a particular relationship between the person and the environment, is appraised by the person as taxing or exceeding his/her resources and endangering his/her well being." Brief and Aldag (1976) rightly point out in this context that there is evidence of role incumbents with high levels of role ambiguity have responded to such situations with anxiety, depression, physical symptoms, a sense of futility or lower self esteem, lower levels of job involvement, organizational commitment, and perceptions of lower performance on the part of the organization, of supervisors, and of themselves. The reserved nature of the Type B Personality members aggravates the situation by showing their hesitation to seek information from their co-workers and superiors. The finding thus correlates the relationship between the Type A (Personality) Managers attitude and behaviour with the present research finding.

Type A personality members experience less stress related to role ambiguity. The low level of stress of Type A Personality members is then related to their high extroversion, time urgency, proactiveness, high ambitious attitude and impatient to get information at any cost.

The findings related to sub variables, other than lack of group cohesiveness, role authority, role inadequacy, constraints of rules and regulations, lack of supervisory support, job difficulty and role overload is having only relative importance in this study. With respect to most of the organizational stress sub variables, the Type B (Personality) Bank Managers experience high stress compared to Type A Bank Managers.

The socio-demographic variables like years of service, education, marital status and hobbies were found to be insignificant in this study. The years of service and Nature of Work (Positions) didn't have any moderating effect on the stress.

The overall finding indicates that stress is a major factor that affects human behavior at work. The findings of the study are contradictory to past findings that Type A Personality members are more prone to occupational stress compared to Type B Personality members (Goldberg, 1993; Deary & Blenkin, 1996; Snyder & Ickes, 1985). In the private banking sector, Type B Personalities are more prone to occupational stress during mergers and acquisition compared to Type A Personalities. To establish the relationship between Mergers and Acquisitions and their impact on occupational stress, it is suggested that studies in this area must be carried out in India.

Implications

Less importance given to job stress variables may lead to:

- Physical problems and health problems like heart diseases, ulcers, arthritis, increased frequency of drinking and smoking, cardiovascular, gastrointestinal endocrine and other stress related disorders.
- Psychological and behavioural problems like change of moods, inferiority complex, widespread resentment, reduced aspirations and self esteem, reduced motivation, feeling of fear, anxiety and tension, loss of psychological contract and job skills.
- Organizational problems like job dissatisfaction, behavioural problems, production turn over, increased absenteeism, increased accidents, greater alienation and estrangement at work, low commitment and involvement at work, low morale and lower productivity.

Recommendations

The post deal side of a Merger and Acquisition process is especially challenging because of the sea of uncertainty and ambiguity. Merger and Acquisition activity presents challenges for the human resource managers in both, the acquiring and the acquired organization. It is also found to have serious impact on the performance of the employees during the transition period. Mergers and Acquisitions lead to stress on the employee, which is caused by the variations in Human Resource practices, uncertainty in the environment, cultural differences and differences in organizational structure and changes in the managerial styles.

To alleviate the problems related to Mergers and Acquisitions, the researcher suggests the following coaching strategies to the top management within the organisation as part of HR strategic interventions:

- Develop strategies to convince the managers continuously that the decision regarding Mergers and Acquisitions was right to a great extent for productivity and better business.
- Foster a learning culture.
- Give insights to make things work.
- Be flexible and adaptive.
- Induce trust and confidence in members.
- Give adequate time to adjust to the new changes.
- Encourage free and open exchange of ideas.
- Understand the performance limits of the employees.
- Discuss the training and learning goals with the employees.
- Identify the training needs of the employees.
- Give opportunity for members to express their training needs.
- Develop periodical learning and training goals to facilitate the organizational change process.
- Be available to the employees as and when they need and clarify their doubts.
- Accept the responsibility of subordinates success and failures with new ideas.
- Review the developmental and performance targets periodically.

Conclusion

Studies show that most of the mergers fail to bring out the desired outcomes due to people related issues. It is found that the organizations follow a single norm to implement the merger and acquisition policies. The findings related to the study indicate that a differential HR policy is required to orient people having different human capacities, nature and attitudes. Differential coaching policies, mentoring strategies, learning and development opportunities are to be imparted to members during post merger days to help them integrate with the new order. Organizations need to reach out to their employees through effective coaching and mentoring strategies by removing the employee fears and by arresting rumors that float around the organization. A well-planned process built on the foundations of an open, honest and consistent HR strategy can pave a way towards sound merger and acquisition that will alleviate executive stress in post-merger period.

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Dr. M. Dileep Kumar, is Professor of Management Studies and Director of Corporate and Public Relations at Acharya Institute of Management and Sciences, Bangalore. He has worked with many prestigious B- Schools across India. He has 10 years of experience in teaching, training, research and consultancy in the areas of Management, Sociology, Social Work and Psychology. His areas of interest include research in People Behavior at Work and Strategic People Management.

Dear Disgruntled

If you work for a man, in heaven's name, work for him. If he pays you wages which supply your bread and butter, speak well of him; stand by him and the institution he represents.

If put to a pinch, an ounce of loyalty is worth a pound of cleverness. If you must vilify, condemn and eternally disparage - resign your position, and when you are outside, damn to your heart's content.

But as long as you are part of the institution, do not condemn it. If you do that, you are loosening the tendrils that are holding you to the institution, and by the first high wind that comes along, you will be uprooted and blown away, and probably will never know the reason why.

- **Elbert Hubbard**

When in Rome, Do as the Romans Do

Product Adaptation in Rural Markets – Preliminary Findings

Dr. G. Sridhar

Marketers are expanding their horizons to reach to the rural masses. Some have succeeded while many are still learning to adapt. The inability to tap the rural potential stems from many factors and one of the important reasons appears to be the knowledge of product adaptation to rural markets. While a lot of debate has been generated on this topic primarily based on experiences in the international domain, there is a dearth of literature in this area in the Indian context. This paper attempts to fill this void by way of an exploratory study.

Keywords: **Product adaptation, Standardization, Rural Markets**

Introduction

Many multinational and domestic organisations that assumed homogenization of rural and urban markets, mainly due to increase in rural incomes, have failed comprehensively to tap rural potential as wide disparity still exists between rural and urban markets in terms of standard of living, literacy levels, physical and marketing infrastructural facilities, social and cultural conditions. Unless marketers consider these disparities to create and maintain exchanges through products and services adapted to rural consumers and market conditions, tapping rural markets will be an elusive dream.

The concept of product adaptation has its roots in international marketing domain but its relevance for rural marketing cannot be ignored as many organisations are found to have adapted their products to suit rural consumers' preferences and market conditions. However, inspite of its relevance to the rural marketing domain, very little has been explored as of now. Much of this little explored evidence on this debate in rural markets has been anecdotal, experience sharing or expert prescriptions for rural markets generally evident in newspapers, magazines and citations in internet. There is hardly any study we encountered that is academically researched. The present study attempts to fill the void.

This paper presents the result of an exploratory study conducted on product adaptation in rural markets. The objective of the paper is to contextualise product adaptation construct to rural marketing domain. Contextualise because the concept has its roots in international marketing domain. Later, the paper also set's directions for further research on the construct.

In this paper, literature review and the method followed for field visits are detailed first. Subsequent sections detail the findings of the study and areas of further studies.

Review of Literature

Product Adaptation in International Marketing Domain

Product adaptation has been researched for the past five decades in the international marketing domain either as a part of marketing programme adaptation (Buzzell, 1968, Sorenson and Wiechmann, 1975, Jain, 1989, Samee and Roth, 1992, Lagas and Lagas, 2003) or exclusively (Hill and Still, 1984, Cavusgil and Zou, 1994, Yamin and Altunisik, 2003). In the international marketing domain, descriptive papers elaborated on the pros and cons of product adaptation, conditions under which product adaptation is possible, types of product adaptation and the consequences of product adaptation (Buzzell, 1968, Leavit, 1983, Van, 2000, Ryans et al, 2003). Studies were also conducted to garner support through empirical evidences (Ward, 1973, Hill and Still, 1984, Karafakioglu, 1986, Leonidou, 1996, Yamin and Altunisik, 2003). Research on adaptation of products examined strategies applied to different world markets (Samiee and Roth 1992) or domestic strategies applied to foreign markets (Cavusgil and Zou 1994, Zou et al. 1997).

Theoretical basis to either adapt or standardise a product is in the concept inter-market segmentation. Intermarket segments are defined as the presence of well-defined and similar clusters of customers across geographical boundaries and are identified on similar criteria (Simmonds, 1985, Kale and Sudharshan, 1987, Jain, 1989, Samiee and Roth, 1992, Szymanski et al., 1993, Shoham, 1995). For offering standardized products successfully, firms must recognize the presence of intermarket segments among the markets it is planning to serve. If they recognize the absence of intermarket segments among the markets to be served, adaptation of products would be a better alternative strategy.

Product standardisation is found feasible where markets are economically and culturally alike (Jain 1989, Terpstra and Sarathy 2001). Organisations following standardisation can maximize profits through the economies of scale by selling the same product in different markets (Levitt, 1983). Product adaptation on the other hand is feasible where there are differences between the consumers' needs, culture and languages, economic and social conditions. Organisations adapting products to local conditions can deliver value to the consumer through appropriate positioning and earn long term profitability through customer satisfaction (Wind, 1986; Ozomer et al 1991, Harvey, 1993). Standardised products are found to be away from consumer preferences (Buzzell, 1968, Hill and Still, 1984). It has also been argued that adaptation of products is customer centric and marketing oriented rather than product oriented (Cavusgil and Zou, 1994) and derives profits for the organisation through customer satisfaction (Douglas and Wind, 1987).

In international marketing domain, it has been found that decision to either adapt or standardise a product is not absolutely dichotomous. This is because, there is no strategy that is best across situations and each strategy can be best in a particular condition. Adequate degree of adaptation is contingent upon a variety of internal and external factors (Jain 1989, Zou and Cavusgil 1996, Theodosiou and Leonidou 2003). Jain (1989) argues that total standardisation is unthinkable, and hence a contingency approach is a better alternative. Contingency approach would include situation specific approaches that consider product-market fit along with organisational strengths and weaknesses (Jain, 1989, Akaah, 1991, Cateora and Graham, 1999). There is a general consensus that ideal standardisation of product should include atleast minimal local adjustments (Douglas and Wind, 1987, Simmonds, 1985).

In the international marketing domain, level of adaptation has been identified by breaking down products into various constituents. Broadly, these are related to design, quality and features (Ward, 1973, Sorenson and Wiechmann, 1975, Hill and Still, 1984, Baalbaki and Malhotra, 1995, Leonedou, 1996), packaging and labeling (Ward, 1973, Sorenson and Wiechmann, 1975, Hill and Still, 1984, Leonedou, 1996).

Product Adaptation in Rural Marketing Domain

In rural marketing domain, literature on product adaptation is mostly descriptive, anecdotal or experience sharing. In general, reference to product adaptation has been cursory in nature. For example, while examining the rural consumption patterns Rao (2000) mentions the utility of small packs and feature changes on the fortunes of the organizations. Similarly Jha (2003) while discussing differences in the consumption behaviour of the rural consumers mentions the role of modifications of the products in rural markets. Velayudhan (2002) in his book also mentions the role of product adaptation in tackling competition and market differences. In few empirical and analytical papers, authors emphasised the relevance of product adaptation in rural markets (Singh 1992, Davar and Chattopadhyay, 2000, Balakrishnan 2000, Sarwade, 2002, Sharma and Gupta, 2002). However, much of the understanding on product adaptation in rural markets for the study has come from the paper clippings and magazine articles (Prem and Sweety, 1985, Das and Sen, 1991, Bijapurkar and Murthy, 1999, Jain, 2000, Das and Ghosh, 2000, Krishnamurthy, 2000, Ganguly, 2001, Dohbol, 2002, Kashyap, 2003, Bijapurkar, 2003)

Similar to the discussion in the international marketing domain, scholars in rural marketing are also divided in their opinion over the issue of standardization and adaptation of product in rural markets. Baig (1980) believed that products (and marketing programmes in general) from urban markets could be transplanted with little or no modifications to rural markets. He argued that rural and urban are not two separate market segments (i.e. presence of intermarket segment) and marketing of products can be similar. Contesting this approach, few believed that products (and marketing programmes) in rural markets should be different from urban markets as there is a wide disparity between rural and urban markets (i.e. difficulty in locating appropriate intermarket segment) in terms of standard of living, literacy levels (NCAER, 2003, Bijapurkar, 2003), physical and marketing infrastructural facilities (Sarwade, 2002), social and cultural conditions (Sharma, 1998, Doshi and Jain, 1999, Rao, 2000, Jha, 2003).

Method

Review of literature is undertaken to explore the nuances of product adaptation in both international markets and rural markets. Literature review involved journals, books, periodicals, newspapers, company websites and annual reports of various organisations. Literature has been drawn from various domains like rural marketing, sociology, and social psychology to understand the rurality construct.

Within the available literature in the rural marketing domain, discussion on product adaptation construct is inadequate. Hence, a field visit was organized which included unstructured interviews on twenty executives drawn from top and middle management of twenty organisations. These organisations were drawn from various product categories like dairy, detergents, banking, insurance, hair care, and television. Organisations chosen for the study varied in terms of their business operations. The sample reflects a range of executives who either directly or indirectly influence the product related decisions. Executives interviewed were either headquartered in Gujarat or Andhra Pradesh. Each interview took approximately 30 minutes. After a brief description about the project, interviews focused on the rural marketing initiatives of the organisation, and adaptation of products. Questions included both open and closed ended. Typically questions dealt with adaptation of products, external environmental influencers, customer related influencers, organisation related influencers and product related influencers. Questions regarding the process of product adaptation and the possible outcomes expected were asked at the end.

For triangulation, interviews were conducted on retailers drawn from four villages in Anand district of Gujarat which include; Navli, Borsad, Mogar, and Gopalpura. Of these four, Borsad, a semi urban market was satellite centre (or feeder town) for nearby villages. Visit included semi structured interviewing twelve general stores owners (three in each village), three electronic stores owners (two in Borsad and one in Mogar) and four bank branch managers. Two lower level executives from insurance sector were interviewed in their district head office located at Anand. Interviews lasted for about 15 minutes for each outlet or branch.

Results and Discussion

Rural marketers do not strictly adhere to either adapt or standardise the products but offer products to rural markets on the basis of product - market fit with varying levels of adaptation ranging from zero adaptation (i.e. standardised product) to complete adaptation (i.e. New Product). Any variant in between these two extremes of continuum is product adaptation. Some of the characteristics of these three product strategies are given in the Figure 1.

Standardisation of product implies that the urban product is launched in rural markets as it is. There are no modifications introduced because of the assumption that consumer needs and preferences are homogenous and market conditions hardly influence the consumption of the product. Major advantage of this strategy is the economies of scales it brings in the production and marketing thus giving organisations the cost advantage. Pharma and industrial products were found to be following this strategy. The study finds that pharmaceuticals are the least adapted products.

Completely adapted products emerge into market irrespective of the product category, organisation type, structure or size. Marketers of these products expressed that they adapt their products when encountered with a new need or a need to be fulfilled with unique products. Some times, technology also dictates them to launch complete adaptations. The assumption for launching complete adapted products is that needs are either unfulfilled or to be created and there are variations in consumer needs and culture. Executives said that complete adaptation is offered to rural market to also take competition to another turf rather than tackle on the same grounds. In our field visit we identified some such products. For example, Aswini Homeo and Ayurvedic Products Limited identified that consumers in the local markets were looking for a product that does not harm skin with chemicals, artificial odours and has natural and traditional values of herbs. The organisation has come out with a unique alternative to bathing soaps in the form of powder and named it as Subhra bath powder. Except for the core benefit that soap offers to its users, all the other levels of product are adapted. Because of its unique locally available ingredients and ayurvedic herbs, it keeps skin smooth, soft and muscles supple unlike any bathing soap which when used would make skin go dry and crack. General Manager of this organisation stated that

"We make efforts to cater to the unique needs of the local consumers and market products which cater to their latent demands"

Product adaptation involves modifications in the product size, product features (design, quality and additional services), brand name, and packaging (shape, colour, packaging material, labeling in local language) either done exclusively or with a major focus to meet the preferences of rural consumers and rural market conditions. Product categories found to have adaptations in rural markets were soaps, hair care, electronics and electrical, banking and insurance, jeans, watches and condoms. Adaptation of a product comes from the marketers understanding of the differences in the market conditions, consumer needs and preferences, culture, languages and so on. For example, LG's Sampoorna colour television, HCL's personal computer which runs on car battery, Cavinkare's Chick Rs. 0.50 shampoo in sachets, Colgate 10 gms sachet can all be considered as product adaptations.

According to executives, adapted products not only satisfy rural consumers' needs and preferences but also complement the distribution objectives of the organisation by acting as a catalyst in intensifying the reach and penetration of the product. Further they expressed that product adaptation in rural markets has the benefit of the existence of a customer oriented strategy as they attempt to understand the buyer behaviour of the rural consumers at regular intervals. Another advantage that product adaptation offers – as per executives - is the flexibility in the pricing mechanism thus also leading to increase the volume, reach and profitability. As product adaptation is associated with creativity and innovation of the organisation, many executives also felt the pressure of meeting the rural consumers' needs and rural market conditions would result in better products.

However, not all organisations in FMCG, durables and services adapt their products as they would be interested in reaping the benefits of standardization. These organisations identify the commonalities among the rural and urban consumers and imbed them in products. Some products by their very nature are not vulnerable to adaptation. For example, when interacting with a senior executive of AMUL, he expressed that

"…..Milk and Ice cream are same for both rural and urban consumers. There is hardly any difference in their needs and preferences. Hence we do not adapt products for rural consumers alone…."

Within product adaptation, there are two broad types we could observe in rural markets (Figure I). These are; adaptations which are available only in the rural markets (we call these as 'Rural Exclusive' (RE) Product Adaptations) and those which are modified initially for rural markets but are later marketed in urban markets (we call these as 'Rural Focused Urban Inclusive' (RFUI) Product Adaptations). One of the important reasons for companies resorting to Rural Focused Urban Inclusive Adaptations is the realization of market potential in urban areas for such adaptations. For example, some executives responded that rural consumers want products in small quantities or simple designs. Hence, products were adapted in rural markets either by introducing in small quantities, or by modifying features, constituents or branding. Later, organisations have realized that these adapted products have potential in urban markets too. However, inspite of such potential in urban markets, the focus of adaptation still remains in the rural markets. In few cases, adapted products are available in urban markets as a spill over case when routed through urban markets for the reasons like organisations poor distribution network, dependence on wholesalers and so on.

In field visits to rural markets, it has been identified that adaptation of product includes modifications in the product size / quantity, product features, brand name and packaging so as to meet the preferences of rural consumers and market conditions. As given in Table 1, in almost all product types there are product adaptations on more than one dimension. Except for quality as a subdimension, atleast one product type has all the dimensions of the product adaptation. Respondents from the field and rural market visits expressed that they do not differentiate the rural and urban consumers with respect to product or service quality.

In the field visit, it was also observed that the degree of adaptation is not a serious issue unlike in the international marketing. This is because, sometimes a small adaptation like change in the pack size would bring benefits to the organization and also satisfy the rural consumers. However, the degree of product adaptation can loosely be considered as an indication of the extent of differences that organizations perceive between rural and urban markets.

Broadly, organisations considered differences in rural and urban consumer needs and preferences, product nature, cost of adaptation, socio cultural conditions, economic conditions, competition and government as key influencers for their decision to either adapt or standardize the products. Organisations expected to achieve better sales, reach and market share due to product adaptation.

Further Research

The discussion till this point apparently appears that product adaptation construct is more or less similar in both rural and international marketing domain which however is not. Though the essence of the construct is similar in both domains, identification of product adaptations is difficult in rural markets. In the international marketing context, market segments include geographically demarcated regions or countries. As a result, when any organisation launches products in other than its home country, it crosses a well defined and agreed geographical boundary thus making it easy to determine the product adaptation typology and its outcomes. However, in the context of rural marketing, there are no such well defined geographical boundaries between rural and urban markets. Every organisation has its own way of representing what rural is. This poses a serious problem in considering what an adaptation is. This implies that identifying product adaptation is subjected to the identification of how rural markets have been defined by the organisations. Hence, further research should attempt at identifying what are the broad ways of defining rural product needs suggested by several researchers in different domains and attempt at measuring it on the respondents. If measurement can generate some broad clusters, product adaptation can be studied in each cluster so as to identify how it is different in different clusters.

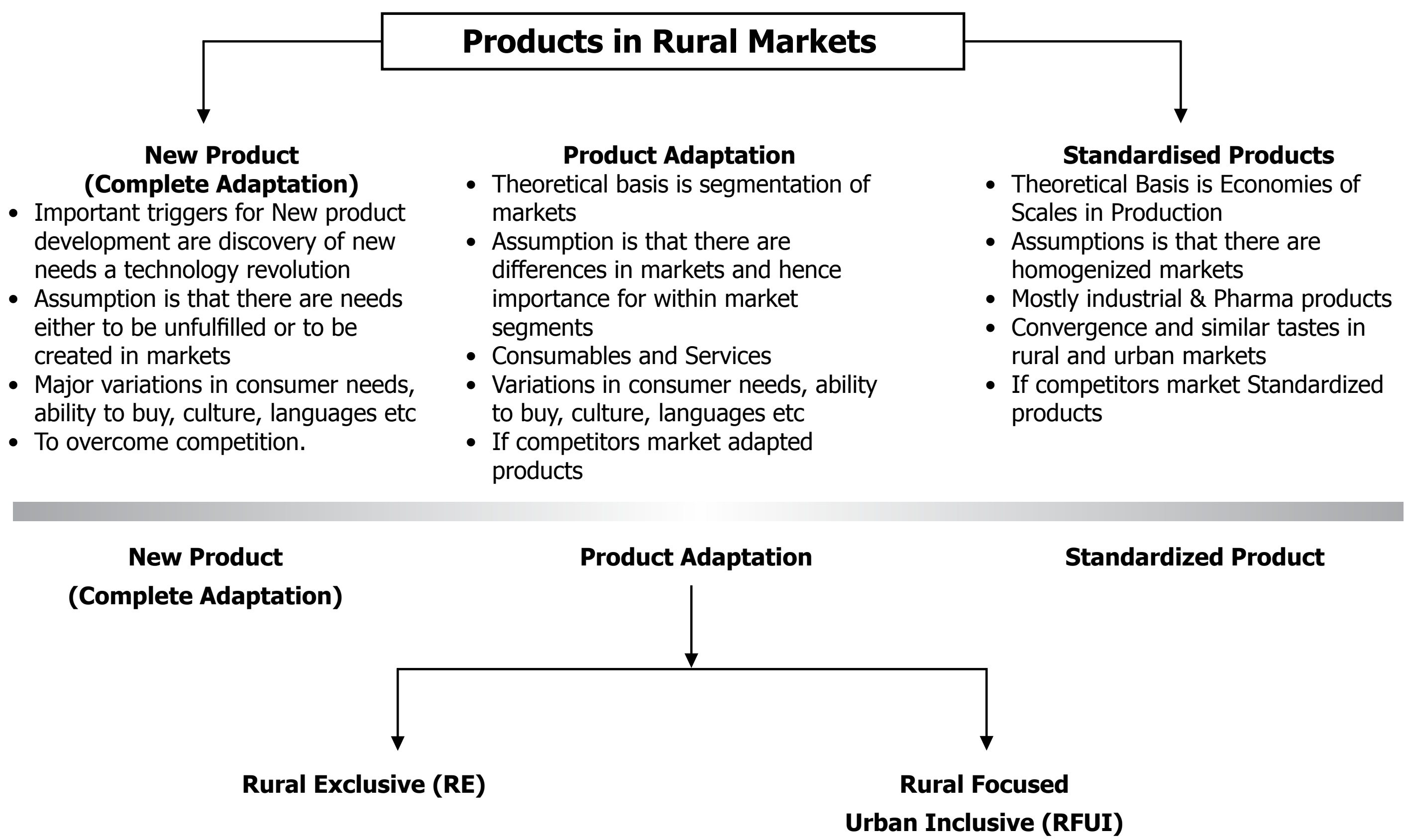

Figure 1: Product Adaptation Continuum

Another item in the further research agenda would be to measure magnitude of product adaptation across various product categories. Though Table 1 gives us some clue as to which dimension is adapted for product categories, further enquiry is needed on the magnitude of product adaptation. In addition, identification of the significant differences among various product categories would be giving more clarity of the construct domain in rural markets.

After having identified various factors that influence the adaptation of product in rural markets, measuring their extent of influence on product adaptation would be useful for academicians and more specifically for practitioners. Marketers would get to know what key factors would influence product adaptation and thus allocate their human and financial resources accordingly. Such idea would be helpful in better achieving the marketing objectives of the organisation.

Given that positivist research agenda has its limitations; qualitative approaches to understand the process of product adaptation would be highly useful. A combination of qualitative and quantitative approach would hopefully generate enough information so as to give the construct a good shape. To sum up the further research agenda, a tentative approach is given in Table 1.

Adaptation Typology	FMCG	Durables	Services
Product Size	Yes in many cases	Yes in many cases	Yes
Product Constituents			
Composition	No	Yes in many cases	Yes in many cases
Quality	No	No	No
Product Features			
No. of Features	Yes in few cases	Yes in many cases	Yes in many cases
Design	Yes, but very few	Yes in many cases	Yes in many cases
Brand Name	Yes but few	Yes in many cases	Yes in many cases
Packaging			
Size / Colour	Yes in few cases	Yes in many cases	NA
Labeling	No	Yes	Yes

Source: Rural market visit and field visit in Andhra Pradesh

Table 1: Product Adaptation in Rural Markets Across Product Types

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Dr. G. Sridhar is an Assistant Professor (Marketing area) at IIM, Kozhikode. He obtained doctorate from Kakatiya University and is a Fellow of Institute of Rural Management, Anand. Sridhar's areas of interest include rural marketing, consumer behavior, product management and sales management.

Sridhar has work experience in industry as well as academics. He has published papers in national and international journals. He has also handled consulting projects and conducted management development programmes.

CASE STUDY

Snack Kings Haldiram and Northern India Strategy

Dr. Vipin Gupta

Dr. Nancy Levenburg

Prof. Pankaj Saran

Keywords: **Haldiram, Snack Foods, Strategy**

Introduction

In 2008, Pankaj Agrawal, CEO of Haldiram-Delhi, contemplated the future of his family business in the snack foods market in India. While small, unorganized companies still dominated India's snack foods market, since 1990s, the organized, branded products market was experiencing strong growth. During the 2000s, in the branded chips segment, U.S. multinational, PepsiCo India Holdings Pvt. Ltd. with its Ruffles/Lays, Cheetos, and Hostess brands, and Haldirams, a major Indian player dominated the market.

Haldiram had become an undisputed leader in the snack foods industry in India, with a turnover estimated at Rs. 3.5 billion and brand valuation at Rs. 15 billion in early 2000s. It was a household name synonymous with authenticity in the namkeen and mithai markets (See Exhibit 1 – A Note on Indian Meals and Snacks), and was known as the "Taste of Tradition." It was said that Haldiram was to namkeen and mithai what Cadbury was to chocolates. The Haldiram brand was ranked among the top hundred of "India's Most Trusted Brands" survey done by A.C. Nielsen.

As Agrawal contemplated the future of Haldiram, he saw three strategic opportunities: (1) expansion of Haldiram-Delhi's product line in India; (2) international expansion of Haldiram-Delhi's lines; and (3) expansion in India's fast food business in which there appeared to be huge opportunities. How should the company leverage its past successes to enable growth? These were the issues he planned to discuss with his father.

Haldiram – Then and Now

Haldiram's story began in 1936, when Gangabisanji Agrawal (alias Haldiram Agrawal) opened a namkeen shop in Bikaner in the State of Rajasthan, in Northern India. The namkeens, salty snacks that were made from chickpeas, pulses (legumes, such as dry beans and lentils), oils, ground nuts, and spices, were prepared in the traditional Northern Indian way known as the Bikaneri style, using techniques that dated back to the 19th century and had been passed down through generations. In 1941, the shop began using the brand name "Haldiram." Using a team of experienced Bikaneri namkeen makers and competing on the basis of superior and uncompromising quality, Haldiram served namkeens directly to customers, as well as through the trade.

Following on the success of namkeens, Haldiram expanded into mithai. Similar to namkeens, it made all the mithais in a traditional manner, with expert cooks using the freshest, purest, and original ingredients each day. Even the spices were ground in special spice grinders to give the original Bikaneri flavor that few others could deliver. With a spirit of hard work and great dedication, which became a hallmark of the subsequent generations of Haldiram, the founder tested each product daily for quality and taste.

Over the years, Haldiram had expanded into the regions of India on the basis of its family tree. Each succeeding generation of the family had taken Haldiram into a new region, and into new cities within a given region. Representing three different lines of the family, the Haldiram Group was comprised of three companies that operated independently but shared the same brand name. First, Haldiram Manufacturing Company Ltd. was based in Delhi (founded in 1983 by the third generation Manohar Lal Agrawal), and catered to the northern Indian market. Haldiram Foods International Ltd.-Nagpur served the western and southern regions, and was founded in 1989 by the third generation Shivkisan Agrawal. Finally, Haldiram Bhujiawala Ltd. was based in Kolkata and focused on the eastern India market. Founded in 1958 by the second generation Rameshwarlal Agrawal, it had a history of bitter relationships with the other two units and operated in total isolation.

Within India, all three Haldiram groups relied on word-of-mouth advertising and spent very little on traditional media. Haldiram's philosophy was to tap the needs of the lowest common denominator using very affordable prices. Each family group offered a similar product line, although claimed to have adapted the taste to the specific domestic region targeted by each group (see Exhibit 2). The three companies also operated under slightly different brand names: Haldiram by the Delhi unit, Haldiram's by the Nagpur unit, and Haldiram Bhujiawala by the Kolkata unit. Though the Delhi and Nagpur companies did consult each other regularly and serviced a total of about 600,000 retail outlets, each company claimed that the quality of its products were distinctly different from those of the other group companies. This strategy had worked well in India since each of the family divisions operated in a clearly demarcated region; and few customers knew that, in reality, Haldiram was three different companies. Consequently, despite a history of family feuds, the brand continued to be reinforced in the minds of the Indian consumers.

Despite their differences, the strategies of all three companies emphasized a core commitment to the snack business, a dedication to quality, and a desire to be a leader the markets it served. All three companies stood by the customer service motto, "You name it - we have it." Each had also developed a strong international presence by extending its products to the Indian emigrant market in different nations, where their markets overlapped in the absence of any territorial agreement. Unfortunately, the common brand used by the independently operating family groups was beginning to create confusion in the minds of international consumers, so by resolution, the three companies had begun seeking differentiation through packaging and logos.

Within India, Haldiram-Delhi was the biggest of the three companies. In 2002, the Delhi unit had an annual turnover of Rs. 1,750 million, as compared to Rs. 750 million sales for the Nagpur unit and Rs. 1,000 million sales of the Kolkata unit. In recent years, Haldiram-Nagpur had been distinctly aggressive in diversifying into related sectors such as processed milk, bakery and ice creams. It planned to introduce a new "Mo'pleez" brand name for the international market, with a slogan "Marching Ahead... For A Global Presence." Within India, the Nagpur unit was expected to launch an exclusive chain of restaurants under varying brand names such as "Abhinandan" (welcome), "Hot Spot," and "Thaath Baat" (pomp and show). It was also working to set up an amusement park.

Haldiram-Delhi: A Look Back

"My father, Manohar Lal Agrawal, single-handedly founded the Delhi unit of Haldiram as an independent firm in 1983, when he had migrated from the family town of Bikaner to start a small shop in Chandni Chowk, the main hub of commercial center in Delhi," explained Pankaj Agrawal, CEO and Managing Director of Haldiram-Delhi. "In 1985, he decided to modernize Haldiram's marketing system with a view to transform traditional Indian foods into international recipes, and to attract foreign buyers. While the brand name quickly became famous in India on the basis of product quality, the growth in the international markets was slow because of the limited shelf life of the product."

"Around 1990," continued Agrawal, "all three family factions of Haldiram independently decided to upgrade their production systems, introducing the most sophisticated production and packaging technologies. This enabled the shelf-life of namkeens to be extended from under a week to almost six months, which not only opened up the international market, but also an opportunity to carve a larger presence in the domestic market. In 1991, Haldiram-Kolkata opened a state-of-the-art manufacturing center, with a showroom above the premises for across-the-counter sales, which proved to be a runaway success. In April 1992, Haldiram-Delhi opened its first manufacturing center and showroom at Mathura Road, New Delhi."

"Prior to then, wholesalers and shopkeepers used to come and buy from the shop… the family didn't have any sales force or any marketing network. But with the new manufacturing center and showroom, Haldiram-Delhi began marketing its products broadly with upgraded packaging. The Haldiram brand name gained wide publicity, and the distribution network and the market rapidly expanded. To leverage these developments, we launched syrups and crushes in 1993, which were an instant success."

Continuing on, Agrawal stated, "In 1996, Haldiram-Delhi started a restaurant at Mathura Road based on the fast food concept. Until then, Haldiram was essentially a sweet shop mix supplier, making namkeens and mithais. The restaurant carried a broader, though selected, range of Indian snacks, like ice creams, samosas, chole bhature (Northern India), pao bhaji (Western India), dosas and idlis (Southern India), and Bengali sweets (Eastern India). The restaurant instantly became a leading Indian snack fast food center in Delhi… it surpassed all our expectations. So another showroom-cum-restaurant was added at Lajpat Nagar, Delhi."

"Then in 1997, Haldiram-Delhi bought land in Gurgaon in the adjoining State of Haryana, which was seen as a suburb of Delhi and where several foreign multinational corporations had shifted their headquarters. The land bought was situated on the fast-growing Delhi-Jaipur national highway. The plan was to shift all the production to Gurgaon, and to build a restaurant and a sweet shop in front of the plant for giving more exposure to the brand name. My charge was the design and construction of the Gurgaon unit. When it became operational in 2001, I also took over as CEO of Haldiram-Delhi."

"At present, the fast food business is growing more than the sweets. Our brand name got even more popular because of this fast food thing. Starting the restaurant at Mathura Road was a turning point for our business, although in terms of revenue, I would say that namkeens are about 70 percent of our total turnover, sweets are about 20 percent, and the fast food segment is about 10 percent."

Haldiram-Delhi: Vision for the Future

By early 2000s, Haldiram-Delhi had evolved from namkeens and salty snacks to a sweet shop, to a branded sweet mix marketer, to a popular fast food chain. Commented Agrawal, "There was no real defined vision for moving into fast food. It was simply that we wanted to serve the best to the customers. That was our only vision." He added, "We didn't focus it like we had to start a fast food restaurant in 1996. It just happened. Our main expertise was – and still is – Indian sweets and namkeens." Agrawal continued, "Nor was there any real vision for deciding how many restaurants to open, or how to grow into a regional fast food chain. From the start, Haldiram-Delhi has concentrated on namkeens and sweets… the rest happened because the opportunity was ripe in time. Now, the time is such that the growth in fast food is more than the growth in sweets."

Fast Food in India

Pankaj Agrawal observed that the Indian fast food industry was "totally unorganized… there are no Indian fast food chains about which we can say that he is our competitor or anything like that. Thus, there is a huge business opportunity to become a leader in the Indian fast food segment. Haldiram is emerging as a multi-cuisine restaurant for the whole family. We want to focus on our own North Indian foods, chats and all. We don't want to start a specialty South Indian restaurant or go into that line. We want to specialize into this mix of North Indian plus South Indian… if a customer specifically wants to have South Indian food, then he or she might go to a South Indian restaurant if he or she finds the quality is not good. If each and every member of the family wants to have different things, then Haldiram's is definitely their choice."

To better serve entire families, the firm was looking into: (1) controlling its costs, and (2) focusing more on customers' demands by studying their needs and wants. "For example," stated Agrawal, "the cook comes early in the morning, and makes the products so that by the time the restaurant is opened for the day, everything is prepared. Once the customers start coming in, we can serve them very quickly. But, there is still room for improving the efficiency of the persons who are making, for instance, chole bhaturas, by using ready-made (frozen) chole. If they use ready-made chole, they can be more focused on frying the bhaturas, and then can possibly be done faster, increasing their efficiency."

"Haldiram is also very focused on serving customers well. In India, traditionally, there has hardly been any management within the restaurant business. And we are not from a restaurant background. We didn't have any restaurant experience… we don't have any professional degree or anything relating to restaurants, or how to manage them. But Haldiram has become a trendsetter for better restaurant management because we have treated customers as part of our family. The customers have taught us how to manage the restaurants… and we have gotten quite fast in serving them. We haven't done any study, but we don't take more than three to four minutes to serve customers after they reach the service counter."

"However," he continued, "there is still a need to better understand what customers want. We used to make fifty to sixty different products, but we learned that the customers were not interested in all of those products. There are some key products for which the customers come to our place… those products are our strengths. We are most well known for namkeens… for them, customers will come from very far-off places. On the other hand, a customer won't come to our place to eat pizza or burgers… they will go to McDonald's or Pizza Hut."

"For us," continued Agrawal, "McDonald's offers an exemplary business model… no other Indian food company is comparable. McDonald's has 30,000 restaurants around the world, and I am impressed with their systems and the way they grow… how they can replicate their systems all over the world. Like McDonald's, we are developing our own internal systems first. Until and unless, we are strong in-house, we don't want to expand. We don't want to give out franchisees, because this is the time when each and every company will give, and we can see that every fast food restaurant is giving out franchisees. McDonald's has 50 restaurants in India, and Narula's has 20 restaurants. Each and every fast food giant has a number of restaurants. We don't want to expand so fast. Also, we are looking for a distinctive format of company-owned and operated franchisees. Like today, we manage each and every outlet personally. Thus, we can learn from it and at the same time, it doesn't affect our brand name also because everything is done in-house."

Snack Foods in India

The total snack foods market in India consisted of more than 1,000 snack items and 300 types of sweets that varied regionally according to preferences in taste, form, texture, aroma, size, and shapes and fillings. The Northern Indian region accounted for approximately fifty percent of the total Indian market, and was the most developed.

While sales in the unorganized sector had been quite flat in recent years, the revenues in the organized sector had been growing at around fifteen percent annually. The organized sector concentrated primarily on the urban markets, while the unorganized sector led in India's large and growing rural markets. The unorganized sector was immensely diverse, and relied on easily accessible indigenous technology, with non-standardized recipes and product quality, few links to testing facilities, unorganized distribution channels, storage deficiencies, and low entry barriers.

According to Jagdeep Kapoor, Managing Director of Samsika Marketing Consultants, three factors were driving the growth in the branded sector: "Branded players are making the right moves in terms of product offering and pricing, ethnic snacks are convenient and appropriate accompaniments for hard and soft beverages, and growth is being spearheaded by teenage consumption." The branded players relied on quality control systems, standardized raw material sourcing, and upgraded packaging, enabling prices to be set at twenty-five percent or more over the non-branded products. Reportedly, the market for branded chips had been growing at approximately twenty percent annually.

In particular, PepsiCo loomed as a large and very formidable competitor, given its resources and interest in the Indian market. Entering the Indian market in 1989, PepsiCo's focus was on the "bridge" snack foods – a hybrid between Western and Indian snack foods with products priced at approximately thirty percent premium over the local competitors. Its snack foods offerings included Ruffles/Lays, Cheetos, and Hostess brands, and Lehar Namkeens (the latter was exclusively sourced from a local player, Bikanervala). Its current President, Chief Financial Officer and a member of PepsiCo's Board of Directors, was India-born Indra Nooyi. Nevertheless, according to Agrawal, "Haldiram does not put Pepsi in the namkeen segment, but instead into the snack segment. If you take only the namkeen segment, we are still the leader. Pepsi is not near us in the country, but as, and when, we diversify from namkeens to other kind of snacks like potato chips or extruded snacks (e.g., Cheetos), Pepsi has more know-how and knowledge about it because they have been into that business for a long period. So, in that area it will be very difficult for us to compete with them in terms of technology, in terms of marketing and everything else."

PepsiCo's snack foods were distributed through its soft drink distribution channel, initially targeting India's fifty largest cities, then extending to 150 cities, and eventually securing distributors in more than 400 cities. Its potatoes were grown using five patented varieties of hybrid seeds by contract farmers in Punjab and other States, including Uttar Pradesh, Madhya Pradesh, Maharashtra, and Karnataka. To reduce the costs and time delays in serving the western and southern India markets from the Northern Indian plant, it also established a plant in Pune.

After acquiring the dominant Uncle Chipps brand in 1998, with annual revenues of Rs. 1,500 million by 2000, PepsiCo held a thirty percent share of the Rs. 5,000 million packaged snack food market, and an approximate ninety percent share of the packaged potato chips market. The overall snack food market in India stood at Rs. 20,000 million, of which seventy-five percent was in the unorganized sector.

PepsiCo's strategy in India focused on attempting to overcome resistance to higher prices by offering a range of package sizes from 35 gram sachets to 400 gram economy packs, which were downsized versus comparable standard packs of its competitors. The 35 gram sachets, priced at Rs. 5 (approximately US$0.11), proved to be quite popular, growing at least three times more than "regular" sizes, and helping to drive market penetration and distribution. PepsiCo also placed an emphasis on attractive retail displays, and making a greater push through more frequent retail outlet visits by its sales agents. Finally, PepsiCo reportedly invested ten percent of its revenues in advertising, seeking to communicate the message that moments shared with its brands made consumers' day-to-day lives special and fun.

In addition to PepsiCo, Haldiram-Delhi's competitors in northern India included Nathu's and Bikanervala (Bikano brand). Nathu's Sweets, founded in 1936 in Delhi, was a manufacturer, retailer, and exporter of sweets, namkeens, and other related products. It was currently managed jointly by the fourth generation husband-and-wife team of Anand and Navita Gupta. Nathu's used mostly modern technology and strived to develop recipes to suit contemporary trends, while continuing the traditional tastes and recipes. Nathu's was known for its innovation and introduction of new products. In recent years, Nathu's had expanded into franchisee-managed restaurants that offered more than 500 items, ranging from traditional Indian snacks to the Westernized food items like pizzas, burgers, and sandwiches.

Bikanervala was a family of Halwais (snack food and sweets makers), which founded a sweet shop in Bikaner, Rajasthan, around 1850s. In 1950, a part of the family migrated to Delhi and set up a roadside "khomcha" (temporary shop) in the Moti Bazar. Bikanervala offered traditional recipes perfected over the generations, exotic ingredients and experience in the art of making ethnic sweets and namkeens. Eventually, the khomcha grew into a regular shop, "Bikaner Namkeen Bhandar," in the Chandni Chowk, and came to be popularly known as "Bikanervala."

Bikanervala formed its exclusive agreement to produce namkeens for PepsiCo's brand Lehar in 1995, opening a new plant in Faridabad, Haryana, to enable high-volume production. The collaboration also gave Bikanervala a significant visibility in the cities, where PepsiCo was gaining strength (in smaller towns and villages, PepsiCo's sales of branded packaged foods were more limited). Upgrading its Delhi plant in 1997 to manufacture its own Bikano brand of products, Bikanervala sought to exploit the changing lifestyle in India that introduced vast potential for the snack foods industry. With an increasingly busy lifestyle, people had little time to spend in the kitchen preparing snacks for guests – it was becoming "much easier to empty biscuits and namkeen packets into plates and serve them immediately."

Bikanervala also engaged in exporting its products to several markets through exclusive overseas distributors, particularly in the Anglo cultures (US, UK, Canada, Australia) and the Middle East, and in 2000, became the first Indian food company to become ISO9002 certified. Bikanervala also opened outlets throughout India, and diversified into the fast growing packaged spices, cookies, and syrups markets. It had also launched its own website to expand its market reach and presence, and formed agreements to supply its branded products to several organizations, including Indian Airlines and the Indian Railways, to further increase the company's visibility. In 2001, it had secured another exclusive supply contract with Mother Dairy (a dairy company), to diversify into the packaged namkeens market with a "Aa Jaa Kha Jaa" (come on, eat up) brand.

In 2001, Bikanervela's turnover had reportedly grown to Rs. 500 million, with Rs. 30 million coming from exports. The company developed a new vision to "put the standardized traditional Indian sweets, namkeens and vegetarian fast food of various Indian regions firmly on the world map." The new goal was to double the sales to Rs. 1 billion by 2004. The CEO and Managing Director S.S. Aggarwal explained the strategy as follows, "We will add to our product mix, improve our marketing strategies and increase our presence in the retail market." Indeed, by 2002, the company had a network of 500 dealers who delivered packaged sweets and namkeens at conventional grocery stores in most North India markets. Its snacking outlets were, however, limited to Delhi and Bikaner, and included six traditional Bikanervala outlets, which exclusively carried its products, and fifteen new Bikano Points, which carried both Bikanervala's own packaged products and branded products from select firms such as Nestlé and Kwality Walls. The company also planned to introduce snacking outlets internationally, and had entered into an agreement with Dubai's leading supermarket chain, Al Maya Lal's Group of companies, to introduce Bikano Points beginning in 2003.

Meanwhile, several more brands existed in other regional markets of India, including Peppy (western India) and Hello (central India). While several large Indian companies, such as Indian Organic Chemicals, Greenfield Process Food, and Premnath Monga Industries had tried to unsuccessfully enter the traditional snack foods market during the 1990s, additional competition came from the unorganized sector, which was particularly prevalent in small towns and villages. In small towns, there were typically dozens of local manufacturers marketing various namkeens and sweets; and in big metros like Delhi, one could find many manufacturers in each and every neighborhood. Agrawal noted, "Quality-wise, they cannot compete with us, but price-wise, especially considering our whole supply chain cost, distribution cost, and retailer margins, it is very difficult to compete with them. As one goes into the interiors (small cities), one finds that the customers want good quality but they cannot afford it. They want something of cheaper price. Out there, we have a limited market share."

Haldiram-Delhi: Striving for Operational Excellence

"From Day One of the Gurgaon unit," Agrawal emphasized, "I watched over everything and put a top priority on overseeing the implementation of all the systems. Systems were one area in which we were not very strong… we had some internal weaknesses that we wanted to overcome. We had the opportunity to make changes in Gurgaon… trying various experiments to get the results we sought. We experimented with new systems in each and every area of management, including purchasing, finance, maintenance, and production. We felt that if the changes were successful in Gurgaon, then we could adapt them in the other, older units at Mathura Road, Lajpat Nagar, and Chandni Chowk where the people had gotten very used to working in a particular fashion.

"We developed everything ourselves. We did not bring in any professional experts or consultants to help in planning new systems because we know our people better than any external agency," asserted Agrawal. "We also realize that we are still developing. Haldiram is not a company that is 100 or 200 years old with all of its systems and everything in place. We are still a very small company - a family owned company and a complete family business. Yet, we are moving towards more professionalism. We are already in process and, step-by-step, everything is going to happen. We are still learning every day, and trying to achieve improvements that we can replicate in the other units, like packaging and the process of manufacturing a product."

"We did it ourselves… we could not hire food technologists because if we did, we would have to disclose our recipes. While it's true that firms such as Coca-Cola use food technologists without disclosing its recipe, Coca-Cola does not disclose its formula to the bottling plants – it simply prepares its pre-mixes at one place, and then dispatches them to distributors all over the world. Moreover, I wanted to learn everything on my own. I wanted to see each and every product… how it was manufactured and how it tasted. So, this was the best way for me to learn. If I hired a professional, then he would be doing everything on his own and it wouldn't increase my knowledge. So, that is the reason… I want to get involved in each and everything."

Haldiram-Delhi's Three Strategic Issues

"I discuss everything with my father because he still has more practical knowledge than I do. He has been in this business for more than forty years. So before implementing anything, I first discuss it with him."

In 2008, Agrawal felt there were three important issues that needed to be resolved:

(1) Expansion of Haldiram-Delhi's product line in India.

A number of national and foreign firms (e.g., PepsiCo) appeared to be eyeing the market opportunities created by Haldiram. After all, Haldiram had been the first to brand its namkeens and mithais in India, and the first to introduce packaging and presentation of ready-to-eat snacks. Its success had been driven by branding and marketing traditional products with which Indian consumers were already familiar. But, in order to retain its market share in India, should the firm expand its product line? If so, should it focus on traditional Indian foods (e.g., samosas) or Western-style foods (e.g., potato chips, which appeared to be experiencing strong growth particularly within the teenage market and younger consumers)? And, if the latter, how should Haldiram compete with the larger and more financially-endowed and professionally-managed PepsiCo?

"We also have a need to succeed using just average people," stated Agrawal. "That way, the competitors would not be able to use their financial muscle to take the initiative out of Haldiram. Why would, for instance, Pepsi, need our people when they have their own highly qualified people? Our people are not as well qualified as their people are."

(2) International expansion of Haldiram-Delhi.

Haldiram had created a popular snacks brand that transcended the regional and national boundaries, in an industry that was only gradually beginning to become global at the international level. While Haldiram was primarily known for its Northern Indian snack items, Agrawal knew that, internationally, a substantial proportion of Indian emigrants were from Southern India. Consequently, he wondered, should Haldiram diversify into Southern Indian snack items, and market them internationally? If so, how should this be done given the three family factions of Haldiram, and the confusion on the part of customers that was already beginning to emerge in the international markets?

Agrawal felt that if it were to expand internationally, it would need to improve its packaging and distribution systems.

"Consider the characteristics of a product like Rajkachori which requires ten different kind of inputs, including yogurt and three different kinds of spices. Many of the inputs and the final product don't have a long shelf life. On the other hand, foreign fast food products are becoming available in India very rapidly… many Western companies simply package burgers or pizzas, freeze it, and send it across. We could go to the international market with frozen products because the cold chains exist."

(3) Expansion in the fast food business.

According to Agrawal, "We have been quite successful in the fast food business, although it has been hard work. But I am encouraged by what we have achieved. And there is a huge business opportunity to become a leader in the Indian fast food segment. But… how would we do this? If you are going to franchise, then you have to limit your variety. You cannot give each and every product. So, we would be focusing only on our core products and our main products like Indian chat, papri chat, golgappas, and Indian snacks like chole bhature, pao bhaji, and tikkis, and give out franchises for that along with the sweets. We would want to promote both of these products together in a branded format like Haldiram's."

"Second," he continued, "we would not want to go far from Delhi so that we could have a good control and face the initial problems more effectively. Because this is such a new area for us, so we have to start in Delhi to see how it goes… the customers' reactions, the turnover in franchisees, profits, and so on. If everything is in place and we succeed, then there is huge opportunity to target and expand into other areas in the Northern region… we can go to sub-metros like Chandigarh, Gurgaon and Noida."

"One thing is clear, though," reflected Agrawal, "apart from food, there is no business that we can or we are looking for. It is only related to food. That's the main expertise. If we go into manufacturing of anything, like televisions, there is no point doing that. We are also not going into any areas that have huge competition. We would not make any money there. So, what's the use? It is better to develop your own line and make money in that… expand your brand name."

Exhibit 1

A Note on Indian Meals and Snacks. Gadia, M (2000)

New Indian Home Cooking. NY: The Berkley Publishing Group.

Lunch is usually eaten around 1:00 p.m.and it is typically the main meal of the day. After that is siesta time. If the situation permits, Indians never miss an afternoon nap. Around 5:00 p.m. is teatime. Children are served milk or sherbet (sugared, flavored beverage) while adults drink tea and eat fried spicy snacks. India is the home of a variety of salty and spicy hot snacks that have no equivalents in other cultures. This is often the time friends visit to share snacks and gossip or to discuss the news of the day. The more important or rare the friend, the greater the number of snacks served. Indians take pride in serving a number of dishes at meals or teatime.

Even after more than twenty years in the United States, I really miss a good snack when I go shopping. I will often say, "I wish there were someone selling samosa and chai." You can find coffee and even chai now but all the snacks served with it [in the US] are typically sweet. In India, snacks are abundant. Chat, samose, dahi bade, and pakore are commonly sold on the street. The best part of going shopping is to stop and have a plate of chat on the way back home. As I am writing this, my mouth is watering as I am thinking of the hot and spicy taste of samosas with tangy hot chutney sold at the corner shop. You don't have snack to fill your stomach but to make your mouth and taste buds come alive. I never remember it ruining my dinner. The street foods of India are unique. With pani puri in the north, bhel in Mumbai and bhaji in the south, the street foods are part of the Indian culinary world.

Exhibit 2

Haldiram Mission Statements

Haldiram Delhi (www.haldiram.com): "Our perpetual consistent quality, best packing strategy, vast market coverage and the number of years of experience have given us a cutting edge vis-à-vis our competitors. Our natural ilk to improve our performance and quality with each passing year has taken us way ahead of our nearest competitor. The people at Haldiram's are very sensitive and customer friendly about the complaints, which in fact is a rare occurrence from the customers and dealers."

Haldidram Nagpur (www.haldiramrams.com): "Haldiram's products inherit the matchless quality. Zero impurity and world class packaging are the hallmarks of each and every Haldiram's Product. To top it up the trump card of reasonable prices and efficient marketing strategy is the key to success. Haldiram is quality conscious; it has always advocated the principle of superior input superior output. We believe in treating customers with trust, dignity, and respect. We believe in fair business practices and in doing our part to save the environment."

Haldiram Kolkota (www.haldiramfood.com): "The quality of salty snacks, sumptuous sweets, made to traditional standards, endeavored stress on quality, packing, shelf life, competitive price and with special emphasis on consumer's satisfaction….To say the least, the lingering taste of Haldiram is among the best in the world of Indian sweets and namkeens."

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- In the early 1990s, Delhi-based company Amrit Banaspati was the market leader in the packaged potato chips market with its Uncle Chipps brand and approximately fifty percent market share.
- Indian Rupee is approximately equal to 0.023 US Dollars.

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Prof. Pankaj Saran is Faculty at EMPI Business School. He is a graduate from Delhi University and has extensive industry experience with academic interests in the area of strategy.

Dr. Nancy Levenburg is an Assistant Professor of Marketing in Seidman College of Business, Grand Valley State University, MI, USA where she teaches Marketing Research and Internet Marketing. She is a doctorate from Union Graduate School and an MBA from Western Michigan University. Her research interests include Internet Use among Small Businesses, Marketing Strategies and Technological Change, Online Teaching and Learning. She is an active member of the American Marketing Association.

Dr. Vipin Gupta is Associate Professor and Roslyn Solomon Jaffe Chair in Strategy at the Simmons School of Management and Faculty Director of SOM International Outreach programme. He has a doctoral degree from the Wharton School of Business, Pennsylvania, a post doctoral fellowship from Tokyo University and a Post Graduate Diploma in Business Management from the Indian Institute of Management, Ahmedabad. Under his stewardship, Dhruva conducted Global Leadership and Organisational Behaviour Effectiveness (GLOBE) - a Wharton School's path breaking research simultaneously carried out in 72 countries.

Dear Editor

I was horrified as an Englishman and a human being when I learned on the Internet that Queen Elizabeth is planning to visit Amritsar, the site of the infamous massacre by British troops of over 300 unarmed civilians in 1919, without uttering even one word of apology.

Mr. Gore-Booth, Britain's envoy in New Delhi, is quoted by Associated Press as saying: "The Queen is not going to apologize, but she is going to lay a wreath. Those of you who recognize the subtle distinction will see it as a very special gesture." (Oct. 7,1997).

These cold, patronizing words show that while the British Empire is mercifully dead, the attitude that led to it is very much alive.

I have learned from the great American educator and poet Eli Siegel, founder of the philosophy Aesthetic Realism, that the greatest enemy of man, the cause of all cruelty and of war, is contempt, the "disposition in every person to think he will be for himself by making less of the outside world."

My own desire to feel superior, to have contempt, is the reason why while I attended Oxford University I shamefully agreed with the accepted view in England of the British Empire, that we had brought needed civilization to lesser peoples, and were in fact doing them a kindness. The truth is the British Empire was based on contempt, on the ugly, wrong, completely unscientific idea that other people, looking different, speaking different languages, did not exist to be known, as having meaning, hopes and fears as real as any Englishman, but were inferior beings who existed instead to be used for Britain's own power, glory, and wealth; and this centuries-old government policy caused horrors, including in Amritsar.

I think it was barbaric, and I am grateful to be learning now as a history teacher at Norman Thomas High School in New York City about the rich history and culture of the people of India, and to know that my purpose is to see meaning and use them to have more respect for the world itself. I want to apologize, as a representative Englishman, to the people of Amritsar for what my country did to them.

For there to be goodwill between people and between nations, this kind, urgent question by Eli Siegel needs to be asked and honestly answered: "What does a person deserve by being a person?"

Thinking about this question, British representatives would never go to India, let alone Amritsar, without beginning their visit with a sincere expression of regret.

- **Christopher Balchin**

BOOK REVIEW

THE TEN FACES OF INNOVATION

STRATEGIES FOR HEIGHTENING CREATIVITY - Tom Kelley with Jonathan Littman

Reviewers: Prof. M. Showry & Prof. Vara Prasad

Keywords: **Creativity, Innovation, Learning Personas, Organising Persona, Building Persona, Ten Faces of Innovation**

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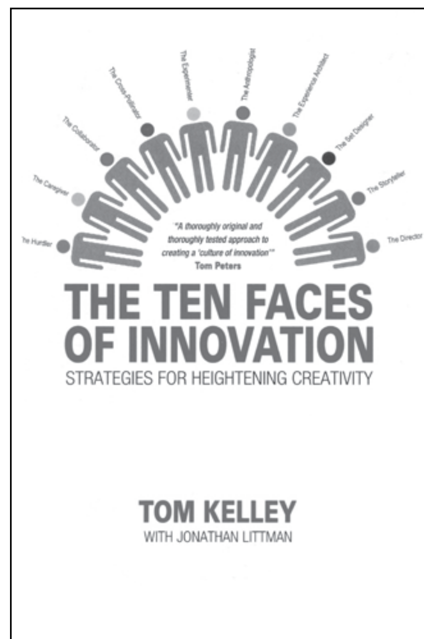

Building an environment that fosters a culture of innovation is a key to long term growth and brand image of organizations. Organizations that would like to succeed in today's dynamic and competitive environment need to recognize innovation as a pivotal management tool in all aspects of the business. This book will be an indispensable treasure for all those who want to infuse an enterprise with the dazzling spirit of creative evolution. The authors enumerate ten keys of innovation with spectacular examples and derive profound insights from organizations like Kraft, Samsung, and Procter & Gamble that can be adopted by anyone to foster creativity in the organization.

The authors initiate the discussion by highlighting the negative persona known as Devil's Advocate. They always see the downside or darker side and view any new initiative with disdain and disbelief. Thousands of great new ideas, concepts and plans may have died premature death due to such Devil's Advocates. The authors of this book describe the roles that people can play, the hats they can wear, and the personas they can adopt to nurture and sustain a culture of continuous innovation than stifle it by the attitude of Devil's Advocate.

Many realized that Innovation indeed is the stroke of success and growth of many 21st Century business organizations known for long term survival and distinct brand image. Innovation is the incredible ability to respond to demands of change, be it in consumer electronics, health care services, retailing, transportation and financial services. Innovation doesn't mean only new ideas; but actions or implementation that result in improvement, a gain or profit. Innovation in organizations takes place through imagination, willpower, and perseverance of people either individually or in teams. The authors in ten chapters highlight ten essential approaches to bring the human elements of innovation from the lab to the living room of an enterprise.

In the introductory chapter, the authors trace the success stories of many innovation initiatives across divergent industries and offer insights to unleash innovation. Ten Faces of Innovation are placed under three heads, namely learning, organizing and building personas. Adopting one or more of these roles, authors say, can help individuals or teams to make a difference and create a broader range of innovative solutions.

The Learning Personas

The drive to learn and continuously expand the knowledge can put individuals in the driver's seat in today's volatile and ever-changing business environment. Complacency is an unaffordable luxury and everyone should ever remain open to new insights and be humble enough to question one's own worldview. The personas that come under this perspective are The Anthropologist, The Experimenter and The Cross-Pollinator.

The *Anthropologist*: Through observation develops a deep understanding of how people interact physically and emotionally with products, services, and spaces thus bringing new insights and learning into the organization. People who play this role typically have an open mind and are dexterous at reframing the problems in a new way to arrive at a breakthrough solution based on insights gained on the field. They usually find their jobs intrinsically rewarding and love what they do. They are not in the habit of judging people rather they learn by watching and talking to them. Anthropologists draw inferences based on their own instincts to understand about the emotional underpinnings of observed human behavior. They have the ability to see what has always been there but has evaded others' attention. From time to time they keep a bug list or idea wallets. A bug list focuses on the negative things whereas idea wallets contain both innovative concepts worth emulating and problems that require solution. They consider everyday experiences pleasant or not to be a good potential material for learning

The *Experimenter:* One of the most classical tasks of an innovator is experimentation. Experimenters need not be genius but have a burning passion for hard work, a curious mind and openness to serendipity. They try different ideas and are ready to admit little failures at the early stages to avoid disasters later on. They are flexible to work with teams of all shapes and sizes. Experimenting typically means prototyping and it is essential to put flesh and bones on many new ideas. Experimenters are swift in converting a concept into a sketch, to a model and finally to a successful new offering. They keep the organization updated and are willing to take calculated risks. Experimentation is one of the best ways to stay ahead in today's competition.

The *Cross-Pollinator*: Creates something new and better through exploration of a clever solution in one context and translates or adapts it successfully to another. For example manual typewriters were created based on transplanted idea of a piano keyboard from the context of a music world. In the corporate world, we find people usually sporting multiple interests that provide them necessary experience to take an idea from one business and apply it in a fresh context. Consumer products giant P&G gained a lot by deliberately staging cross-pollination ideas. The authors identified seven key elements that encourage the flowering of cross-pollination. Cross-pollinators possess childlike ability to spot key differences as well as hone the adult skill of applying those subtle differences in new contexts. They look at problems from a completely different perspective that often sparks innovative hybrids. The author's name Cross-pollinators as T-shaped individuals who possess a breadth of knowledge in many fields, but they also have depth in at least one area of expertise.

The Organizing Personas

The three personas that come under this category are the Hurdler, the Collaborator and the Director who describe the organizing roles played by individuals. People who adopt these roles don't dismiss the process of budget and resource allocation as "politics" or "red tape," instead they consider it as a complex game of chess, that they play to win.

Hurdlers: Know the roadblocks to innovation and develop required abilities to steer clear of such blocks. They maintain a grin determination amid the gloom of adversity. Hurdlers always feel that there is no need to tackle a challenge head-on if one can find a way to sidestep it. They take the risks, if necessary break rules and know how to work intelligently outside the system. Hurdlers respond to challenges in the same way as great athletes respond to tough competition. Obstacles or constraints are like a tight deadline and a small budget would be a wonderful source of inspiration for Hurdlers to turn lemons into lemonade. Hurdlers never consider setbacks as problems - instead, they perceive it as an opportunity. Finding the silver line in every cloud is a part of their role. Hurdlers play a significant role in changing an organization's view of innovation. They are open to new ideas and have wide latitude to pursue unusual ideas or projects. For example, the automaker Toyota was able to convert the early problem of quality into a brand building opportunity after launching its new Lexus brand in the United States. They contacted every Lexus owner and informed that the car might have an issue. Subsequently, to ease the situation, the company sent the technicians to owner's homes and offices to identify the problems and undertake repair on the spot, if necessary. The idea of making calls, informing them about the problem that the car might have and the inspection undertaken by the technicians turned into a long term strategy to satisfy the customers that resulted in brand building. The authors suggest that every organization has to nurture and cherish the Hurdlers.

Collaborator: The authors regard Edison as a master collaborator who led a talented team that churned out a wide-range series of inventions and innovations. Collaborators are proactive and lead from the middle to create new combinations and multidisciplinary solutions by using their diplomatic skills. The authors highlight how IDEO itself was formed through an unusual collaboration to achieve its dream. The company engineered a three-way collaboration that paved the way to work on more than sixty projects. The ability and eagerness to collaborate with an increasingly broad mix of organizations made IDEO to deliver better service for its clients. Collaborators speak the team's language and value project accomplishments beyond individual achievements. According to the authors collaboration is an approach that can dissolve traditional barriers between various departments of an enterprise in order to create cross-functional teams resulting in breakthrough innovation.

Director: According to the authors orchestrating a company's innovation effort is critical to the long-term health of an enterprise. It requires a person to be appointed as a Director of Innovation. The director's job is not just confined to gathering together the talented cast and crew but also to spark creative talent among them. One of the authors learned a lot about the role of a director from watching his brother David in action for 22 years at IDEO - a world famous design firm. His brother was adept at allowing people to take intelligent chances and gave them the opportunity to recover from their failures. He inspired a number of IDEOers to renew the processes of innovation by centering their efforts on market-focused practices. Five most critical traits of a director's job involves spawning a creative culture, hatching the ideas, developing chemistry in teams, targeting strategic opportunities and generating an innovation movement. It is the skill of a director to build a team of people who require little direction and can lead by example themselves.

The Building Personas

The four personas that make innovation happen under this category are the Experience Architect, the Set Designer, the Caregiver and the Storyteller. People in these roles are highly visible, have a right approach to action and stamp their mark in the organization.

Experience Architects: Focus relentlessly on creating a successful customer experience that goes beyond mere functionality. They view the world as a stage and play the role of a host who never forgets to deliver something special to customers. A good Experience Architect always strives to discard the status quo and introduces something new that adds value to the organization. Experience Architects look for an opportunity to turn the ordinary into something distinctive that provides a delightful experience to customers, resulting in extraordinary returns for the organization. Changing a single ingredient in a product or service can sometimes make a big difference in customer experience. The authors mention the example of a company that created a delightful experience for its customers by changing an ingredient in its product. Experience Architects focus their attention on one or two essential elements of a product or service known as trigger points that are truly important for a customer. Creating a great experience for customers around those trigger points can realize returns for the organization. It enables the organization to surpass the competition and outperform the market.

The role of a *Set Designer* in the organization is to create a stage that stimulates employees to do their best at work. A carefully crafted workspace would nourish and sustain a creative culture that contributes to the overall performance. Space plays a very important role for the organizations that depend on free thinking and idea-sprouting individuals. Set designers create collaborative spaces that help people to move and migrate, form into new groups while executing the projects. For example, P&G created a space called The Gym, a 10,000 square foot innovation center where teams can collaborate and ideate not just about new products and services but also adopt the process of innovation that keeps it ahead of the curve. Organizations like Pixar and eBay realized that highly collaborative environments are central to the happiness and creativity of their talented staff. Organizations that adopt the role of a Set Designer can create their workspace and office as one of the most powerful tools to spark continuous innovation for a remarkable performance improvement.

The *Caregiver* builds on the metaphor of dedicated doctors and nurses to deliver customer care in a manner that goes beyond normal service. Good Caregivers take extra pain to understand the needs of each individual customer and are very good at guiding his choices. Based on the examples narrated pertaining to this persona, the authors suggest that every organization must continuously and powerfully reinforce the culture that epitomizes a Caregiver.

The *Storyteller* brings a team together through persuasive and interesting narratives that communicate fundamental human values or reinforce a specific cultural trait. Organizations like Dell and Starbucks have lots of corporate legends that support their brands and build camaraderie within their teams. According to Stephen Denning, business stories have focused purposes like sparking action, transmitting values, fostering collaboration or leading people into the future.

The innovation roles described in the book give us an opportunity to broaden our creative range, with the flexibility to pick the right role for the right challenge. The message of the book is that the ten innovation elements spark a fresh discourse among the team members to make their own unique contributions to the success of the enterprise. This book is aimed at all those in the corporate world who would like to drive creativity throughout the organization and build their own unique culture of innovation.

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Prof. M. Showry is a faculty member at Icfai School of HRD. Prior to Icfai, Showry has worked with Loyola Educational Society, APEX and Dhruva College of Management. His areas of interest are HRM and Statistics. He has published about 10 papers in reputed journals.

Prof. Vara Prasad is a faculty member at Icfai School of HRD. He has twelve years of experience both teaching and consulting combined. He has published more than 15 papers and articles in reputed management journals. Earlier he had worked with ICBM and Magnus B-Schools. He is currently pursuing Ph.D in the area of HRM at Kakatiya University.

Dear Lord

I am 80 and
there's much I haven't done
I hope, dear Lord you'll
let me live until I'm 81
But if I haven't finished all
I want to do.
Would you please let me stay
a while, until I'm 82?
So many places I want to go
so much I want to see --------
Do you think you could manage
to make it 83?
Many things I may have done,
but there is so much left in store,
I'd like it very much to live to 84.
And if by then, I'm still alive,
Then I'd like to stay to 85.
The world is changing very fast,
so I'd really like to stick
And see what happened to the
world
when I am 86.
I know dear Lord, it's a lot to ask
and it will be nice in heaven,
But I would really like to stay
around
until I am 87.
I know by then I won't be fast,
and sometimes, I'll be late,
But it would be oh-so-pleasant
to be around at 88.
I will have seen so many things
and had a wonderful time,
So, I'm sure that I'll be willing to
leave at 89.
(well, may be)

- **Sheila Chopra**

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Prof. Baseema Banoo Krkoska is a Sage Fellow from Cornell University, USA. She earned a Master's Degree in Communication from Cornell University in 2002. She was a topper and the gold medalist in MBA from Osmania University.

Baseema was associated with Dhruva College of Management before relocating in the USA. With interests in the field of Library Science she decided to pursue a career in the field of Library Science and joined the Mann Library in 2007. She is a member of the American Libraries Association, a division member of the Association of College & Research Libraries, Reference and User Services Association (RUSA) and a committee member for Business Reference and Services Section.

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