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The Journal of Amity Business School, Manesar, Gurgaon

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From the desk of Editor-in-Chief

'Strategic Management' has become a buzzword today and its humming sound is, therefore, audible in the corridors of all the significant units of the corporate sector. While strategy formulation and its implementation is getting popular in almost every functional area of management, it is attracting more attention in the realms of human resource management because human resource is the only active factor of production making the other factors of production active, which are, by and large, passive in nature.

It is perhaps because of the special status that the human resources enjoy among all the factors of production that, of late, human resource practitioners and management scholars have started advocating that human resources should be viewed from an investment perspective and, therefore, employees should be viewed as valuable investments – instead of viewing them as variable cost of production. They have started differing from those strategists who show a great concern for potential capital costs and display casual indifference towards potential human resource costs – an approach which can only be termed as a short sighted one.

It is now obvious that in order to seek an advantage over their competitors, organizations will have to recognize the importance of having superior human resources and it is here that the need arises for the formulation and implementation of human resource strategies. Human resource strategists now call for heavy investment in their human resources by the organizations so as to have a highly skilled and knowledgeable workforce which can withstand any onslaught from their competitors. Now there is a recognition of the fact that the overall strategy of an organization is not likely to accomplish its objectives unless it has an appropriate human resource strategy as well. For example, an organization pursuing strategies of innovation cannot be successful unless it has an appropriate human resource strategy to retain its experts in the key areas and contain its turnover rate within limits. Similarly, an organization pursuing strategies for cutting its cost of production cannot achieve the desired results unless it has appropriate human resource strategy in the areas of training and development.

In view of above, it is imperative for any organization functioning in a highly competitive environment, to pay adequate attention to the factors relevant to strategy based human resource investment decisions. Such an organization will have to form and implement human resource strategies in almost all the areas of human resource management.

S Randall Schuler has rightly observed that strategic human resource management is largely about integration and adoption. Its concern is to ensure that HR management is fully integrated with the strategy and the strategic needs of the firm and further that HR practices are adjusted, accepted, and used by line managers and employees as part of their everyday work. Taking this into consideration, every ambitious organization should formulate and implement human resource strategy not only for procurement, training and development but also for compensation, integration and maintenance of its workforce and, by making it an integral part of the overall strategy of the organization, contribute towards the accomplishment of strategic goals of the organization.

On the above lines, I request all the stakeholders in our journal to make their significant contributions whether by contributing good articles or making valuable suggestions.

Prof (Dr) R C Sharma
Editor-in-Chief
Amity Management Analyst

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What makes them click?—An analysis of successful network applications

Anurag D*

Networking technology and networked applications are quickly becoming part of everyday life. There is a lot of innovation happening in both business and consumer application spaces. Many times, the same technology is adopted by businesses and consumers for very different reasons.

In this article, an attempt has been made to look at some of the new Internet Applications and what promises they hold for businesses as well as consumers. It also looks at what makes these applications successful. Finally, it explores some key players who are at the forefront of these emerging technologies.

The Network is everywhere

You are having a typical work day and come across something that requires approval from your company's finance department. You annotate the file with your comments and place it in the out bin on your desk. The inter-office mail carrier picks up the file a few hours later and delivers it to the finance department. There, it sits for a week since the person in charge is out of town on a business trip. You wonder why it is taking so long. But this is not the first time. This is how business is done in your company. Simple things can often take days or weeks to resolve. So, you carry on and life is good.

This isn't a scene from an old, black and white movie. This is how most business was done (and is still done) in many parts of the world less than a decade ago. This is life before email. Email changed business in such a profound way that one wonders how anything was done without it. Worker productivity increased several times and we entered the era of compressed time frames known as "Internet Time". Worker productivity directly translates into bottom line gains for businesses. The idea of doing more with less has always been attractive. So, it is no surprise that businesses are always on the lookout for new technology that can further improve the utilization of their most valuable resource – human capital.

People find innovative ways to use work related technology for non-work related purposes. So, it is only natural that email becomes the most important network application in consumer space as well.

However, the motivation for using this technology is vastly different in the consumer space. It's not about productivity; it's about connecting with other people. Networking technology and networked applications have become part of our lives in more ways than we realize. From email to ATM machines, from online tax preparation to sharing pictures with family and friends, the network is everywhere. The technology is evolving rapidly and newer applications are being deployed everyday. So, what makes some of these network technologies and applications successful while others fade away? Let us try to identify patterns by analyzing some applications that are quickly becoming second nature for businesses and consumers alike.

Voice over IP

Voice over IP (or Internet Telephony) has been around for some time. However, the technology is now mature enough that it is poised for a real break through. IP Telephony is going mainstream and is no longer considered a science experiment. According to IDC, by 2006, 50% of all voice traffic minutes will be carried over IP. Let's take a look at how VoIP is being adopted in enterprise and consumer markets.

Enterprise VoIP

Initially, cost savings were the primary motivation for businesses to adopt VoIP. The cost savings could be realized at two levels. Since VoIP technology allows voice to travel over the same IP network as data, the initial infrastructure costs are less than the

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traditionally separate voice and data networks. Secondly, ongoing operational costs are less because the same IT group can manage both data and voice.

Another area of cost saving is toll bypass. Most businesses that have physical presence in more than one location already have data networks connecting their offices. The ability to carry inter-office voice traffic over this same network allows them to save on long distance phone charges.

However, VoIP adoption these days is driven as much by productivity gains as by cost savings. VoIP allows telephony and data-oriented tasks to be combined into a communication system thereby making business processes more efficient. For example, emails and voicemails can be treated identically by all systems and users can get to their messages from a multitude of devices. Such applications dramatically improve worker productivity and businesses see VoIP as a platform that future applications will build upon.

The market for VoIP is quite fragmented at this point. The key players include traditional network equipment vendors as well as traditional TDM/PBX vendors like Nortel, Avaya, Siemens and Alcatel. According to Synergy Research [1], the top Worldwide IP Phone vendor rankings are as follows:

Rank	Vendor
1	Cisco
2	Avaya
3	Nortel
4	Alcatel
5	Mitel

Table 1: Q4 2005 Worldwide IP Phone Vendor Rankings

No single VoIP vendor has more than 20% market share. Many analysts predict that the industry is about to go through a consolidation phase. In fact, this appears to have started already with Alcatel recently acquiring Lucent. In the long run, more than anything else, the winners will probably be decided by their ability to deliver applications and productivity gains.

Consumer VoIP

Consumer VoIP adoption is primarily driven by toll bypass cost savings. The ability to make long phone calls is pretty lucrative. There are a number of vendors competing in this space. Early entrants were upstarts like Vonage who started offering an alternative to traditional home telephone service from providers like AT&T. Vonage took advantage of the fact that more and more households had high speed internet access. This set the stage for carrying voice traffic cheaply over the internet connection. Vonage has been very successful due to its "first mover" advantage. However, broadband service providers are quickly catching up by offering their own VoIP service. Their competitive advantage over Vonage is their ability to bundle the voice service with data that consumers are already paying for.

Another type of providers target consumers who make expensive international toll calls. Most of these services use VoIP behind the scenes. Consumers typically call a toll free number from a traditional home phone and the service creates a VoIP channel over the internet to the destination behind the scenes. In the early days of such service, the audio quality was quite poor due to the inherent delays on public internet. Many providers have since built dedicated data connections and have improved voice quality considerably. One example of such service providers is Reliance Infocom Ltd that has quickly captured a large pie of USA-India voice traffic with its Reliance India Call service.

Traditional internet portal providers like Microsoft, AOL, Yahoo and Google were next to enter this space. These vendors had very successful instant messaging clients and it was a natural step for them to add voice capabilities. However, their offering was quite different from Vonage. They were more focused on enabling voice "chat" – much like instant messaging sessions. Users would use their computers to call their "buddies" who were online and sitting in front of their computers. This model was attractive to only a small niche of consumers due to its poor usability. These vendors have since added the ability to call traditional phones from the computers and are beginning to get more users. Another upstart worth mentioning is Skype. Skype launched their service with the ability to make calls to traditional

phones (SkypeOut) as well receive calls from traditional phones (SkypeIn). Skype was also a breeze to setup and worked with almost all types of home networks out of the box. The ease of use pushed Skype to the front of the pack for computer-to-phone VoIP providers. Skype's popularity was a big factor in eBay's decision to acquire the company in 2005.

The consumer VoIP market is quite fragmented at this point. However, according to a study by Sandvine Inc. [2], broadband service providers seem to be gaining an edge in North America.

VoIP Service	Share of VoIP minutes
Service provider-branded	53%
Vonage	21.7%
Skype	14.4%
Others	10.9%

Table 2: VoIP minutes on broadband networks (North America).

Europe indicates a similar trend. Skype has a much better showing in Europe but that appears to be at the expense of Vonage instead of the service providers.

VoIP Service	Share of VoIP minutes
Service provider-branded	51.2%
Vonage	<1%
Skype	45%
Others	3.5%

Table 3: VoIP minutes on broadband networks (Europe).

As prices continue to move downwards, quality and reliability of service will become important for consumers. Ease of use will also be a factor. Everyone knows how a telephone works. If you have to teach your customers a new way to make phone calls then you will certainly be at a disadvantage. Looking ahead, consumers are likely to choose VoIP services that are cheap, reliable and easy to use.

Collaboration

Networks, by definition, connect entities with each other. So, it is no wonder that a wide array of network applications that make collaborating with others easier are in existence today. This domain includes everything from instant messaging to web conferencing and data sharing. Let's take a look at how collaboration applications are being used in business and consumer areas.

Enterprise Collaboration

A mature area of collaboration in the enterprise space has been voice conferencing. With the advent of VoIP, conferencing is also moving to IP based conferencing. The VoIP vendors certainly have an advantage here and most of them sell conferencing products in addition to IP PBX products.

Application sharing and virtual whiteboards have emerged as another essential collaboration tool. This field is dominated by first movers like WebEx. However, the voice conferencing vendors have also added these features into their products and are web conferencing suites that can either be deployed at the customer's premises or hosted remotely by the vendor.

Instant Messaging application became popular in the consumer space first and then moved on to businesses. IM is now considered an essential part of doing business with you colleagues, partners and customers alike. Business usage places some additional requirements on IM applications. For example, encrypting the conversations becomes important in the business context. Similarly, the need to store conversations for later reference is a key requirement. The adoption of instant messaging in the workplace continues to grow as vendors add on these new capabilities. According to a recent IDC group study [3], more than 28 million business users worldwide used enterprise instant messaging products to send nearly 1 billion messages each day in 2005.

Instant Messaging applications introduced the important concept of availability. This feature lets you communicate your status to other and helps them make decisions to reach you based on that. This concept is now being extended into what is

known as "presence". The idea is simple – since you are using a networked application most of the time (be it Email, web browser, IM or even phone), the network "knows" where you are and what your availability is. This knowledge can significantly enhance your collaboration experience. For one, people trying to reach you will know where you are and whether to call your desk phone or mobile or voicemail. This reduces the occurrence of "phone tag" that is painfully familiar to most office workers. Since Presence capability extends your availability status to any network application, this also allows you to reduce interruptions to your work. You can set your status (e.g. "busy") in one place and propagate that to your colleagues no matter which application or device they are using.

There are a number of providers competing in the collaboration space. This includes established vendors like Cisco, Microsoft and Lotus. Other players include WebEx and a number of smaller companies building their products on top of open source platforms like Jabber and Asterisk. It is pretty obvious that the collaboration space has a pretty rich set of applications. However, too many applications lead to user confusion and information overload. The end result is that they fail to deliver on their promise and reduced productivity. For this reason, the winners in this space will be decided by their ability to seamlessly integrate these applications.

Consumer Collaboration

Collaboration in the consumer space primarily takes the form of social interactions. The leading application in this area is Instant Messaging. Almost everyone that has an internet connection uses at least one instant messaging application. According to ComScore MediaMatrix, AOL, Yahoo and MSN are the top providers of instant messaging in the US

IM Service	US Users (millions)
AOL/ICQ	41.6
Yahoo	19.1
MSN	14.1

Table 4: US Instant Messaging Market Share (July 2005)

AOL appears to have the largest number of users due to its first mover's advantage. ICQ was the first IM service and AOL got a large number of users when they acquired ICQ.

A new category of consumer web sites has recently appeared on the scene. This category is loosely called "social networking". The sites try to build a community by catering to a particular niche of users that have something in common. The users participate by adding content, commenting on each other's content and sharing information. This is currently the fastest growing segment in consumer websites. According to Nielsen/NetRatings [4], a popular online community site, MySpace.com recently became the tenth most visited site on the Internet.

Site	Audience, 000	Time Spent
Yahoo!	105,027	3:28:39
Microsoft	99,368	0:50:16
MSN	95,124	1:52:10
Google	93,244	1:00:56
AOL	75,348	6:13:54
eBay	55,573	1:59:18
MapQuest	40,809	0:12:05
Amazon	40,721	0:23:21
Real	36,961	0:43:00
MySpace	36,373	2:09:04

Table 5: Top sites in March 2006

The third category of popular "social interaction" sites is photo sharing sites. These sites have seen an explosive growth as digital camera prices continue to drop. The early movers in this area were digital camera makers and photo printing services (e.g. Kodak). The next wave of companies entering this domain took the social networking approach and offered many rich features related to photo sharing. Sites like Flickr.com have built a strong community and user provided public content continues to grow. According to Nielsen/NetRatings, Flickr's traffic grew 448% to 3.4 million from December 2004 to

December 2005. About 100 million photos have been posted at the site!

Video

Just like VoIP, video applications have been around for some time. They have not been widely adopted until now since they use large chunks of bandwidth and high speed connections were not widely available in the past. With widespread deployment of high speed networks in recent times, video is another technology whose time has come. Let's look at how businesses and consumers might use video applications.

Enterprise Video

Many businesses have already been exposed to video as part of video conferencing solutions. These solutions are typically sold as part of collaboration suites and all the leading vendors mentioned in the Collaboration section above have a presence in this segment. However, the video quality available has been choppy at best. The user experience is nowhere near meeting someone in person. A new technology called "Telepresence" aims to fix this problem. With High Definition video feeds transmitted over fast networks and displayed over large plasma displays, this technology delivers on the promise of true virtual meetings. In order to deliver the best possible experience, businesses would probably build specialized conference rooms and mount the equipment there. The cost savings on travel expenses and lost productivity are likely to be much more than the investment in these specialized rooms. The telepresence segment is fairly new and currently there are no big players in this area. However, there are many small companies and startups with demonstrable technology. This is a ripe environment for acquisitions since this could become a fairly lucrative business for the big vendors.

Streaming video is the second application that is likely to become widely adopted in the enterprise. Some streaming video applications do exist in the market but these are again beset by poor video quality. Some of the High Definition video technology from the telepresence segment will most likely find its way into the desktop streaming market as well. Streaming applications will certainly see a surge in adoption when that happens. Streaming is invaluable for spreading information throughout the company.

Examples include live broadcast of company meetings, training classes, etc. Such uses can boost worker productivity and save on travel costs and will surely appeal to businesses.

Consumer Video

Streaming video has been around in the consumer space as well. However, there has been a shortage of video content. Things are beginning to change as many of the large media companies are starting to offer video streams of their television broadcasts. These sites offer some content (e.g. news clips) for free while charging for premium content (e.g. sporting events and TV shows). According to a new forecast from IDC [5], Internet video services will generate over \$1.7 billion in revenues by 2010, an increase of more than \$1.5 billion from 2005 totals.

Another area that is seeing an upsurge in consumer interest is video sharing. Video sharing is similar to photo sharing services. The focus of video sharing sites has been on building user communities. Some upstarts like YouTube have been very successful at this due to their rich feature set and ease of use. Other players in this area include traditional web portals like Microsoft and Yahoo. Google also entered the fray with the recent launch of Google Video. According to a Nielsen/Net Ratings report [6], YouTube and Google Video grew from relative obscurity to substantial players in February 2006.

Site	Audience, 000	Y/Y Change
MSN Video	9,279	44%
YouTube	9,045	NA
Google Video	6,246	NA
iFilm	4,336	102%
video.search. yahoo.com	3,774	148%

Table 6: Top video sites in February 2006

Increased broadband penetration is certainly the key factor in a growing trend of accessing streaming media online at video streaming and sharing sites. Among the players in this domain, consumers seem to prefer those that have the best user experience and a good user community.

Conclusion

The factors that make certain applications successful appear to follow well defined themes. In the business domain, the primary themes are cost savings and productivity gains. However, it is important to note that putting together a large number of applications that are productivity enhancers by themselves tend to cause information overload and reduce overall productivity. For this reason, convergence of applications is a critical theme for the success of vendors offering business applications.

The themes that emerge in the consumer space are markedly different. Although cost savings is certainly on the mind of consumers, social interactions primarily drive their interest. Ease of use emerges as the second important theme in this space.

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Capital Account Convertibility: Issues for Developing Countries

Dr Sumati Varma*

This paper examines pertinent issues relating to capital account convertibility in a developing country context. It also investigates the link between capital account liberalisation and growth for a cross-section of seventeen developing countries, including India. It examines the links between capital mobility and growth, both theoretically and empirically. It also explores the different measures of financial openness and the empirical evidence on the association between financial openness and growth.

The paper uses a de jure measure of capital account convertibility calculated as the proportion of capital flows to total flow of funds. The results find a positive association between financial openness and growth. However, growth is associated with an increase in the efficiency of inputs rather than due to an increase in investment per-se.

Introduction

Capital account liberalisation has been a part of a broader strategy of financial liberalisation in large parts of the developing world in the last thirty years. The genesis of capital account liberalisation can be traced to the theory of financial repression, first advocated by McKinnon (1973) and Shaw (1973). According to them, efficient allocation of capital was possible only when the market and not the State determined the allocation of credit. In other words, financial variables need to take market values for efficient allocation of capital, leading to growth of the economy. In theory, financial development can raise an economy's growth rate by increasing the rate of capital accumulation and by spurring technological innovation. This became the basis of the IMF-World Bank sponsored package of Structural Adjustment and Reform for the developing world in the 1970s.

The global experience with financial liberalisation has been associated with financial crisis as well. Though the economies of the developing world discovered the benefits of liberalisation but opening up did not occur as anticipated due to market distortions and the role of investor expectations. The behaviour of international investors often exhibits 'herd mentality', leading to speculative bubbles as the mood of the market changes. The existence of information asymmetries—a situation where one party

to a transaction has less information than the other, is a key feature of capital markets and shapes the outcomes of financial transactions, resulting in less than efficient resource allocation. (Mishkin 1996)

This paper examines some pertinent issues relating to financial liberalisation and specifically to capital account liberalisation in the developing country context. It also empirically examines the relationship between capital account convertibility and growth.

Capital Mobility: Theoretical Underpinnings

The classic case for free capital markets rests on the assumption that it delivers an efficient allocation of resources. A large literature on "efficient markets" emphasises the implications of this assumption. Capital controls, on the other hand, have conventionally been used the world over to deal with situations of weak balance of payments. Over time, capital controls have also been increasingly viewed as an instrument of monetary and exchange rate autonomy. In a number of countries, application of capital controls allowed the authorities to manipulate interest and exchange rates so as to attain the objectives of internal and external balance. The existence of the Impossible Trinity (i.e. the incompatibility between monetary policy independence, open capital account and a fixed/managed exchange rate regime) also led to a role for

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capital controls in countries with fixed or managed regimes. Analyses based on asymmetric information and herd behaviour in financial markets also suggested that capital controls may help in dealing with market failures more effectively, particularly those arising from volatility in short term capital flows and exchange rates.

The Case for Capital Mobility

- Free capital mobility allows capital to be moved from countries and sectors where its marginal productivity is relatively low to those where it is relatively high. This implies that capital is allocated in a globally efficient way by flowing towards countries which offer the highest rate of return. World output and economic growth will be maximized if capital goes to where its marginal productivity is greatest. Controls that interfere with the free movement of capital will therefore constrain global economic growth.
- The second major direct benefit of free capital mobility is that it allows portfolio risks to be diversified. This allows investors to minimize risks and maximize the return on their portfolio. Capital mobility thus enables investors to achieve higher risk adjusted rates of return. Income levels in recipient countries should also rise as a result of the capital inflows. Higher rates of return can encourage savings and investments that deliver faster rates of economic growth.
- The importance of diversification for developing countries also lies in the fact that they often have relatively small endowments of most factors other than labour, but relatively large endowments of a few very specific factors, such as particular minerals or export crops. Relaxing restrictions in international trade in factor ownership allows governments and private investors to diversify their portfolios and alleviates the problems created for many developing countries by the volatility of primary commodity prices.
- The financial sector illustrates particularly the important instance of the need for portfolio diversification, since the observed fragility of the financial systems of developing countries results, in part, from the restrictions which their own governments impose on the entry of foreign banks. This leads to the banking sector being dominated by domestic banks with assets portfolios which, rather than being globally diversified, are focused on the domestic economy and are, therefore, especially vulnerable to economy-wide shocks such as terms of trade shocks or exchange rate crises.
- An open capital account could bring with it greater financial efficiency, specialisation and innovation by exposing the financial sector to global competition.
- Developing countries need external capital to sustain an excess of investment over domestic saving and an open capital account could also attract larger foreign capital.
- Residents get the opportunity to base their investment and consumption decisions on world interest rates and world price of tradeables, which could enhance their welfare.
- By setting prices right, an open capital account enables aggregate savings and investments to be optimised, leading to both allocative efficiency and competitive discipline.
- By offering the opportunity of accessing the world markets to diversify portfolios, an open capital account allows both savers and investors to protect the real value of their assets through risk reduction.
- Capital controls encourage hidden capital flight and diversion of saving into real assets, and gold, particularly during periods of macro-economic instability, leading to suboptimal use of internal resources.
- Capital controls are not very effective, particularly when the current account is convertible, as current account transactions create channels for disguised capital flows.
- Capital controls intend to insulate domestic financial conditions from external financial developments. The influence of external financial conditions, however, has been increasing over the years even in countries with extensive capital controls and because the costs of evading the controls have declined and the attractiveness of holding assets in offshore markets have increased, capital controls are increasingly becoming ineffective.
- Going by the "squeezing on a balloon argument", capital being fungible, restrictions on one form of capital and not on others would quickly lead to displacement of flows to the uncontrolled segment. (Quirk 1989).

The Case Against Capital Mobility

The basic premise of free capital mobility is the existence of a 'first best' world. In real life, such a world does not exist. Distortions exist at a number of levels, as private international markets are subject to market failure.

- Capital mobility in the presence of trade distortions, differential tax treatment across countries and differences in prudential regulation can lead to the global misallocation of capital.
- Trade protection may distort the estimated rate of return to domestic investment in an upward direction which encourages excess capital inflows. These, in turn, may mean that there is an inefficient use of domestic resources as capital intensity is favoured over labour intensity.
- A smaller upward bias may be created by relatively low taxation or regulation. The efficiency argument for free capital mobility, therefore, presupposes that these distortions have been harmonized. In the absence of harmonization, the second best solution may be that controls over 'capital markets' are used to neutralize the effects of other distortions.
- Even in the absence of trade, tax or regulatory distortions, there can be no presumption that capital will be globally allocated to where it yields the highest rate of return. While movement of capital flows depends partly on the type of capital involved, it is also influenced by a combination of 'pull' and 'push' factors. Relative interest rates that are dictated by short run monetary policies, levels of economic activity and expected exchange rate changes all have a part to play. But these influences do not guarantee efficient allocation of capital. Capital flows may be influenced by speculation more than by economic fundamentals. The fact that fundamentals normally change relatively slowly whereas the pattern of capital flows is unstable, suggests that fundamentals are not the driving force and that capital markets are myopic.
- The behaviour of international investors often exhibits 'herd mentality' rather than a scientific evaluation of rates of return. This leads to speculative bubbles that burst as mood of the market changes. International lending is, therefore, as much psychological as it is economic;

but psychology does not guarantee an efficient allocation of global savings. Countries with high domestic saving rates and strong economic growth will be more attractive than those with low savings rate and slow economic growth. Private markets will, therefore, direct resources to countries at times when their need is less, and away from them when their need is greater.

- Premature liberalization could initially stimulate capital inflows that cause the real exchange to appreciate and thereby destabilize an economy undergoing the fragile process of transition and structural reform. Once the stabilization programme lacks credibility, currency substitution and capital flight could trigger a balance of payments crisis, depreciation and spiraling inflation.
- An open capital account exposes the economy to the danger of macro-economic instability due to the volatility of short term capital flows and the associated negative 'externalities' in international lending in the form of contagion effects.
- Speculative short-term movements in the interest rates also make monetary policy largely ineffective.
- Taking capital account liberalization to be an extension of trade liberalization is, perhaps, not a very apt analogy for various reasons. First, capital flows are much larger than trade flows. Secondly, capital movements are heavily influenced by changes in expectations, which are themselves elastic and narrowly distributed among creditors. Thirdly, whereas we rarely experience international trade crises, we do experience international financial crises. Liberalization of the capital account is, therefore, too complicated to be considered an extension of currency account convertibility.
- Finally, countries that are deemed un-creditworthy by private capital can only turn to aid. The changing composition of resource flows will have important distributional consequences that disadvantages low income countries. These countries will be adversely affected alongside other developing and emerging economies where international financial crises, caused partly by capital volatility, leads to global economic recession.

Capital Mobility and Growth: Review of Literature

Measuring Capital Account Openness

The literature typically focuses on three aspects of financial openness: measures based on statute, based on actual capital flows, and on asset prices. Measures based on statute are also known as *de jure* or rule-based measures and rely on, and represent policies on capital account restrictions. The most commonly used *de jure* measure of openness is derived from information in the IMF's Annual Report on **Exchange Arrangements and Exchange Restrictions, (AREAER)**. It is available for all IMF member countries from 1966 and is a dummy variable that takes a value of 1 if a country has capital account restrictions in a given year and 0 otherwise. However, it does not distinguish between different types of controls nor does it capture the difference in intensity of controls. Another *de jure* measure called *SHARE* measures openness as a variable reflecting the proportion of years in which countries had liberalized capital accounts. Quinn (1997) has constructed the most comprehensive cross country indicator of capital account openness. He uses a 0 through 4 scale to classify openness, with a higher number implying a more open capital account.

These and other such rules based measures assume that restrictions on capital account are fully effective, and therefore represent the countries' true degree of financial openness. However studies have found that capital controls, especially in developing countries, have been of limited effectiveness as investors find ways of circumventing them. To this extent, these measures underestimate the degree of a country's financial openness.

De facto measures of openness are based on actual capital flows and measure a country's effective openness. This is analogous to using trade volumes as a measure of trade openness and helps to distinguish between different types of capital flows. This level of disaggregation allows us to more closely identify the different channels through which capital flows might affect economic growth (Kraay (1998) and Swank (1998)). Since actual outflows and inflows are affected by a number of factors such as monetary, fiscal and exchange rate policies and the global economic and financial climate, and not merely by

restrictions on capital flows, this measure is unlikely to be an informative indicator of the capital account regime. Besides this, capital flow data for some developing countries is incomplete and of poor quality as well.

A third alternative is to use portfolio and direct investment assets and liabilities as a per cent of GDP as a long run indicator of financial openness (Lane and Milesi-Ferretti (2001)). Such a measure is a good indicator of openness at a point in time, but its value may fluctuate from year to year, since capital flows are endogenous and there can be large valuation adjustments due to, say, a large swing in equity values.

Capital Account Openness and Growth

There is a large and growing literature that tests the potential benefits of capital account liberalization through its influence on long run growth and development, by directly investigating the empirical relationship between capital account liberalization and economic growth. Almost all of these studies augment a basic growth model that includes variables such as the level of schooling, investment, population growth and the level of GDP in the initial year with a measure of capital account liberalisation. The data are typically averaged over five, ten, or twenty years so that the data set is converted into either cross-sectional or panel ones. Distortions in the domestic economy such as information asymmetry and moral hazard are proxied through the use of measures of institutional development and policy environment such as the inflation rate and fiscal deficit.

Supporting Evidence of Capital Account Liberalization on Growth

Wang (1990) develops a model in which international capital movements from the developed North to the developing South transfers technology and shows that liberalisation of the capital account leads to greater foreign direct investment leading to greater competition in which domestic firms try to be efficient. In the process, domestic savings are more efficiently used. The rate of technological change is an increasing function of the amount of foreign capital operating in the South and of the extent to which technology in the advanced country exceeds

Edwards (2001) examines whether the relationship between capital mobility and growth is different for emerging and advanced economies and tests the impact of capital mobility on economic growth, where growth is estimated in terms of GDP growth and total factor productivity (TFP) growth.

Bekaert, Harvey and Lundblad (2001) (BHL) examine the impact of stock market liberalization on economic growth. Augmenting the standard set of growth model variables with their variable indicating stock market liberalization, they maximize the time series content in their regression using a moving average panel data method. These results, along with those of Quinn, are the strongest evidence supporting the hypothesis that capital account liberalisation leads to growth.

O'Donnell (2001) examines the impact of capital account liberalization using both IMF rule-based measure and a quantitative based measure of financial openness. He found rules based measures too coarse an indicator of capital account liberalization as these do not take into account the nature of different types of controls. Using quantitative measure, he finds that capital account liberalization does seem to speed up economic growth. He also finds that benefits to all countries are not equal.

Chanda (2001) also finds that the benefits of capital account liberalization are different for different groups. He suggests that the impact may vary with the level of ethnic and linguistic heterogeneity in the society, a proxy for the number of interest groups. In particular, he finds that capital controls lead to greater inefficiencies and lower growth among countries with a high degree of ethnic and linguistic heterogeneity.

Chinn and Ito (2002) examine the empirical relationship between capital controls and the financial development of credit and equity markets. The authors investigate a broader set of proxy measures of financial development, create and utilize a new index based on the IMF measures of exchange restrictions that incorporates a measure of the intensity of capital controls and examines the implications of institutional and legal factors. The study analyzes the experiences of 105 countries over the period 1977-1997 and concludes that the rate of financial development, as measured by private credit creation and stock market activity, is linked to the

that in the less developed one. It is shown that when the South shifts from autarky to free capital mobility, its steady state growth rate of per capita income also increases.

Obstfeld (1994) presents a simple model of global portfolio diversification that links growth and financial openness. The set up is a stylised development of the idea developed by Romer (1990) and Grossman and Helpman (1991). The model asserts that ongoing growth depends upon investments that supply specialized and hence inherently risky production inputs. Because risky technologies in the model have higher expected returns than safe ones, international asset trade which allows each country to hold a globally diversified portfolio of risky investments, encourages all countries to shift from low return safe investments towards high return risky investments. Provided that risky returns are imperfectly correlated across countries and that some risk free assets are initially held, a small rise in diversification opportunities always raises expected growth as well as national welfare. The key here is that financial liberalization can enhance growth even in the absence of net capital inflow.

Quinn (1997) is one of the most comprehensive studies to identify a positive result between capital account liberalization and growth. He uses a multivariate regression framework to determine the change in international financial regulation is robustly associated. Quinn's study covers 58 countries over the period 1960 to 1989 and although his results suggest a significant effect of the change in capital account liberalization on growth, it is difficult to distinguish the impact of current account and capital liberalization separately.

Klein and Olivei (1999) investigate the association between capital account liberalization and growth in a cross sectional regression specification of 82 countries over the period 1986 to 1995. Their study first focuses on the role of capital account liberalization on financial development and then considers the effect of financial development on capital account liberalisation. They conclude that the beneficial effects of capital account liberalisation can only be achieved in an environment in which there is institutional support for the changes brought about by the free flow of capital.

existence of capital controls.

Klein (2003) offers robust empirical evidence that capital account openness contributes in an important way to economic growth for middle income countries. He concludes that there is a need to carefully manage and sequence liberalization, with appropriate controls, regulatory apparatus and macroeconomic framework.

Studies not Supporting the Hypothesis that Liberalization Promotes Growth

In a widely cited study, **Rodrik (1998)** has cast doubts on the effects of capital account liberalization on growth. In a sample that includes almost 100 countries, developing as well as developed, he finds no significant effect of capital account liberalization, as measured by Share, on the percentage change in real per capita income over the period 1975 to 1989 in growth regressions that also include initial per capita incomes, initial secondary-school enrolment rate, an index of the quality of government institutions and regional dummy variables. He also finds no relationship between capital account liberalization and investment-to-income, nor between capital account liberalization and inflation.

These results are broadly consistent with those of **Kraay (1998)**, who undertakes a more comprehensive examination of the effect of capital account liberalisation on investment, growth and inflation. The study includes data from 117 countries over the period 1985–1997, and uses three different measures of financial market development and policy environment.¹ His regressions take the form of cross sections, with one observation per country, where the dependant variable is the growth in output between 1985 and 1997. He uses both OLS and the instrumental variable approach, in which the capital account liberalization variables are instrumented by their own past values.

Methodology

The empirical analysis in this paper is a time series analysis for seventeen developing economies for the period 1970–2000.

The paper estimates the association between capital account openness and growth in a linear regression framework. Since the data is in the form of a time series, the first step is to check stationarity of variables, to see if the mean and variance of the series is time independent over the sample. In all

data which is in the form of a time series, the first step is to determine if the variables are stationary in levels, or if a first or second order differencing is required to achieve stationarity. For this purpose a unit root test is done. This is known as testing the order of integration of variables. Various tests are available to test the order of integration of variables, including the Dickey Fuller (DF 1979), Augmented Dickey Fuller (ADF), Phillips Perron (PP 1990) and Durbin Watson (Sargan and Bhargava 1983) test. This paper uses the Dickey Fuller and Phillips Perron tests to test for the presence of unit roots and replaces non stationary variables with the first difference of their values.

In order to test the hypothesis of the influence of openness on growth, the following models were estimated:

$$g_j = a_0 + a_1K_j + a_2X_j + e_j \quad (1)$$

where g_j is average real GDP growth in country j during the period 1971–2000;

k_j is a measure of capital account openness in country j , or an indicator of the extent of capital account liberalisation between 1971 and 2000. Capital account openness is measured by the variable OPEN⁺, which is measured as the sum of total capital flows to total flow of funds. e_j is heteroskedastic error with zero mean.

X_j are other variables that affect economic performance such as

- a) INV⁺ - The investment ratio during 1971–2000, proxied by the rate of gross fixed capital formation to GDP;
- b) HUM⁺ - A measure of human capital, taken to be the total mean years of education;
- c) LRG⁻ - The log of real GDP per capita in 1971, which is taken to be a measure of initial economic activity;
- d) DEV⁺ - A measure of the country's level of development taken to be the product of LRG and OPEN.

The superscript over the variable represents the expected obtainable sign.

In principle, a greater openness of the capital account has an impact on economic performance through two alternative channels. The first one is the increase

in foreign savings, and through them, on aggregate investment. Following Edwards (2001), this is called the "Investment Effect". The second channel through which capital mobility may affect economic performance refers to efficiency and productivity growth. This is termed the "Performance Effect". The standard model of economic growth explains the long term trend in the potential output of an economy by breaking it down into two parts:

The first part can be explained by the growth in inputs used in production. This is called Real GDP Growth (RGDPG).

- Growth which can be explained by improvements in the efficiency with these inputs used is called Total Factor Productivity (TFP) growth.

Data Sources

Data for the study has been taken from various issues of The International Financial Statistics Yearbook and The Penn World Tables (version 6).

Estimation and Results

The paper uses the OLS technique for estimating the linear relationship between capital account openness and growth. Therefore, to obtain meaningful results, the order of integration of variables had to be examined. Regression results are meaningful only if the order of integration of the dependant variable is greater than or equal to the order of integration of the independent variables. Results of the test and their critical values are reported in Table 1 and 2. The results show that the variables OPEN and HUM were found to be non stationary for some countries in the sample. These were replaced with the first difference of their values.

Table 3 presents the main statistically significant findings of the estimation. The results show that there is a positive significant relationship between openness and growth for Argentina, Chile, Paraguay, Venezuela, Korea, Malaysia, Philippines and Thailand.

Bolivia, Colombia and India have a positive relationship between openness and growth but the coefficient is insignificant.

The results for Mexico, Peru and Uruguay indicate a negative association of openness and growth.

The coefficient of INV, however, has a significant positive sign only for Indonesia, and Philippines and is positive but insignificant for Korea and

Thailand. The "Investment Effect", therefore, does not seem to be a strong explanatory variable of growth. This could be due to the fact that there is a smaller proportion of FDI compared to portfolio flows in the total inflow of capital. Since it is FDI inflows that manifest themselves into investment, this is possibly the reason for the "Investment Effect" being less robust.

In the neo-classical framework, capital flows contribute to growth primarily by supplementing domestic saving, while in the endogenous growth framework, the sources of growth attributed to capital flows comprise the spillovers associated with foreign capital in the form of technology, skills and introduction of new products as well as the positive externalities in terms of higher efficiency of domestic financial markets and the resultant improvement in resource allocation and efficient financial intermediation by domestic financial institutions.

6. Conclusions

The empirical estimation in this paper indicates a strong robust relationship between openness and growth for some countries in the sample. The "Investment Effect" is also found to be positive and significant only for four Asian countries. The effect of capital flows on growth is stronger in the event of strong supervision and in a regulated framework. Financial depth of the economy also has a role to play. This study, however, has chosen a simple framework to demonstrate the association between openness and growth and can be further elaborated.

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Table1
Testing For Unit Roots
Dickey Fuller Statistics

	Rgdpg	Open	Inv	Hum	Lrg	Dev
Argentina	-4.344* (1st dif)	-3.170**	-6.802*	-6.468*	-4.344*	-3.167**
Bolivia	-4.376*	-3.555**	-5.693*	-3.877** (OLT)	-21.621* (OLT)	-3.528**
Brazil	-3.584**	-.3731*	-5.148*	-2.687**	-5.931*	-3.701**
Chile	-6.410*	-3.955*	-5.077*	-8.729*	-3.652**	-3.691**
Colombia	-3.539**	-3.019**	-4.253*	-0.788	-3.312**	-2.92***
Ecuador	-5.530*	-3.587**	-6.099*	-2.67***	-4.014*	-3.556**
Mexico	-20.052*	-3.193**	-6.020*	-2.102	-4.059*	-3.099**
Paraguay	-4.179*	-4.930*	-3.793*	-4.301*	-2.88***	-4.851*
Peru	-4.559*	-3.032**	-3.195**	-0.093	-3.672**	-3.077**
Uruguay	-3.493**	-3.978*	-0.835	-0.661	-3.201**	-4.010*
Venezuela	-8.890*	-4.040*	-5.389*	0.617	-6.888*	-4.054*
India	-4.158*	-7.137* (1stdif)	-5.367*	0.542	-3.525**	-7.209 (1st dif)
Indonesia	-5.826*	-6.227	-21.489*	-0.383	-4.25*	-6.236 (1st dif)
Korea	-4.040*	-11.976* (1st dif)	-3.869** (1LT)	0.060	-4.934*	-5.190*
Malaysia	-5.042*	-7.5* (1st dif)	-7.164*	-1.830	-2.79***	-6.951 (1st dif)
Philippines	-4.154*	-7.166 (1st dif)	-4.083*	-3.971 (3LT)	-3.796*	-5.773 (1st dif)
Thailand	-3.169**	-6.076 (1st dif)	-10.351*	-6.813*	-3.360**	-2.66*** (1L)

Critical values for zero lag: at 1% level of significance: 3.723 'dif' stands for difference
 5% level of significance: 2.989 'L' indicates lag
 10% level of significance: 2.625 'LT' indicates lag trend

* indicates stationarity at 1% level of significance

** indicates stationarity at 5% level of significance

*** indicates stationarity at 10% level of significance

Table 2
Testing For Unit Roots
Phillips Perron Statistics

	Rgdpg	Open	Inv	Hum	Lrg	Dev
Argentina	-8.512	-15.60**	-29.7***	-34.986*	-23.862*	-15.58**
Bolivia	-24.105*	-17.03**	-31.652*	-21.621 (0LT)	-21.630* (1LT)	-16.90**
Brazil	-18.733*	-18.995*	-28.110*	-6.453	-22.863*	-19.097*
Chile	-18.776*	-21.375*	-28.331*	-40.772*	-19.072*	-19.646*
Colombia	-18.491*	-14.73**	-23.225*	-1.010	-14.870*	-14.02**
Ecuador	-29.871*	-18.542*	-34.099*	-2.279	-21.622*	-18.419*
Mexico	-30.234*	-6.881	-22.882*	-4.950	-21.536*	-35.873 (1st dif)
Paraguay	-20.082*	-15.90**	-20.209*	-22.221*	-15.063*	-16.24**
Peru	-25.232*	-14.79**	-17.523*	-0.124	-19.352*	-15.10**
Uruguay	-14.05**	-21.260*	-5.115	-1.818	-15.7*	-21.551*
Venezuela	-33.135*	-21.738*	-30.058*	0.774	-23.528*	-33.135*
India	-22.614*	-11.4***	-29.506*	0.834	-16.908*	37.9* (1st dif)
Indonesia	-29.166*	-27.565* (1st dif)	-15.47**	-17.324*	-23.235*	-34.225 (1st dif)
Korea	-21.780*	-13.70**	-10.085	0.087	-28.329*	-14.53**
Malaysia	-28.123*	29.234 (1st dif)	-28.715*	-7.630	-13.996*	-10.3***
Philippines	-23.393*	-30.397 (1st dif)	-22.384*	-3.569	-19.166*	-32.027* (1st dif)
Thailand	-15.93**	-11.5***	-46.335*	-36.984*	-17.186*	-9.910

Critical values for zero lag: at 1% level of significance: -17.472
 at 5% level of significance: -12.628
 at 10% level of significance: -10.280

'dif' stands for difference
 L' indicates lag
 'LT' indicates lag trend

* indicates stationarity at 1% level of significance
 ** indicates stationarity at 5% level of significance
 *** indicates stationarity at 10% level of significance

Table 3
Capital Account Openness and Growth:
Individual country results
Dependant Variable : Real GDP Growth (RGPG)

	OPEN	INV	HUMAN	CRGDC	DEV	CONST	R ²	Adj R ²	N
Argentina	.03209 (1.97)	.03070 (0.38)	7.792006 (0.80)	.000979 (0.17)	-.09193 (-2.70)	2.256617 (2.02)	0.3172	0.1750	30
Bolivia	.02599 (0.03)	-.54647 (-0.65)	-3.5722 (-1.11)	-.0053935 (-1.69)	-.06251 (-0.06)	1.93486 (1.20)	0.0483	-0.1606	30
Brazil	-.2206 (-1.42)	.12859 (0.01)	-70.8484 (-1.05)	-.005007 (-1.21)	13.69193 (1.04)	0.2544	0.1326	30	
Chile	.08749 (1.44)	-.01203 (-0.25)	-.64828 (-0.88)	.0001915 (1.20)	-.09541 (-1.43)	0.044239 (0.24)	0.1386	-0.0408	30
Colombia	.00029 (0.15)	.09462 (1.00)	.5451637 (2.06)	.0003178 (2.74)	.02958 (0.32)	-.074388 (-1.26)	0.3462	0.2134	30
Ecuador	.02653 (0.10)	.48061 (0.31)	457.2412 (1.38)	.0378986 (1.10)	-.56859 (0.02)	-55.7413 (-1.36)	0.1065	-0.0055	30
Mexico	-.9284 (-2.12)	-.00422 (-1.03)	-12.9628 (-1.79)	-.000271 (-0.96)	1.0432 (2.11)	1.834465 (1.77)	0.6436	0.5694	30
Paraguay	.00151 (8.34)	.07484 (2.64)	-.551887 (-2.22)	.0000933 (1.95)	.01258 (1.52)	.0169434 (1.90)	0.7344	0.5428	30
Peru	-.0962 (-1.76)	.00501 (0.05)	-.219299 (-0.43)	.0001706 (5.78)	.10948 (1.80)	.0108689 (0.11)	0.6146	0.2198	30
Uruguay	-.0728 (-1.63)	-.25297 (-2.80)	-.40539 (-0.88)	.0002007 (8.50)	.08455 (1.71)	.0132741 (0.15)	0.68	0.5839	30
Venezuela	.41196 (1.48)	-.00023 (-2.12)	-1.11529 (-1.28)	.0002545 (2.47)	-.46282 (-1.46)	.3130479 (1.48)	0.4129	0.2908	30
India	.00221 (1.12)	-.04282 (-0.48)	-.657634 (-1.95)	.0006966 (3.35)	(1.56)	.0802242	0.4454	0.3390	30
Indonesia	.0540 (2.00)	.00081 (3.92)	-.722955 (-1.30)	.0005043 (15.27)	.06814 (0.96)	.1122053 (1.60)	0.7861	0.6587	30
Korea	.02235 (1.34)	.06159 (0.65)	1.124795 (2.25)	-.000037 (-0.78)	-.02738 (-1.34)	-.102652 (-0.74)	0.3520	0.0423	30
Malaysia	.12118	.00034 (1.76)	.7586013 (0.22)	.0002689 (0.58)	-.13867 (3.57)	-.090274 (-1.75)	0.4541 (-0.49)	0.3031	30
Philippines	.12909	.07762 (1.43)	.8550774 (2.36)	.0002674 (2.61)	-.16283 (2.64)	-1.07864 (-1.43)	0.5565 (-1.98)	0.4292	30
Thailand	.02412	.00247 (1.39)	.2134033 (1.44)	.002087 (0.58)	-.02913 (8.71)	.008762 (-1.54)	0.6858 (0.19)	0.5941	30

Performance Management Practices in Multinational Corporations in India

Dr Hawa Singh*

After the onset of liberalization, privatization and globalization, multinational companies have been coming to India, bringing with them diverse cultures and work ethics. Human Resource Management has changed due to change taking place in business triggered off by global competition, downsizing and technological advances. In the changed scenario, the survival and growth of any organization depend on the management of its human resources. Performance management is a very critical and effective tool in the development and optimization of human resource management in an organization. Performance appraisal management has been viewed as a process by which managers, supervisors and staff workers align employees' performance with the firms goals via three sequential phases: planning and goal setting, coaching and feedback and evaluation and measurement. Performance management is a system for integrating the management, organization and employee performance. The present paper is an attempt to study prevalence of performance management practices in multinational corporations.

Globalisation, as it appears in the beginning of 21st century, poses distinctive Human Resource Management (HRM) challenges to business organizations especially those operating across boundaries as Multi National Corporations (MNCs) or global enterprises. Globalization represents itself in the form of free flow of technology and human resource across national boundaries, responsible for the spread of IT and has created competitive business environment. These business developments are creating complex and changing economic situations. The growing role of MNCs and the use of complex global strategic business decisions have generated a similar phenomenon in area of international human resource practices. Human resource management has increasingly been recognized as a critical segment of international business operations (Dowling, 1994; Milliman, 1991; Schuler, 1993). Effective use of available human resource in a volatile business environment is particularly critical for the success of any such operation. In order to manage employees for competitive edge in a period of globalisation, human resource personnel must possess competence relevant for implementing human resource management strategies, policies and practices (Barney and Wright, 1988; Huselid, 1997; Vlrch, 1995). The twin processes of privatization and liberalization not only opened India to the globe but also facilitated the arrival of all leading Indian

organizations on the global stage. Wipro, Infos and TCS are prominent names in IT industry globally. Large multi-business houses such as Reliance, Tata Sons and the AV Birla group are also active operating overseas. The changes in the business scenario have necessitated the Indian industry to look inward for the development of human resource (Barney, 1999). The HRM function has emerged as one of the most important areas of organizational working practices. It has not been developed in isolation but in the context of industrial change and economic development. Schuler proposes that sustainable competitive advantage is attained when the firm has a human resource pool that cannot be limited or substituted by its rivals. Human resource practices involve "trading employees as value assets" as a source of complete advantage through their commitment, adaptability and high quality of skills and performance, etc. (Storey, 1992). Local culture and management style are important human resource considerations. India is considered to be one of the few countries with a heterogeneous cultural setting and relatively large degree of dissimilarity and diversity among different groups or culture (Fatehi, 1996). Diversity is the root of complex cultural disposition in India that has a significant impact on the Indian management styles (Sharma, 1984 and Husian, 1994). Industrialized and developed countries have a cultural set-up different from India

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In addition, human resource practices/issues specific to various countries are required to be taken into account while doing business in India. It is argued that local circumstances have a significant impact on international business operations with regard to management of human resource practices (Schuler and Staeje, 1992; Monks, 1996). The Indian regulatory environment is a major concern with a relatively large number of laws regulating human resource management practices (Lawler, 1995). It has become very difficult for foreign companies to manage human resource practices. This is because of the unprecedented increase in demand for skilled people following a rapid rise in the level of foreign and local involvement in India. Lorange (1996) considers that the MNCs must have their own, strong, full fledged human resource function with clear methods of working closely with each partner. Geringer and Herbert (1989) consider it important to develop an integrated learning work culture rather than "us-them" culture while operating in a cross cultural environment. As a majority of cutting edge researches and practices in the area of management thinking (including HRM practices) have been conducted in the West, more specifically in the U.S, their usefulness and adaptability will have to be tested in different culture environments. Local adoptions of global HRM initiatives have been very successful in some cases, but not in others.

In a market-driven competitive economy, only the fittest firms survive and among those which survive, the employee of those fare better where performance appraisal management plays a significant part as a tool and technique of management development and growth. P V Nayak, Director, Glaxo of India, observed that performance appraisal management is an important area because people have to be prepared to take up higher responsibility. Performance appraisal has several purposes such as to assess training needs, to effect promotions, to give pay increase and to implement organizational strategy. Williams, in his work, "Performance Management", mentions that there are at least three different models of performance management, a system for managing the employee performance, a system for integrating the management and a system for organizational employee performance. We look at performance management as a process by which managers,

supervisors and staff work to align their performance with the firm's goals via three sequential phases: planning and goal setting; coaching and feedback; and evaluation and measurement. The emphasis in the performance appraisal management process historically has been on the periodical measurement or assessment aspect rather than the first two and hence the entire system has come in for a lot of criticism. Strauss G and Sayles L R in their book, "Personnel: The Human Problems of Management" discussed the procedures of performance appraisal, which are classified in three groups: 1) Traditional performance rating, 2) Newer rating methods and 3) Result oriented appraisal. The traditional rating procedures refer to the rating of an individual's traits by his superior. The newer rating procedure represents improvement upon traditional procedures. The result-oriented procedures, which involve the setting of goals by superiors and subordinates working together are being adapted increasingly in organizational settings.

The emphasis in the performance management process traditionally has been on the measurement aspect rather than integrating the management, organization and employee performance. Performance appraisal management system is one of the most controversial areas of the human resource management in business organizations. It is likely to remain controversial since this is the only human resource function which directly impacts motivation. If performance appraisal is used as an administrative tool to make discussions related to salary, bonus and compensation, its impact is felt in the current year. If it is invested with the role of development tool tied to promotion, job rotation and special assignment opportunities in the future, it has an impact on future. Given this complexity, it is extremely challenging and important/critical for both the professionals and operating managers. R S Dwivedi, in his publication, "Supervisors, personality and performance" presents evaluation of the employees of Escorts Limited on merit rating scale. He concluded that merit-rating scale was fairly acceptable and sound from the standpoint of at least three criteria of rating such as excellence reliability, halo and dispersion. Modak S in his article, "How to appraise potential", reports that leading corporations have to redesign their simple

performance appraisal system and re-orient it to a potential cum performance based appraisal system. K Ramachandran, Vice President, Philips India, observes "People are like icebergs. What you see above the surface (performance) is only a small part. A large part, the attributes needed to perform excellently in a future job, which I call potential is not immediately visible. It is hidden below the surface".

A. R. Nagandh and Barnard Estafem in their research work "The systematic assessment of employee's performance", found that majority of the firms were doing appraisal performance for the purpose of promotions, transfers, determining wage increases and training needs. Prof. Mathi Bolan in his survey found that personnel appraisal continues to be used in a large number of organizations for controlling employees rather than for developing them. From as early as 1982 and till the early 1990s, most of the studies on performance appraisal have focused on the measurement issues rather than the management aspects. The emphasis, therefore, was on rating scales and formats and concerns related to reliability and validity. In recent years, because of liberalization, privatization and globalisation and consequent changes in socio-economic environment, there is a need to move away from psychometric concerns to a more broad based understanding of the social and multinational dimensions of the appraisal process. T S Darbari, Vice President, CMC Ltd, in his article, "Reformulating appraisal norms", observed that no performance appraisal management system can be absolutely perfect in organizations. The organization has to ensure that a system adapted by it best suits to its needs. It must also continuously strive to improve upon it. Chow, Regional HR Director, Schick ACR Ltd, recommends that performance management should be an ongoing process. It must also be consistent with the nature of the employees' work. The present paper is an attempt to study the performance management practices in the multinational corporations in India.

Objectives of the Study

1. To analyze the various aspects of the performance management practices in selected multinational corporations in India.

2. To compare the performance management practices among various multinational industries.
3. To generate the base line information that will contribute to the field of human resource development.

Hypothesis

The null hypothesis of the present paper is that the multinational industries in India are not giving any significant recognition to the value of management performance practices in their respective organizations.

Research Methodology

The present paper is based on descriptive-cum-diagnostic research methods. The population was stratified on the basis of economic activities of the multinational corporations. This study relies on primary data collected from 50 multinational corporations. Keeping in view the economic activities, sample industries have been divided into 9 groups. Each group consists of ten units. These groups represent various sectors such as service, marketing, consultancy, production, etc. They also represent their parent countries like the USA, UK, Japan, Korea, Australia, etc. The stratified and convenient methods are used to select the units. The performance management questionnaire developed by T V Rao and Udai Pareek is used in present study. There are twenty statements in the questionnaire. Respondents have to state the extent to which each of these statements is true in relation to their organization by using the following four point scale 1. Not true 2. Partly true 3. True and 4. Very true. Apart from administering the questionnaire to human resource managers, it is also supplemented by informal discussion with employees and observations of the researcher. The data is analyzed and interpreted with the help of SPSS, which showed Pearson Chi-square, mean and other statistical tools.

Discussions and Results

Career Paths

Table-1 exhibits 'P' value and table-2 shows the mean score of performance management practices of multinational corporations. The result of table-1 reveals that P-value (0.21) for career paths practice

is more than the table value 0.05, which rejects the hypothesis. It explains that the multinational corporations take enough care in helping employees to acquaint themselves in advance regarding their career paths. The opportunities and limitations regarding their career are clearly explained to them by the management. The system helps the employees to have proper understanding of their service period. It is found that cargo industries have the highest mean ranking for this practice in comparison to other multinational corporations. It indicates that the managements of such companies are giving adequate importance to career development of the human resource. Advertisement corporations make fewer efforts in specifying the career opportunities for employees. It is found from the study that career paths practice is prevalent in multinational corporations.

People Identification and Motivations

It is evident from table-1 that the P-value (0.46) is greater than the table value 0.05. This rejects the hypothesis. The results of the study show that there is an inbuilt mechanism in the multinational industries to identify potential skills, knowledge, abilities and leadership qualities in the employees, which, in turn, help them to motivate the employees. It assists the managers at the time of promotion of the employees as well as to take decisions regarding other job related matters. Table 2 shows that majority of the multinational industries are scoring mean ranking above the average level which indicates that corporations are showing good concern for people identification and motivation practice of performance appraisal management system. Advertisement and some other industries are not giving much attention to design a mechanism to identify the possible potentials in employees. The findings show that majority of the corporations are showing consideration in recognizing the value of this practice in their respective organizations.

Key Performance Areas Identification

The chi-square table-1 shows 'P' value 0.091, greater than the table value, which rejects the null hypothesis. It explains that key performance areas are identified in advance by the managements, which are considered very important for employees while performing their functions. The reporting officers then decide these key areas in consultation with the

employees. It makes it possible for organization to take advantage of employees' knowledge and expertise. Table 2 exhibits that Banks give higher mean ranking i.e. 3.60 whereas advertisement companies give least mean score of 2.00. The mean ranking score of the large number of corporations reflects that these organizations take interest in identification of key performance areas. The results show that key performance areas identification practice is prevalent in multinational corporations.

Role Clarity and Direction

It is evident from the table-1 that 'P'-value 0.89 is higher than the table value 0.05. Thus null hypothesis is rejected. It reveals that the roles which an employee has to play in performing his job in the department are made clear to him by the management. That system avoids role conflicts in work situations. Management of the multinational corporations is providing necessary guidance to the employees to perform their job efficiently. It aims at developing favourable and conducive organizational climate. This leads towards industrial peace and harmony. Table 2 shows that Banks, Information Technology, Drug and Pharmaceutical, Cargo and Consultancy industries score high mean ranking i.e. 3.00. On the other hand, advertisement and automobile corporations score low mean ranking. It implies that managements of the latter are not always active in identification of roles of the employees and providing direction to them.

Goal Setting

As far as goal setting is concerned, it is clear from the table-1 that P-value is greater than the table value 0.05. This rejects the null hypothesis. The corporations provide an opportunity to the employees in setting their individual goals. This system encourages employees to participate in work situations. It encourages the human resource manager to make the job situations interesting. Apart from this, employees become more creative, alert and committed to achieve goals. Table-2 shows that the majority of the industries belonging to different sectors score mean ranking above the overall average level, which indicates that companies are showing good interest in setting employees' goals as a practice of performance appraisal management. Advertisement industries score least mean ranking

i.e. 1.80 which reveals that these units are not paying due attention to goal setting practice. The finding of the study shows that the value of goal setting practice is recognized by the MNCs.

Performance Plans

Table-1 reveals that P-value is 0.19, which is more than the table value 0.05, and thus the null hypothesis is rejected. This means that there is an inbuilt mechanism for preparing performance plans every year by multinational industries. These plans play a pivotal role in giving direction to the employees and their superiors. Performance plans, in essence, are standards, which help the management to measure the output of the employees. This also helps in making corrections in case of deviations from already set plans. Table-2 shows that Advertisement units got least mean ranking (2.00) whereas Drug and Pharmaceutical and Consultancy corporations got the highest mean ranking (3.80). Considering the population view, majority of the corporations do not differ significantly in this regard.

Performance and Targets

It is evident from the table-1 that obtained P-value for performance and targets practice is 0.72, which is more than the table value and thus rejects the null hypothesis. It can be concluded that line managers of the corporations discuss the output and targets with their subordinates. This system is effective for achievement of targets in the organizations. Table-2 exhibits that Information Technology industry has the highest mean ranking (3.20) whereas Advertisement and Automobile industries have the lowest mean ranking (2.20). The mean ranking score of this practice indicates moderate interest of the corporations. The result shows that, at certain times, the managers may not like to discuss with the employees the targets being set for their jobs.

Self-Appraisal

Table-1 shows that the P-value to the self-appraisal practice is 0.61, which is more than the table value 0.05, which rejects the null hypothesis. This means that employees of corporation have opportunities to review and analyze their performance themselves. This helps the employees to get an opportunity to grow, to realize their potential and let them devise their own approaches for problem solving. This will result in enhancing the mutual trust between

subordinates and superiors. It is clear from table 2 that organizations are scoring mean ranking more than above average ranking level (2.74) and some of these are near the excellent positions, which indicates that companies provide healthy environment to their employees to analyze and review their performance in doing their jobs. The results show that self-appraisal is well-recognized practice in the multinational corporations.

Communication

Communication is the lifeline of any business organization. There is need for proper communication in organizations about policy, plans, objectives and job related issues etc. Communication system helps in developing better understanding, mutuality and trust between the appraisee and appraiser in the organization. This also helps in the clarification of roles and accountability. This is supported by the results given in table-1 which shows that P-value 0.25 is greater than the table value 0.05. It does not accept the null hypothesis. Table-2 reveals that Information Technology industry score highest mean ranking i.e. 3.40, whereas Automobile industry scored least mean ranking of 2.00. The results reveal that there is good flow of communication across the functions and levels of the organization.

Employees and Information

Multinational Corporations keep their employees well informed regarding the policies, plans, objectives and day-to-day functioning of the organization. A good flow of information helps the employees to understand the direction in which the organization is moving as well as enhance the skills of the employees for problem solving. It is supported by the P-value i.e. 0.22 is greater than the table value 0.05 which rejects the null hypothesis. Table-2 reveals that corporations representing various sectors secure mean ranking more or less near to average level ranking 2.77. The findings show that this practice is not much prevalent in MNCs.

Interactions

Table 1 clearly indicates that the P-value is 0.098 which is greater than the table value 0.05. This rejects the null hypothesis. It highlights that there is a system for employees to meet senior managers. This system supports the openness in the organization and fosters trust of subordinates in their seniors. It

provides space for discussion; consultation and exchange of opinions among employees. It promotes high team spirit and cooperation between seniors and subordinates in the organization. Table 2 shows that banks give the highest mean ranking i.e. 3.60 to this practice, whereas Automobile industry scores the lowest mean ranking i.e. 2.00. The results reveal that this practice is prevalent in the MNCs.

Communication Infrastructure

Table 1 shows that the P-value of this practice is 0.07 which is greater than the table value 0.05 which rejects the null hypothesis. It shows that corporations are careful to have good communication infrastructure in their organizations. Communication makes the things happen and smoothens the channels of information to provide information as and when required at a particular point or place. In a dynamic environment, it is crucial that industries keep updating their communication infrastructure in order to meet the challenges effectively in the business world. It is also observed from table 2 that Banking industries score high mean ranking 3.60 while Advertisement industry scores least mean ranking 2.00. Overall, it is evident that multinational corporations are reorienting communication infrastructure continuously.

Company Image

From the table-1, it is clear that P-value is 0.83, which is higher than the table value 0.05. It rejects the null hypothesis. It reveals that sample industry considers the company image as a very important practice of performance management. It reflects the culture and goodwill of the company to the shareholders, creditors, government and customers, etc. The company image plays an important role in making a place in business world. Table 2 shows that banks have the highest mean ranking 3.60 whereas Advertisement, Rubber and Automobile corporations give least mean ranking 2.60. The management of the corporations is recognizing company image as an important practice.

Performance Differentiation

Table 1 shows that calculated P-value is 0.25 which is greater than the table value 0.05. Thus, it rejects the null hypothesis. It is evident from the table that the system provides an opportunity to differentiate

the superior performance from moderate to low performance. One of the main objectives of the performance appraisal system is to differentiate the superior performance from moderate to low performance. Table 2 reveals that majority of the multinational corporations score higher mean ranking to average mean ranking (2.64). It shows that corporations recognize the value of performance differentiation practice in their organizations.

Employee Autonomy

Table 1 exhibit that the P-value 0.30 is more than the table value 0.05 which rejects the null hypothesis. This highlights that in the investigated industries, employees are empowered to take decisions in relation to performing their jobs. Employee autonomy makes them more responsible and loyal to organization because they feel their involvement in decision-making. Multinational corporations believe in giving freedom to employees to take routine decisions. The item 15 of table 2 depicts that corporations representing various industries are near to average mean ranking i.e. 2.68. This indicates that management of these industries are recognising employees autonomy practice in their organizations.

Delegation

Delegation of authority is a very important tool to empower the employees. Subordinates become more responsible and dedicated to their work and they feel proud of being given authority. It helps in developing subordinates as potential leaders. This is supported by the results that P-value 0.28 is greater than the table value 0.05. It rejects the null hypothesis. It is observed from table 2 that Banking industry gives highest mean ranking to delegation practice of performance management. It shows that delegation of authority moves from top level to lower level in banks. The result shows that multinational corporations recognize the value of delegation practice.

Role Models

It is evident from the table that P-value for role models practice is 0.14, which is greater than the table value 0.05 which rejects the null hypothesis. This indicates that their senior managers in the investigated multinational industries are perceived by subordinates as role models. With this knowledge,

senior managers are expected to be better individuals in the organization. Since subordinates respect and admire their role models, this will lead to healthy working environment and better interpersonal relations. The information technology industry scores highest mean ranking 3.00 whereas automobiles industry gives least mean ranking to this practice. It is evident from the analysis that this practice is prevalent and exercised in the corporations.

Employee Participation

From Table-1, it is observed that management of the multinational motivates employees' participation in organization's decision making in order to get their support and commitment. This creates a sense of belongingness, team spirit and commitment to organizational goals. Participation of the employees in decision making morally binds them to help in successful implementation of the policy and plans. Other industries such as Hitachi, Pepsi, Coca Cola and Motorola, etc. shows more concern to promote employee participation in management decisions whereas Advertising and Automobile industry are giving least importance to this practice.

Total Quality

Table 1 shows that the calculated P-value of the total quality practice is 0.06. This value is higher than the table value 0.05. It rejects the null hypothesis. It indicates that there exists a total quality system in the multinational corporations. It integrates all the functions and processes of management within organization in the rapidly growing global environment of business. These organizations believe that total quality is important key to sustain success. It suggests that multinational corporations not only want to survive but also grow in competition. The Drug and Pharma companies gave higher mean ranking to total quality i.e. 3.40. Rubber and Tube industry gave lowest mean ranking to this practice i.e. 2.00. The mean score for item 19 is very near to excellent mark (2.74) which shows that multinational corporations are following this practice in their organisations.

Work quality

It is observed from the table that P-value (0.064) of this variable is greater than the table value 0.05. Thus, null hypothesis is rejected. The results of the study reveal that management of the multinational corporations are very active in maintaining and

improving the quality of work of the employees. Corporations encourage situation where employees feel sense of pride in quality of work which they perform. The management of the industries are putting sincere efforts to promote the work culture in the employees. Table 2 shows that Information Technology Corporations give highest mean ranking 3.40 to this practice, whereas Advertisement corporations give least mean ranking 1.80. Mean ranking scored by other remaining corporations is near to average level ranking, i.e. 2.84. The result of the study reveals that Multinational Corporations recognize the value of this practice in their respective organizations.

Conclusions and Suggestions

From the results of the above study, it is evident that multinational corporations have recognized the importance and need to apply the performance management practices in their respective organizations. It is also observed that there is a variation in the recognition of the values of performance management practices among multinationals. It is found that performance plan practice followed by company image and communication practices have higher average mean ranking (3.05, 2.98 and 2.95) in comparison to other performance management practices. This indicates that performance standards, good-will of the company and smooth flow of communication are properly recognized and actively followed by management of multinationals. Employees' participation practice followed by delegation and people identification practices scored lower average mean ranking (2.37, 2.9 and 2.50). These Multinational companies have not given much consideration to these practices. One of the reasons for the variations may be that the adoption of performance management practices is contingent on the specific requirements of each multinational. However, there is scope of improvement and updating these practices in order to have better human resource management. Further, inter-industry comparisons of performance management practices reveal that consultancy industry and cargo industry have given more attention to performance management practices in comparison to other industries. They have secured higher average mean ranking (3.08 and 2.95). Advertisement industry and

automobile industry are not much enthusiastic about recognizing the value of performance management practices. These companies secured lower average mean ranking in comparison to other corporations.

There are significant changes taking place in work organizations such as outsourcing of core operations, re-allocation of work, greater autonomy to business units, adoption of project based forms of work and matrix management structures. All of these have significant impact on the performance of management systems. Management of the MNCs has to make considered efforts to develop and continuously update the performance management practices in the light of corporate objectives and policies. This study will also help to develop comprehensive database and index for human resource practices in order to establish standards in terms of the scope of terminologies used and their implications.

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Table - 1
Performance Management Practices

Practices	Measurement Indicators	Code								Statistical Test Parameters	
		Banks	Advert	Infortec	Rubber/Drugs/ Type Pharm	Cargo	Consul- tancy	Auto- mobiles	other		
Career Paths	1=Not True	0	2	1	1	1	1	0	1	2	N=50 $c^2 = 29.4$ DF = 24 P.Value= 0.21
	2=Partly True	3	2	2	0	2	0	1	0	2	
	3=True	1	1	1	3	0	0	3	3	3	
	4=Very True	1	0	1	1	2	4	1	1	0	
People Identifi- cation and Motivation	1=Not True	0	3	1	2	1	0	0	3	1	N=50 $c^2 = 24$ DF = 24 P.Value= 0.46
	2=Partly True	3	1	1	0	1	1	2	2	2	
	3=True	1	1	1	2	2	1	2	0	1	
	4=Very True	1	0	2	1	1	3	1	0	3	
Key Area of Performance Identification	1=Not True	0	2	0	1	0	0	0	0	1	N=50 $c^2 = 33.63$ DF = 24 P.Value= 0.091
	2=Partly True	0	1	1	2	2	1	1	4	3	
	3=True	3	2	3	1	1	0	1	1	3	
	4=Very True	2	0	1	1	2	4	3	0	0	
Role Clarity and Direction	1=Not True	0	3	0	1	1	1	0	1	0	N=50 $c^2 = 33.73$ DF = 24 P.Value= 0.89
	2=Partly True	1	0	2	1	2	1	1	3	5	
	3=True	4	1	2	2	2	0	2	1	2	
	4=Very True	0	1	1	1	0	3	2	0	0	
Goal Setting	1=Not True	0	3	0	1	0	0	0	1	0	N=50 $c^2 = 35.77$ DF = 24 P.Value = 0.058
	2=Partly True	2	0	1	0	2	2	2	3	4	
	3=True	1	2	3	4	1	1	1	1	3	
	4=Very True	2	0	1	0	2	2	2	0	0	
Performance Plans	1=Not True	1	2	0	0	0	0	0	1	1	N=50 $c^2 = 29.63$ DF = 24 P.Value = 0.19
	2=Partly True	0	1	0	1	0	1	0	1	2	
	3=True	1	2	4	3	1	1	1	2	4	
	4=Very True	3	0	1	1	4	3	4	1	0	
Performance and Targets	1=Not True	0	2	0	1	0	1	0	1	0	N=50 $c^2 = 19.51$ DF = 24 P.Value = 0.72
	2=Partly True	1	1	0	0	1	1	2	2	2	
	3=True	4	1	4	3	3	2	1	2	4	
	4=Very True	0	1	1	1	1	1	2	0	1	
Self-Appraisal	1=Not True	0	2	1	0	1	1	0	0	0	N=50 $c^2 = 21.33$ DF = 24 P.Value = 0.61
	2=Partly True	2	1	0	0	1	0	1	3	2	
	3=True	1	1	2	4	1	2	2	1	3	
	4=Very True	2	1	2	1	2	2	2	1	2	
Communication	1=Not True	0	1	0	0	1	1	0	1	1	N=50 $c^2 = 28.09$ DF = 24 P.Value = 0.25
	2=Partly True	2	1	0	0	0	0	0	3	0	
	3=True	2	3	3	4	2	2	2	1	3	
	4=Very True	1	0	2	1	2	2	3	0	3	
Employees and Information	1=Not True	0	2	0	0	0	0	0	0	1	N=50 $c^2 = 28.77$ DF = 24 P.Value = 0.22
	2=Partly True	3	1	1	0	1	1	2	4	2	
	3=True	2	2	3	4	2	2	1	1	2	
	4=Very True	0	0	1	1	2	2	2	0	2	
Interactions	1=Not True	0	3	0	1	0	1	0	2	0	N=50 $c^2 = 33.31$ DF = 24 P.Value = 0.98
	2=Partly True	0	0	0	1	2	2	3	1	2	
	3=True	2	1	4	3	2	1	0	2	2	
	4=Very True	3	1	1	0	1	1	2	0	3	

Communication Infrastructure	1=Not True	0	3	0	1	1	0	1	1	0	N=50 c ² = 27.60 DF = 24 P.Value = 0.27
	2=Partly True	0	0	2	1	0	2	1	1	3	
	3=True	2	1	3	3	2	2	1	3	3	
	4=Very True	3	1	0	0	2	1	2	0	1	
Company Image	1=Not True	0	1	0	1	1	0	0	0	1	N=50 c ² = 17.29 DF = 24 P.Value = 0.83
	2=Partly True	0	2	1	1	1	1	1	2	4	
	3=True	2	0	1	2	2	2	2	2	0	
	4=Very True	3	2	3	1	1	2	2	1	2	
Performance Differentiation	1=Not True	0	1	0	0	0	1	0	0	0	N=50 c ² = 28.07 DF = 24 P.Value = 0.25
	2=Partly True	1	3	1	3	4	1	1	2	3	
	3=True	4	1	3	2	0	1	2	3	4	
	4=Very True	0	0	1	0	1	2	2	0	0	
Employees Autonomy	1=Not True	1	0	0	0	1	1	0	2	0	N=50 c ² = 26.90 DF = 24 P.Value = 0.30
	2=Partly True	2	3	2	0	1	0	2	2	1	
	3=True	0	1	3	4	3	3	1	1	4	
	4=Very True	2	1	0	1	0	1	2	0	2	
Delegation	1=Not True	0	3	0	1	1	1	0	0	0	N=50 c ² = 27.37 DF = 24 P.Value = 0.28
	2=Partly True	1	0	2	1	2	0	1	2	3	
	3=True	3	2	3	3	1	3	2	3	4	
	4=Very True	1	0	0	0	1	1	2	0	0	
Role Models	1=Not True	0	1	0	1	1	1	1	1	0	N=50 c ² = 31.31 DF = 24 P.Value = 0.14
	2=Partly True	5	1	1	1	2	1	0	4	3	
	3=True	0	3	3	3	0	1	2	0	2	
	4=Very True	0	0	1	0	2	2	2	0	2	
Employees' Participation	1=Not True	0	2	0	0	1	0	1	2	0	N=50 c ² = 37.78 DF = 24 P.Value = 0.036
	2=Partly True	5	3	2	3	1	3	2	3	1	
	3=True	0	0	3	2	2	0	0	0	4	
	4=Very True	0	0	0	0	1	2	2	0	2	
Total Quality	1=Not True	0	3	0	2	1	2	0	1	0	N=50 c ² = 37.62 DF = 24 P.Value = 0.06
	2=Partly True	3	2	0	0	0	1	2	1	1	
	3=True	1	0	5	2	3	0	1	1	4	
	4=Very True	1	0	0	1	1	2	2	2	2	
Work Quality	1=Not True	0	2	0	1	0	2	0	1	0	N=50 c ² = 35.31 DF = 24 P.Value = 0.064
	2=Partly True	3	2	0	0	0	0	3	0	2	
	3=True	2	1	3	3	1	1	0	2	3	
	4=Very True	0	0	2	1	4	2	2	2	2	

Table - 2
Mean Ranking Scores of the Responses to Statements on
Performance Management

Practices	Banks	Advert	Infotec	Rubber/ Type	Drugs/ Pharm	Cargo	Consul- tancy	Auto- mobiles	other	Average
Career Paths	2.60	1.80	2.40	2.80	2.60	3.40	3.00	2.80	2.14	2.62
People Identification and Motivation	2.60	1.60	2.80	2.40	2.60	3.40	2.80	1.40	2.86	2.50
Key Area of Performance Identification	3.60	2.00	3.00	2.40	3.00	3.60	3.40	2.20	2.29	2.83
Role Clarity and Direction	2.80	2.00	2.80	2.60	2.20	3.00	3.20	2.00	2.29	2.54
Goal Setting	3.00	1.80	3.00	2.60	3.00	3.00	3.00	2.00	2.43	2.65
Performance Plans	3.20	2.00	3.20	3.00	3.80	3.40	3.80	2.60	2.43	3.05
Performance and Targets	2.80	2.20	3.20	2.80	3.00	2.60	3.00	2.20	2.86	2.74
Self-Appraisal	3.00	2.20	3.00	3.20	2.80	3.00	3.20	2.40	3.00	2.87
Communication	2.80	2.40	3.40	3.20	3.00	3.00	3.60	2.00	3.14	2.95
Employees and Information	2.40	2.00	3.00	3.20	3.20	3.20	3.00	2.20	2.71	2.77
Interactions	3.60	2.20	3.20	2.40	2.80	2.40	2.80	2.00	3.14	2.73
Communication Infrastructure	3.60	2.00	2.60	2.40	3.00	2.80	2.80	2.40	2.71	2.70
Company Image	3.60	2.60	3.40	2.60	2.60	3.20	3.20	2.80	2.80	2.98
Performance Differentiation	2.80	2.00	3.00	2.40	2.40	2.80	3.20	2.60	2.57	2.64
Employees Autonomy	2.60	2.60	2.60	3.20	2.40	2.80	3.00	1.80	3.14	2.68
Delegation	3.00	1.80	2.60	2.40	2.40	2.80	3.20	1.60	2.57	2.49
Role Models	2.00	2.40	3.00	2.40	2.60	2.80	3.00	1.80	2.86	2.54
Employees Participation	2.00	1.60	2.60	2.40	2.60	2.80	2.60	1.60	3.14	2.37
Total Quality	2.60	2.40	3.00	2.00	3.40	2.40	3.00	2.80	3.10	2.74
Work Quality	2.40	1.80	3.40	2.80	3.80	2.60	2.80	3.00	3.00	2.84
Average	2.85	2.07	2.96	2.66	2.86	2.95	3.08	2.21	2.759	2.7115

Linkage of Spirituality and Workplace Management: A Review and Propositions

Ashish Pandey*, Prof Rajen K Gupta** and Nisha Pandey***

In the form of corporate spirituality, corporate world is able to find a humane alternative to mindless commercialism without losing profitability. There already appears to be a substantial shift in field of economics from utilitarianism to ethics of care in the context of relationship amongst economy, society and ecology. This paper synthesizes similar thoughts proposed in management and social economics literature and presents it in the form of an integrative model. The paper aims at conceptualizing Indian model of workplace spirituality based on its ancient wisdom tradition.

'Srunvantu serve amritasya putrah'

Hear, ye children of immortality.....

Call to mankind from Upanishad

Spiritual quest is an existential and eternal quest of human beings and acts as an anchor of human consciousness. Search for the meaning of life and existence is an exclusively human quest (Lynda Gratton, 2004). Nobel laureate poet of India Gurudev Rabindranath Tagore presents it in different way and says that there is 'surplus in human being'. The term 'surplus in man' signifies that man has a feeling that he is truly represented in something that exceeds his apparent terrestrial being (Matilal, 2002). This inherent existential quest makes the foundation for further evolution of human consciousness. Mary Parker and Maslow made powerful connection between self-actualization and work in organizational setting. Maslow(1970) in his discourse on self-actualization states that it is the ultimate need of human being that denote towards complete intellectual, emotional, and spiritual fulfillment. According to him, self-actualization is simply a "by product of self actualizing work and self actualizing duty." According to Follet (1918), when human beings work together in organization harmoniously with their talent and in spite of their distinctiveness, in interdependent and interconnected way, it is witness to a visible manifestation of "God".

At the individual level spirituality is defined as inner and meaningful life, deeply intuitive sense of relatedness, being connected with one's complete self, consciousness and its evolution and manifestation of such inner state in behaviour of individual (Freshman, (1999), Mitroff and Denton (1999), Eckersley, (2000), Ashmos and Duchon (2000), Emmons, (2000). Guillory (2000) Kale and Srivastava, (2002), Piedmont and MacDonald (2000) have proposed the upgradation of "Big Five" model of personality of Digman (1990) and to a 'spirituality' as sixth personality actor.

In the context of job, spirituality is how one feels about one's work-whether it is just a job or is a calling. Organizational spirituality represents a specific form of work feeling that energizes action. Inspired action involves transcendence- a sense of purpose that transcends the instrumentality associated with reasoned action (Dehler and Welsh 1994). Spirituality enables businesspersons to gain better perspective for their surroundings and themselves and provides stable and helpful vision. Values like Benevolence, Integrity, Justice, Mutuality, Receptivity, Respect, Responsibility are tested empirically and their positive impact on employee

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attitude, commitment, creativity, job satisfaction or loyalty, are found worldwide. (Giacalone and Jurkiewicz, 2004).

Workplace spirituality has been defined (Giacalone and Jurkiewicz, 2003) as a framework of organizational values evidenced in the culture that promote employees' experience of transcendence through the work process, facilitating their sense of being connected to others in a way that provides feeling of completeness and joy. In the context of workplace, spirituality at work also appears in the way of learning, development, and enhanced creativity (Freshman 1999).

In "Spiritual Audit of Corporate America" thirst and receptivity of the American corporate world towards transcendental aspects of life is coming out very emphatically (Mitroff and Denton, 1999). Because of growing concern towards the spiritual aspects of life in management academia, human spirit has not remained a black box. In "Spirited Leading and Learning", Vaill (1998) claims work as an 'inherently spiritual endeavor'. Rising interest in this area in general and integration of spirituality in business organization in particular is evident looking at current bestsellers like Coombs's book, "The Living Workplace: Soul, Spirit and Success in the 21st Century" (Wicken, Macqueen, McClelland, 2001), and "Purpose-Driven Life" by Rick Warren. Pfeiffer manual of training and consultancy has brought out its 2004 issue on the theme of inside-out fitness. A worldwide international survey in 1992 confirms the view that people are striving for meaning in their work. Two third of the respondents expressed a desire to become part of that organization in which new thinking and humanistic values in the workplace are given importance and recognition (Jennifer and Laabs 1995). Ann Coombs had detected a change in workplace attitudes. This Toronto based corporate consultant noted that employees were making new demands more concerned with quality of life than money or stock options in professional/personal life. Quality of life here includes the desire for a spiritually sustaining environment.

In fact internal life, transcendental experiences, or Tagore's 'surplus in human being' are very inherent dimensions of individual self about which McDonald (1997) writes that when one is in touch with that

core and guides his behavior according to this centre, one acts genuinely as one can. This awareness is the strong anchor to understand, respect and concern for others and deep faith towards our own transcendental being. Coveys' principle centered personality, transformational leadership, or Greenfield's servant leadership or Collins' level five leadership is directed towards this intact core of individual. On the foundation of same construct of sacredness within the very nature of human being and civilization, Gupta (1996) proposes that there is a place of sacred in the business organizations also. This study aimed at examining the way individual level spiritual awareness translates into group and organizational level and manifest itself.

Research in the manifestation of spirituality in the organization is done in the form of empirical study of interplay of certain variable (mostly values) and their impact on certain phenomenon (like firm profit, commitment etc.). Such findings have been quoted later in this paper. Perhaps the most debated area in the workplace spirituality in management academics is, about the methodology of research in this area. Strongly advocated by Giacalone and Jurkiewicz (2003), that it is only through scientific measurement that workplace spirituality and performance related conclusion could be validated that can satisfy both practitioners and scholarly audiences. On the other hand, there are proponents of interpretive approach of knowledge creation like Krahnke (2003) who quotes, Peter Senge that it is precisely immeasurable that we most deeply care about. Spirituality being a dimension to subjective reality of human beings cannot be precisely represented through numbers, tables and coefficients.

Integration of business and spirituality

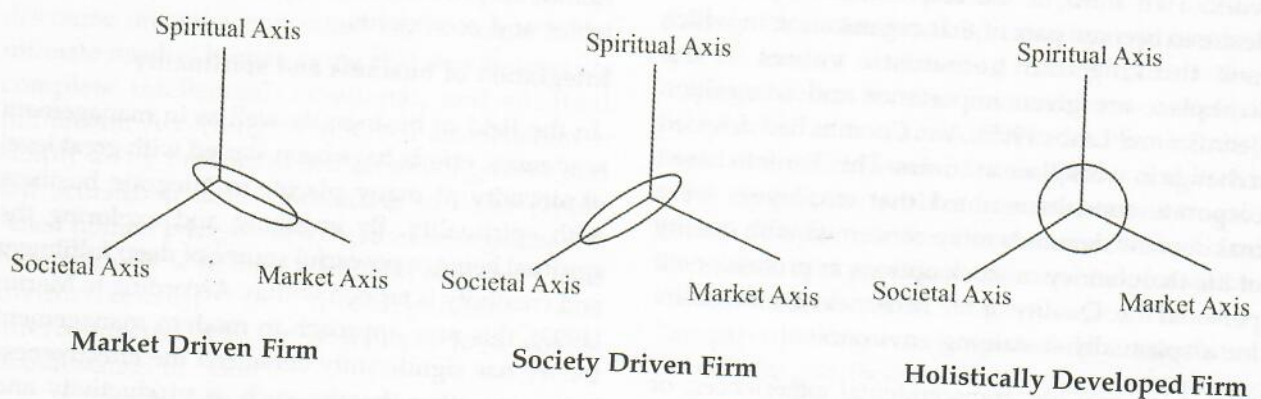
In the field of business as well as in management academics, efforts have been started with great level of sincerity at many places, to integrate business with spirituality. By engaging and exploring the spiritual being, a powerful source of deep fulfilment and creativity is tapped within. According to Martin (1993), this new approach in modern management theory has significantly enhanced the effectiveness like some other theories such as productivity and quality improvement, human motivation, teamwork and systems perspectives. This change is not

outrageously utopian. There already appears to be substantial shift in the field of economics from utilitarianism to ethic of care in the context of relationship amongst economy, society and ecology (O'Hara 1998). In the form of corporate spirituality, corporate world is able to find one humane alternative to mindless commercialism without losing profitability (Khandwala 2004). Block (1993) argues for making it palatable for contemporary business world for serving the higher order purpose of societal interconnectedness and selfless leadership model. Gupta (2004) states that profit with a purpose larger than one's narrow self interest is the best guarantee for long term peace, stability, and social cohesion, and is fundamentally necessary for corporations to pursue their business unhindered. A Harvard Business School study examined ten companies with strong corporate cultures (spirited workplaces) and ten with weak corporate cultures amongst leading corporations. In eleven years time, very significant correlation was found between organizational spirited culture and profitability. Similar results are found in a study at Vanderbilt University (Thompson 2000). In an article on spirituality and profitability, Corinne McLaughlin has been quoted as saying that there are many examples of increased productivity and profitability.

Positive impact of spirited culture can be understood in organizational learning. At the organizational level another aspect which has been studied, is change

management which is related to organizational learning also. Porras and Silvers (1991) differentiate between two types of change: organizational development and organization transformation. Organization transformation happens at deeper level in the organization than those traditionally targeted change by OD. In organization transformation, spirituality is invoked through vision, transformational leadership and intrinsic motivation (Dehler and Welsh 1994). A hypothetical positive linkage is drawn between emotional intelligence and above mentioned spirituality competence and identified that those who grow in spirituality, tend to grow in personal and social level emotional intelligence skills (Tischler, Biberman and McKeage 2002).

Calkins (1992) proposed three axes on which social well being rests. Drawing on research findings discussed above and Calkins framework of well being, we would like to propose new framework for thinking about manifestation of individual spirituality at organization level. We identify three axes on which corporations work. These are market axis, social axis and spiritual axis. Till the recent past, majority of business organizations were working on two axes: material axis and social axis. But in the form of spirituality business, organization have found the third axis to operate on for holistic development.



Material axis pertains to organization relationship with its natural resources and material wealth. Material wealth is related to profitability and market value of the firm. Generation of market capital is the outcome of operations of the firm on this axis. The dynamic optimum on this axis results from outcome of investment of material resources and shareholder's money.

Social axis pertains to the relationship among employees and the firm's relations with the community. Social wealth refers to solidarity amongst organizational members and organization reputation within society. Generation of social wealth largely depends on sound HR policies and performing corporate social responsibility.

Balanced scorecard approach, propounded by Norton and Kaplan, incorporates this aspect of organizational performance including previous one.

Finally, the vertical, spiritual axis links men to divine impulse or inner consciousness. For most of the religions, cultures and civilizations, it is the purpose of individual and collective existence. We cannot position any optimum on this axis. This is an expression of what is most eternal and everlasting within human self individually or collectively.

To operate on different axes, firms rely on different kinds of intelligence. The primary human faculty used in material development is the logical intelligence and logical reasoning. This human faculty can be accessed through IQ. This intelligence is the basis of competence of working with tools and machines. Some important features of logical intelligence are differentiation, discrimination, and

accumulation. Primary human faculty used in societal development is emotional intelligence. This is represented by EQ, the emotional quotient. This shows the affective competence of people to relate with others and to be aware about their mind. At the organizational level, it can be assessed through social responsiveness of the firm. Primary human faculty, used in spiritual development, is spiritual intelligence. This intelligence refers to continuous self-renewal and evolutions of consciousness. At the organizational level, it is expressed in the form of enhanced organizational learning, ability to transform and evolve at higher level of collective consciences. Different human faculties and objectives aim at different perspectives of organizational performance that in turn appears in different organizational characteristics. We are a species searching the ideals of truth (science), beauty (aesthetics), good (ethics and philosophy), plenty (economics) and justice (Ackoff, 1981). IQ or rational intelligence is mainly related to science and economics and works more in efficiency paradigm. EQ or emotional intelligence is mainly related to good and justice. This is the faculty mainly concerned with ensuring equity within the organization and its larger role in society. SQ is related self-awareness and unity. This the faculty to ensure the individual, society or organization to maintain the economical and social pursuits in a balanced way and this ensures the equilibrium within the organization. On the basis of above discussion, the following model is proposed to present the integrative view of organizational objectives, different human faculties and their outcome at organizational level:

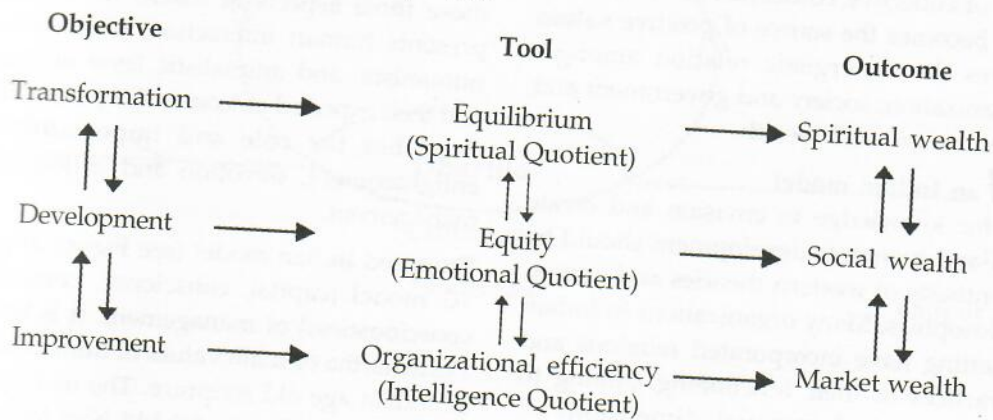


Figure 1 : Integrative Model of Organizational evolution

Wealth creation is the primary objective of business fraternity. But thought leaders across the different streams in management and economics are in search of dimensions of wealth that can pave the pathway of holistic development of mankind. Adam Smith, an economic philosopher, talked about the equity concept and morality in economics. He propounded the idea that the greater good of greatest number is effectively served by the invisible hands of self-interest. Milton Freedman after several arguments cited accepted the social responsibility of any business organization, and stated that profit maximization should be attempted within the legal framework and subject to broad social and ethical norms. Business world has been guided by these principles generally in last two centuries of modern history. Now beyond the rules, norms and ethics, it is spiritual values and spiritual understanding within the organization as well as outside the organization that can open up new vistas and, moreover, impart new meaning to the term of wealth creation. It will be helpful in harmonization of business relations and personal relations. From productivity and economic point of view, after incorporating spiritual values in the workplace, persons rate smooth environment and job satisfaction to a higher extent which are strongly helpful in maximization of market wealth and social wealth. IQ, EQ and SQ are the important tools for generating market wealth, social wealth and spiritual wealth. These outcomes are the result of improvement, development and transformation of one's internal and external qualities, which place an organization at a higher platform of collective consciousness. Higher level of collective consciousness within the organization becomes the source of positive values and facilitates the synergistic relation amongst business organization, society and government and this is termed as spiritual wealth.

In search of an Indian model

The search for knowledge to envision and create better social and economic development should be based on synthesis of western theories and eastern age-old philosophies. Many organizations in Indian industrial setting have incorporated religious and spiritual practices in their functioning, aiming to achieve integration of spiritual dimensions of individual life and organizational life. Many of them

send their executives for programs like art of living, Vipasyana, etc. At academic level, models and work plans are proposed for presenting the integrative reality of spirituality and business. In the Indian cultural perspective, integration of business and spirituality is presented in the work of Swami Ranganathananda. He draws the lead from Upanishads and Bhagwad Gita and proposes the management perspective in light of karmyoga and other yogic ideals. 'Giving model of motivation' of Chakraborty (1993) takes the lead from five rinas (debts) on a individual described in Indian culture and gives a different paradigm of looking at motivation. It defines motivation in terms of paying back the rina towards society instead of seeking gratification in consuming and possessing more and more goods, affluence or position. 'Rajarishi model of leadership', another model propounded by Chakraborty, is based on 'detached involvement' proposition presented in Bhagwad Gita. Gupta's work in the form of monograph titled, 'Management by consciousness', attempts to shift the paradigm of management thinking from physical/terrestrial level to spiritual/consciousness level. Wakhlu's work on leadership in management is also grounded in spirituality and awareness. In his book, "Managing by Heart", he uses mainly Indian cultural metaphors for presenting his ideas. He advocates a new and holistic paradigm integrating the three I's of Insight, Integration and Inspired Action. Sharma (1996) in his book, "Eastern Windows Western Doors", presents many conceptual frameworks which integrate economic, social and spiritual aspects of corporate world. OSHA model and Corporate VEDA are his most famous frameworks, which juxtapose these three aspects at macro level. OSHA model presents human interaction at oneness, spiritual, humanistic and animalistic level of consciousness and their expected outcomes. Corporate VEDA model describes the role and importance of vision, enlightenment, devotion and action in corporate management.

Proposed Indian model (see Figure 2) is termed as 4C model (capital, conscience, consumption and consciousness) of management. It is based on four Purushartha or main values of human life presented in Indian age old scripture. The main pillars of the Vedic philosophy are (a) Idd Nan Mmam, nothing

...self, all for society, (b) Rta which literally means divine Laws, are the cosmic laws of social, moral and physical order, (c) Trinity of values-dharma, artha and kama, and (d) four purushartha which comprehensively cover trinity of values (trivarga) and moksha-perfect bliss (Sublok, 2002). Vedic dharma is just not a theology, but covers morals of the individuals ethics for society and creation of material wealth for mankind. The Vedas do not advise any creed or cult but good and virtuous conduct and evolution of human consciousness for holistic development of individuals and society. Vedic philosophy aims at social, spiritual, and moral ethics apart from the natural ethics of materialism.

Purushartha in Sanskrit means human wealth or purpose. These are four pursuits in which human beings may legitimately engage, also called chaturvarga, four-fold good. Dharma refers to righteous living. Dharma in its vedic sense is the

fulfilment of virtue, noble deeds duties and responsibilities, restraints and observances—performing one's part in the service and upliftment of society. Artha means material welfare and abundance, money, property, possessions. Kama refers to pleasure, love, and enjoyment. Earthly love, aesthetic and cultural fulfillment, pleasures of the world (including sexual), the joys of family and society, enjoyment of happiness, security, creativity, usefulness and inspiration. Dharma is of four primary forms. Moksha is realization of the Self God, the unitary non dual consciousness. One of the fundamental Vedic proposition is that moksha comes through the fulfillment of dharma, artha and kama.

In this pursuit, dharma (conscience) is the steady guide for artha (capital) and kama (consumption). Artha measures not only riches but also quality of life, providing the personal and social security needed to pursue kama, dharma and moksha.

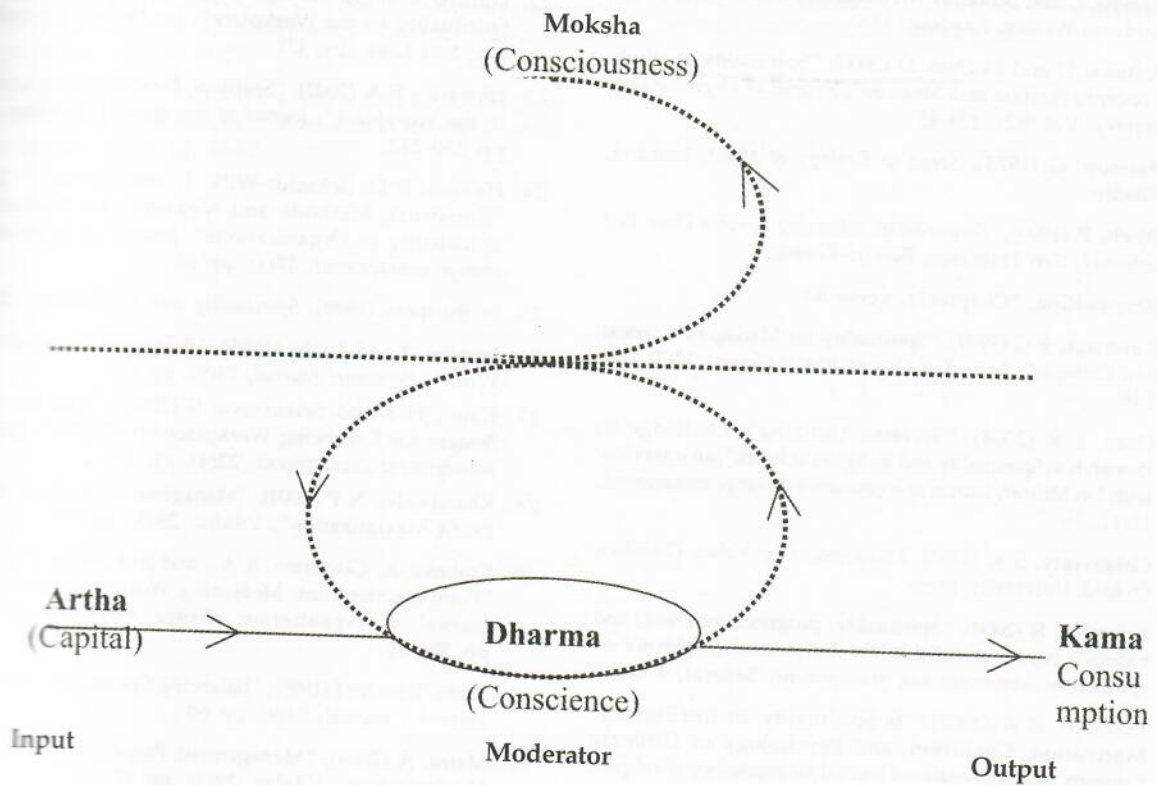


Figure 2 : 4C Model of Management

In this scheme, the main actor of business is not purely rational economic man spiritual man, also indulges in business. Earning material wealth is not to fulfill endless sensory pleasure of gratification of individual ego but for him material wealth or *artha* is a medium to fulfill higher purpose of human life. He would derive his strength not through competition but through constant consciousness integrated with existence. He would operate with abundance mentality. Compassion for him would be an equally important virtue as that of entrepreneurship. In this scheme, not only cost minimization but minimization of human intervention in the natural processes would be equally important concerns. This scheme can provide a platform of evolution of Home economicus to Homo socialicus to Home spiritualicus.

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Knowledge Management Through IPR: An Indian Perspective

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As humanity stands at the threshold of the Knowledge Society, India with its abundant pool of intellectual capital is favourably placed to emerge as a leading nation in the 21st century. But to attain this lofty position, it has to work out effective strategies to manage its knowledge potential to leverage economic and social development. Managing knowledge would entail creating an enabling ambience in the country for knowledge generation and knowledge protection. A system of protecting knowledge would act as an incentive for those engaged in knowledge generation. Assurance of protection and reward would compel more and more knowledge workers to involve themselves in creative thinking, leading to development of technologies resulting in wealth generation, economic growth and societal transformation. As creating and protecting knowledge becomes vital in the emerging scenario, Intellectual Property Rights (IPRs) acquire added significance. IPR can be a potent tool in accelerating the transformation of India into a knowledge power. To capture this unique opportunity, India has to consciously develop a system of nurturing knowledge generation. Such a system would involve a network of knowledge workers, knowledge-producing institutions and knowledge users. India should also considerably step up its R & D expenditure so as to reach the 1% of GDP benchmark. Indian industry should transform itself from an imitative mindset to an innovative one, and integrate R & D into their business strategy. Industry should also come forward and extend its technical, financial and marketing strength to the R & D institutions in taking new ideas to the market place. Knowledge generation, leading to wealth creation and societal transformation, can be sustained only if knowledge is protected and the knowledge creator is suitably rewarded. This is the rationale for evolving a system for protection of intellectual property. By putting in place a TRIPS-compliant IPR protection system, India has expressed its intent to exploit the potential of this system to spur economic growth and social development. Incorporating optimum utilization of IPR into the knowledge management strategies would ensure India's place in the sun in the Knowledge Century.

The 21st century has been christened is the Knowledge Century; the Evolving Human Society, the Knowledge Society etc. Military power and economic power which ruled the roost in the previous century are gradually giving way to 'brain power'. It is the ability of a nation to harness its brain power which will determine its place among the comity of nations in the present century. The product of brain power-knowledge-is increasingly acquiring the status of an indispensable asset which has the potential to accelerate growth. Generating, preserving and utilizing knowledge, will therefore, become the key to a vibrant economy in the coming years.

As a successful economy is one, which uses knowledge as an effective tool for development, creating and protecting knowledge becomes vital in the emerging scenario. This underscores the significance of Intellectual Property Rights (IPRs) which came into the limelight during the Uruguay

Round of GATT, and found inclusion in the final agreement in the form of Trade Related Aspects of Intellectual Property Rights (TRIPS). India being a signatory to the agreement was expected to set its own house in order with respect to legislations and procedures to comply with the requirement of the international IPR regime. During the ten-year transition period of 1995-2004, India struggled to get over its hesitation and doubts, but successfully met the dead-line of December 31, 2004. There are still skeptical noises in various quarters, but there is ample evidence that IPR can be a potent tool in accelerating the transformation of India into a knowledge power-house, which today has become essential to spurring economic growth and social development.

Objectives

This paper is an outcome of a study conducted with the following objectives:

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- To identify the salient features of the evolving knowledge society
- To evaluate India's potential to develop into a knowledge economy
- To examine the role of IPR in knowledge management strategies
- To appraise India's preparedness to exploit the opportunities offered by the new IPRs regime.

The Knowledge Society

Man has traversed through different societies, each with its unique characteristics, to arrive at the threshold of what has come to be called as the Knowledge Society. A superior intellect in comparison to other beings has contributed to generation and dissemination of knowledge to mankind which, in turn, has triggered great inventions and innovations, accelerating the growth of human civilization. In the Agrarian Society, manual labour was the key factor and economic growth was linked to agricultural produce. The Industrial Revolution gave birth to the Industrial Society which was driven by machines and technological development. The advent of the new millennium is witness to knowledge occupying the centre stage and adding new expressions like knowledge society, knowledge economy, knowledge worker etc. to the lexicon. Knowledge becomes the most important resource, making acquisition, possession and application of knowledge of immense significance.

According to the Management Guru, Peter F Drucker, knowledge society is one that is characterized by borderlessness, and where knowledge, instead of capital or labour, is the primary factor of production. Dr. Abdul Kalam identifies the following distinct characteristics of the knowledge society:

- It uses knowledge through all its constituents and endeavours, to empower and enrich its people.
- It uses knowledge as a powerful tool to drive societal transformation.
- It is the society committed to invent and innovate constantly.
- It has the capacity to generate, absorb, disseminate and protect knowledge and also use it to create economic wealth and social good for all its constituents.

The ability to create and maintain an infrastructure that facilitates knowledge creation and knowledge utilization, will be the key to decide the prosperity of the knowledge society (APJ Abdul Kalam et al, 2004)

India and the Knowledge Society

In the new millennium, efficient utilization of the knowledge resource can create comprehensive wealth for a nation and effectively contribute towards economic and social development. India is eminently endowed with all the vital ingredients to be in the vanguard of nations that can be benefited by the knowledge society. India is the home of one of the largest technical manpower pool in the world. It is rich in natural resources waiting to be harnessed. It has an ancient tradition of knowledge creation which got diluted by invasions and colonialisation. India needs to reinvent itself to suit the requirements of the modern day knowledge society. As the developed world is moving over to a society where knowledge is the currency of power and wealth, India should also leverage its assets and advantages to not only match the developed world, but move ahead to be the leader. It is evident that this is already happening in the IT sector. There are more IT engineers in Bangalore than in Silicon Valley, and most of the IT jobs in the USA today are held by Indians. The chances are that Indians could grab the jobs in other knowledge sectors as well. Bio-technology and pharmaceuticals are two sectors where India has started developing knowledge products. These products are making a mark for themselves, not only domestically but also globally.

Knowledge Management Strategies

India is favorably placed to emerge as a leader in the knowledge society. But to attain this lofty position, it has to work out effective strategies to manage its knowledge potential to leverage economic and social development. Managing knowledge would entail creating an enabling ambience in the country for knowledge generation and knowledge protection. A system of protecting knowledge would act as an incentive for those engaged in knowledge generation. Assurance of protection and reward would invite more and more knowledge workers to involve themselves in creative thinking leading to inventions

and innovations, ultimately resulting in upgraded technologies and social well being.

Knowledge Generation

To capture this unique opportunity to transform itself into a knowledge power, India has to consciously develop a system of nurturing knowledge generation. It is through inventions and innovations that knowledge is converted into wealth. Further, innovation is a vital factor in enhancing competitiveness of both service and manufacturing sectors. Hence, there is an urgent need to put in place a system that would involve a network of knowledge workers, knowledge-producing institutions and knowledge users. With such a network, the innovation system can tap the growing

stock of the global pool of knowledge, assimilate and adapt it to local needs and finally create new knowledge and technology. Evolving such a system would hasten India's growth into a global knowledge power. Today, India has, more than 250 universities and many more professional colleges and institutions. It has the world's largest chain of publicly funded R & D institutions. On an average, more than 3,50,000 engineers and 5000 PhD scholars graduate every year in the country. With such a vast reservoir of qualified, English-speaking scientific and technically qualified manpower, India holds the potential of becoming an international hub of research and development activity.

Table-1: Expenditure on R and D (GERD) in billion US\$ PPP and R and D intensity (GERD/GDP).

Regions/Countries	1990		1992		1994		1996/1997		1999/2000	
	GERD	GERD/GDP	GERD	GERD/GDP	GERD	GERD/GDP	GERD	GERD/GDP	GERD	GERD/GDP
World Total	409.8	1.8%	438.7	1.7%	478.5	1.5%	549.7	1.6%	755.1	1.7%
Developed countries	367.9	2.3%	379.7	2.3%	414.2	2.1%	460.4	2.2%	596.7	2.3%
Developing countries	42.0	0.7%	59.0	0.6%	64.3	0.5%	89.3	0.6%	158.4	0.9%
Americas	167.7	2.1%	186.7	2.1%	193.1	1.9%	225.8	2.0%	302.3	2.2%
North America	156.4	2.6%	175.1	2.7%	178.1	2.5%	209.0	2.6%	281.0	2.7%
Latin America & Caribbean	11.3	0.5%	11.5	0.5%	15.0	0.5%	16.8	0.5%	21.3	0.6%
Europe	138.8	1.8%	130.2	1.9%	147.7	1.6%	157.7	1.7%	202.9	1.7%
European Union	101.9	2.0%	117.7	1.9%	128.6	1.8%	137.9	1.9%	174.7	1.9%
Central & Eastern Europe	5.7	1.7%	2.9	1.5%	4.4	0.8%	5.6	0.8%	9.1	0.9%
Community of Independent States (in Europe)	18.9	1.1%	4.1	0.8%	11.8	1.0%	7.6	0.9%	12.8	0.9%
Europe Free Trade Association	12.3	2.2%	5.5	2.3%	2.9	1.8%	6.6	2.3%	6.3	2.1%
Africa	5.2	0.6%	3.6	0.4%	4.2	0.2%	4.3	0.3%	5.8	0.3%
South Africa	2.9	1.0%	1.8	0.6%	1.8	0.6%	2.5	0.7%	3.6	0.8%
Other sub-Saharan Countries	1.9	0.5%	1.1	0.3%	0.5	0.1%	0.6	0.1%	1.1	0.2%
Arab states (in Africa)	0.4	0.3%	0.7	0.5%	1.9	0.2%	1.2	0.2%	1.1	0.2%
Asia	94.2	1.8%	114.2	1.3%	127.5	1.1%	154.8	1.2%	235.6	1.5%
Japan	67.0	3.1%	68.3	2.8%	80.0	2.8%	83.1	2.8%	98.2	2.9%
China	12.4	0.8%	22.2	0.7%	23.3	0.5%	21.1	0.6%	50.3	1.0%
Israel	1.8	2.5%	2.0	2.6%	2.4	2.7%	3.4	3.2%	6.1	4.7%
India	2.5	0.8%	7.1	0.8%	10.1	0.6%	13.2	0.6%	20.0	0.7%
Newly Industrialized Economies (in Asia)	8.2	1.6%	10.7	1.3%	7.3	0.9%	26.7	1.1%	48.2	1.7%
Community of Independent States (in Asia)							0.6	0.4%	0.6	0.3%
Arab States (in Asia)	1.9	0.4%	3.1	0.5%			0.8	0.1%	0.6	0.1%
Other Asia	0.5	0.2%	0.7	0.1%	4.4	0.3%	5.9	0.5%	11.6	1.1%
Oceania	3.9	1.1%	4.1	1.2%	6.0	1.4%	7.2	1.6%	8.5	1.5%

Source: UIS, regional estimations based on UIS data and UNESCO (1993,1995, 1998), World Science Report, Paris, UNESCO Institute for Statistics (2001), The State of Science and Technology in the World, 1996-1997, Paris

Although the above figures when considered in isolation, present an impressive picture, they fade in comparison to global standards. Overall global trends in R & D have recorded an impressive growth as is evident from Table 1. The world expenditure on R & D has almost doubled from US \$410 billion to US \$775 billion in current purchasing power parities (CPI), making it 1.7% of total GDP. But the percentage of developing countries is only 0.9%, which is less than the internationally prescribed target of 1%. Among the major countries of Asia, India is lagging behind. Asia as a whole had spend 1.2% of GDP on R & D in 2000; Japan, 2.9%; China, 1.5% and India 0.7%. This clearly indicates that though the overall R & D expenditure of Asia grew considerably over the decade, India still continues to struggle to meet the 1% of GDP benchmark. R & D activities not only generate knowledge, but also utilize knowledge. If India has to emerge as a knowledge power, investments in R & D need to be considerably stepped up. India has to evolve a sustainable strategy for building up knowledge networks in the country. Specific focus in this regard should be on the following:

- Publicly funded R & D institutions should be networked and nurtured as idea generators and providers of new concepts.
- The R & D institutions should make concerted efforts to undergo a cultural shift by looking at research as a valuable input for business, and, hence, managing it in a business-like manner.
- A greater role should be played by the industry as partners who have the technical, financial and marketing strength to take ideas to the market place.
- Indian industry should transform itself from an imitative mind-set to an innovative mind-set, and integrate R & D into their business strategy.

There are evidences that some of these initiatives are gradually being put in place. Positive results have been envisaged in sectors like IT, Pharmaceuticals and bio-technology. There is increasing recognition of India as an R & D hub. Many MNCs have evinced interest in setting up their R & D centres in India. This augurs well for the country, whose future as a knowledge super-power seems to be a distinct possibility.

Knowledge Protection

Knowledge generation leading to wealth creation and societal transformation can be sustained only if knowledge is protected, and the knowledge creator is suitably rewarded. This is the rationale for evolving a system for protection of intellectual property which was brought into sharp focus by the Uruguay Round of GATT. The agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) lays down the intellectual property rights and their effective enforcement. The intellectual property system refers to the entire gamut of intellectual property laws, procedures, practices and institutions responsible for protecting, administering, enforcing and using intellectual assets for economic, cultural and social progress. India can be credited for recognizing the potential of IPR and taking the first steps, though unsure, towards systematizing knowledge protection. But the basic concept of IPR and its increasing contemporary relevance are issues that are still unknown to a vast majority of the Indian population including, the educated elite. This calls for concerted efforts to spread IPR literacy in the country.

Managing Knowledge through IPR

Concept of IPR

Intellectual property refers to the creations of the human mind, of human intellect. In other words, intellectual property is a 'product of the mind'. The rights granted to the creators of innovative work are known as Intellectual Property Rights. The unauthorised use of intellectual property is an infringement of the rights of the owner.

The convention establishing the World Intellectual Property Organisation, one of the specialised agencies of the United Nations, in 1967, provided that 'intellectual property' shall include rights relating to:

- I) Literary, artistic, and scientific works
- II) Performance of performing artists, phonograms and broadcasts
- III) Inventions in all fields of human endeavour
- IV) Scientific discoveries (no national law or international treaty gives any property rights to scientific discoveries)

- V) Industrial designs
- VI) Protection against unfair competition and all other rights resulting from intellectual activity in the industrial, scientific, literary, or artistic fields.

The intellectual property is protected and governed by appropriate national legislations. The national legislation specifically describes the inventions, which are the subject matter of protection, and those, which are excluded from protection. For example, methods of treatment of the humans or animals by surgery or therapy, inventions whose use would be contrary to law or morality, or inventions which are injurious to public health are excluded from patentability in the Indian legislation.

Intellectual Property Rights include:

- Patents
- Copyright
- Trademarks
- Industrial designs
- Geographical indications
- Trade secrets
- Layout designs of integrated circuits

The different forms of intellectual property are as under:

Patents

Patents provide property rights to inventions. An invention may be defined as a novel idea, which permits in practice the solution of a specific problem. The TRIPS Agreement provides that for an invention to be registered as a patent, it must be:

- New
- Involve an inventive step, and
- Capable of industrial application.

The Agreement further stipulates that countries shall grant patents for inventions in all fields of technology and for both:

- Products, and
- Processes, including those used in manufacturing the products.

Further, patents are to be granted without discrimination as to place of invention and whether products are imported or locally produced.

The product/process which countries are permitted to exclude from patentability are:

- Diagnostic, therapeutic and surgical methods for the treatment of humans and animals
- Plants and animals other than micro-organisms
- Essential biological processes for the production of plants
- Animals other than non-biological and microbiological processes.

However, where a country excludes plant varieties from patentability, it is expected to provide protection under a 'sui generis' system. The system provided by the UPOV Convention on the Protection of New Varieties of Plants can be used for this purpose.

Rights of the Patent Holders

Patents give patent owners exclusive property rights, allowing them to prevent others from using the inventions covered. Manufacturers wishing to use patented inventions must obtain licences or authorizations from the patent owners, who normally will require them to pay royalties.

The term of a patent is that period for which a patent is valid. In India the term of a patent falling within the category of food, drug or medicine was five years from the date of grant or seven years from the date of filing. In respect of any other invention, the term of a patent was fourteen years from the date of grant. With the latest amendments, the term of a patent is uniformly 20 years

Copyright

Rights known in general parlance as copyright can be acquired in relation to works of authorship that includes literary works (they include computer software under the Indian law); musical works and accompanying lyrics; dramatic works and dialogues; pantomimes and choreographic work; pictorial, graphic and sculptural works inclusive of drawings, paintings, photographic works, architecture, works of applied art, maps, plans, sketches; motion pictures and other audio-visual works; and sound recordings. This right is basically a proprietary right and comes into existence as soon as the work is created.

In India, the right is protected by the Copyright Act of 1957, which was amended in 1984 and again revised in 1995 and 1999. Under the Act, registration of a work is not compulsory, i.e. there is no

completion of any formality of registration. The particulars of the work can simply be entered in the Register of Copyrights to constitute prima facie evidence of ownership of work.

Copyright gives the proprietor exclusive right to make particular use of the work. The author also has a moral right to claim authorship, and either he/she or his/her legal heir can restrain or claim or hold damages in respect of any distortion, alteration or modification of the work, which would be prejudicial to his honour or reputation. The author is conferred exclusive right in respect of reproduction of the work and other acts which enable the owner to get financial advantage by executing such rights.

Original literary, dramatic, musical or artistic work enjoy copyright protection for the lifetime of the author plus 60 years, if they are published within the lifetime of the author.

Trade Marks

A Trade Mark is a visual system in the form of a word, a symbol or a label applied to an article of manufacture or sale with a view to indicate the consumer about the origin of manufacture. It, therefore, helps to distinguish such goods from similar goods manufactured by others in the same trade.

Examples would include the service marks used by different companies to typify their brands like 'Parker' for pens, 'Lux' for soap, the Maruti logo etc.

The registration of trademarks is important because it creates a link between manufacturer and the customer. The customer uses the trade mark to choose goods while purchasing. The normal consumer would only be aware of such brand names associated with different items of consumption. When there are so many varieties of goods made by different manufacturers with varied features, it becomes impossible to select one or the other, depending upon the relative feeling of trust associated with the various brands. It is also an excellent instrument of publicity and a symbol of goodwill, apart from being a property which can have an enormous economic potential.

In India, this protection is obtained through legislation covered under the Trade and Merchandise Act of 1958. As in the case of patents and designs,

the trade marks are administered by the Controller General of Patents, Designs and Trade Marks under the control and supervision of the Ministry of Industry.

The duration of a trade mark is for a period of 7 years from the date of filing of the application. This period can be renewed from time to time for a period of 7 years from the date of expiry of original registration or subsequent renewal. Thus, a registered trademark can be kept in force perpetually by paying the prescribed renewal fees. This is followed because continuous use of the mark over a long period of time helps in making the mark popular amongst the customers, generating both publicity and goodwill.

Industrial Designs

A design is an idea of conception relating to the features of shape, configuration, pattern or ornamental features applied to an article by any industrial process or means, whether manual, mechanical or chemical, separate or combined; which is the finished article appeal to and are judged solely by vision. It is clear that design means features of shape etc. applied to an article and not the article itself. These features are conceived in the creator's intellect. The ideas conceived are given material form as a pictorial illustration, or as a specimen, prototype or as a model. These features can then be protected as a design.

In India, designs are covered by the Designs Act of 1911. This Act confers exclusive right to apply to any article in any class in which the design is registered.

The registration of the design is possible only when it is reduced to a visible form so as to be identifiable. This can be either by being embedded in an actual article or by making a paper model or model of any other material or as a two dimensional model on paper.

Geographical Indications

Geographical Indications are indications which identify a good as originating in a territory, or a region or locality in that territory, where a given quality, reputation or other characteristic of the good is essentially attributable to its geographical origin. The TRIPS agreement provides that countries should not permit registration of trademarks containing a

misleading indication of the geographical origin of goods. The most common example of this is 'champagne', a term associated with wine produced in a certain region of France. In principle, therefore, it is not permissible to call wine produced elsewhere 'champagne', even though the wine may be regarded in the producing country as comparable to the French champagne.

Undisclosed Information

Undisclosed information refers to trade secrets or know-how that has commercial value because it is secret, and that has been subjected to reasonable steps to keep it secret. The TRIPS agreement stipulates that a person lawfully in control of such information must have the possibility of preventing it from being disclosed or acquired by or used by others without his or her consent in a manner contrary to honest commercial practices. Furthermore, the Agreement has provisions on undisclosed test data and other data whose submission is required by governments as a condition of approving the marketing of pharmaceutical or of agricultural chemical products'. Member governments must protect such data against unfair commercial use.

Layout Designs of Integrated Circuits

The TRIPS agreement requires member countries to protect the layout-designs of integrated circuits in accordance with the Washington Treaty on Intellectual Property in Respect of Integrated Circuits (which was negotiated in 1989). Additional provisions stipulate that importing or selling articles incorporating a protected integrated circuit without authorization from the right holder shall be considered unlawful.

IPR-Related Legislation in India

Prior to the agreement on TRIPS, India had a legal system of protection for four types of intellectual properties viz.

- Patent
- Copyright
- Trade mark and
- Industrial design.

The TRIPS agreement brought in three additional intellectual properties viz, geographical indications, layout designs of integrated circuits and the protection of undisclosed information. During the

ten-year transition period, India, through amendments and new legislations, has put in place a legal system to comply with the requirements of the TRIPS Agreement.

The Current Status of Legislations

Patents: The Patents Act, 1970. The Act was last amended in 2005.

Design: The Design Act, 1911. A new Design Act, 2000 has been enacted, superseding the Design Act, 1911.

Trade Marks: The Trade and Merchandise Marks Act, 1958. A new Trademarks Act, 1999 has been enacted, superseding the earlier Trade and Merchandise Marks Act, 1958.

Copyright : The Copyright Act, 1957, amended in 1983, 1984, 1992, 1994 and 1999 and the Copyright Rules, 1958.

Layout Design of Integrated Circuits: The Semiconductor Integrated Circuit Layout Design Act, 2000.

Protection of Undisclosed Information: No exclusive legislation exists, but the matter is generally covered under the Contract Law.

Geographical Indications: The Geographical Indication of Goods (Registration and Protection) Act, 1999.

The Task Ahead

If India is to catch up with the developed countries, India needs to exploit its knowledge potential to leap-frog the technology lag. This challenge can be met if instead of getting bogged down in the avoidable details of the new IPR regime, India identifies the opportunities it offers and exploits them to its own advantage. By legislating on all forms of IPR in compliance with the TRIPS agreement, laying down rules and procedures for their implementation and by modernizing all its IPR offices and facilities, India has unambiguously expressed its intent to actively participate in the global IPR system. To derive all possible advantages from this initiative, India has to undertake a number of proactive steps:

- An intensive campaign to spread IPR awareness needs to be launched so as to energize potential inventors and innovators into various creative activities.
- An IPR culture needs to be deliberately promoted to encourage innovative activity linked to

technological developments and market needs.

- IPR and public interest are not antithetical to each other as it is made out to be. IPR is only a limited monopoly with the ultimate benefit accruing to the society. Whatever concerns are there regarding adequate safeguards, should appropriately be addressed at the national level.
- An R & D network capable of creating, organizing and disseminating knowledge and also converting knowledge into economic and social goods be put in place. It should be a collaborative effort in public and private partnership. Although India has set out on a course of privatization, it has to be realized that without government action there will be little investment in the production and adoption of new technologies.
- In a country so richly endowed with traditional knowledge, adequate protection should be ensured to exclude unauthorized use of this knowledge by third parties. At the same time, efforts should be made to further develop traditional knowledge so as to enhance its role in local and national development.

As India sets its agenda for the 21st century, it has to be realized that a nation's ability to convert knowledge into wealth through creativity and innovation will determine its future in the Knowledge Century. An understanding of the role of IPRs in the process of innovation and the role of innovation itself in the process of development is crucial to India transforming itself into a knowledge economy. The knowledge management strategies of India, therefore, will have to incorporate optimum utilization of IPR.

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Evaluation of Field Sales Force—A Comparative Analysis of Indian and Multinational Companies

Dr Atul Dhingra*

A salesman represents his company to society in general and to customers in particular. Opinions of the firm and its products are formed on the basis of impressions left by salesmen in their job. Effective management of sales force calls for effective recruitment and selection, training, compensation, direction, motivation, and evaluation of sales force. Although all components of sales force management are very important but evaluation process shows the real picture of the sales persons, if implemented effectively.

An effort has been made in this paper, based on a research study, using primary data, collected from 39 big companies, to understand the mechanism for sales force evaluation of Indian and Multinational companies operating in India.

The study revealed that every company, Indian or Multinational, evaluates its salespersons on the basis of accomplishment of sales quotas and targets. Surprisingly, no Indian or Multinational company use 'customer complaints' as yardstick for evaluation. 'Person to person comparison' and 'absenteeism' are also used very little in evaluating sales persons in India.

The study pointed out that, in India, all companies conduct sales force appraisal. 75% Indian and 80% Multinationals give back appraisal report to their sales people. The study also accepted the hypotheses that there is no significant difference in Indian and Multinational companies as far as use of performance appraisal result for promotion and transfers of sales persons are concerned but rejected the hypothesis in the case of use of appraisal results in fixing compensation.

Introduction

A salesman represents his company to society in general and to customers in particular. Opinions of the firm and its products are formed on the basis of impressions left by salesmen in their job. Customers also judge companies not by their factories or by their offices but, by the people who visit them. In order to display good image through its field sales force, proper sales force management becomes essential for all the companies.

Effective management of sales force, calls for effective recruitment and selection, training, compensation, direction, motivation, and evaluation of sales force. Although all components of sales force management are very important, evaluation process shows the real picture of the sales persons, if implemented effectively. It helps companies in finding out, whether, the things are taking place as planned and in right directions and also taking corrective measures if the deviations come to the fore.

Evaluation is essentially a comparison of sales force goals and objectives with actual achievements in the field. The most common approach is, comparison of target sales with actual sales in terms of territories, products, units, and customers. However, sales figures do not tell the whole story, and sales managers have to consider other factors like profit contribution, customer service and support, complaint handling, job attitude, knowledge of company's and competitor's products, displays set up etc.

An effort has been made here, to understand the mechanism for sales force evaluation of Indian and Multinational companies operating in India.

Review of literature

Robert F Vizza (1963) opined, "many firms seem to lack an effective, complete procedure for evaluating the performance of their salesmen". Undoubtedly, we still do not have an optimum evaluation process

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that work is still on to find out the best evaluation methods and procedures.

According to Churchill, Ford, and Walker (1987), number of orders, average size of order, number of new accounts, number of calls, time utilization, expenses and some non-selling activities, are the bases used to evaluate sales people. Donald W Jackson, Jr, Lonnie L Ostrom, and Kenneth R Evans (1982), found that sales statistics are the most used output measures for evaluating salespeople. According to them, more than eight of the ten firms, evaluate sales people with respect to their absolute level of sales and three out of four assess, how closely sales people achieve quotas assigned to them.

According to William J Stanton, and Richard H Baskirk (1974), the wide variety of conditions the salesmen work under, often makes it very difficult for management to compare the productivity and effectiveness of men involved. We have no really satisfactory method, for equating territorial differences in potential, competition or working conditions. It is difficult to compare the performance of city salesmen with country salesmen. Even if the districts are equal in potential, they are not comparable in area, customer size, or other bases. Even factors such as days worked, miles travelled, calls made, or expenses incurred, may contain a degree of error, either intentional or unintentional.

A study by Jobber, Hooley, and Shipley (1989), surveyed a sample of 450 industrial products' organizations and found wide variations in the usage of output criteria among the sample of firms, and that large firms tend to use more output criteria than small firms. They also found, that there is a tendency

for large firms to use more input criteria when evaluating their sales force.

Whatever may be the opinion of experts, it is generally agreed that salesmen should be judged solely on those phases of sales performance, over which they exercise control and should not be held responsible for results beyond their control.

Research Methodology

The present study focuses on evaluation of sales force and, is, one part of a bigger research effort to study sales force management, including recruitment and selection, training, direction, motivation etc. of sales force by Indian and Multinational companies. Cosmetic industry was selected for the purpose of study, as it employs large number of sales people, only second to pharmaceutical industry in India. The data were gathered from 39 companies, 24 Indian and 15 Multinationals operating in India through well structured, pre-tested questionnaire. All the companies were major players, limited companies and smaller companies from unorganized sectors were not included in the study. Information in the companies was gathered from senior sales managers.

Findings and Discussion

In Cosmetic Industry in India, all companies conduct sales force appraisal. 'Annual confidential report' and yearly 'Self appraisal report' are used by these companies. All Multinationals and 83.33% Indian companies conduct formal evaluation interview to discuss the results with each sales person individually. Table 1 shows that 75% Indian and 80% Multinationals give back appraisal report to their sales people.

Table 1: Do salespersons receive appraisal report back ?

	Indian Companies (n = 24)	Multinationals (n = 15)	Total (n = 39)
Yes	18 (75%)	12 (80%)	30 (76.92%)
No	6 (25%)	3 (20%)	9 (23.08%)

Table 2 presents the methods of evaluation used by companies in cosmetic industry in India.

Table 2: Methods of sales force evaluation

Methods	Indian Companies (n = 24)	Multinationals (n = 15)	Total (n = 39)
(a) Ranking Method	6 (25.%)	0	6 (15.38%)
(b) Past sales figures comparison	9 (37.5%)	6 (40%)	15 (38.46%)
(c) Person to person comparison	3 (12.5%)	3 (20%)	6 (15.38%)
(d) Accomplishment of sales quotas	24 (100%)	15 (100%)	39 (100%)
(e) Customers complaints	0	0	0
(f) Absenteeism	6 (25.%)	3 (20%)	9 (23.08%)
(g) Knowledge of Co.'s products	12 (50.%)	6 (40%)	18 (46.16%)
(h) Job attitude	9 (37.5%)	12 (80%)	21 (53.85%)

Note: Total percentage exceeds 100 showing the use of multiple methods at a time

According to the table every company, Indian or Multinational, evaluates salespersons on the basis of accomplishment of sales quotas and targets. 80% Multinationals fix job attitude as yardstick for evaluating their salespersons. 40% Multinationals use 'past sales figures comparison method' and 'knowledge of company's products' for evaluating their sales force. 50% Indian companies also use 'knowledge of company's products' as a measure for evaluating their sales force. 37.5% Indian

companies use 'job attitude' and 'past sales figures comparison' as yardstick for evaluating sales force. Surprisingly, no Indian or Multinational company use 'customer complaints' as method of evaluation. Multinationals also do not use ranking of sales men for evaluating them. 'Person to person comparison' and 'absenteeism' are also used very little in evaluating sales persons in cosmetic industry in India.

Table 3: Association of result of performance appraisal with compensation, promotion, and transfer

		Indian Companies (n = 24)	Multinationals (n = 15)	Total (n = 39)
Compensation	Yes	15	15	30
	No	9	0	9
Promotion	Yes	21	15	36
	No	3	0	3
Transfer	Yes	15	8	23
	No	9	7	16

Table 3 reveal that all Multinationals and 62.5% Indian companies use appraisal report in determining compensation for the sales persons. All Multinationals and 87.5% Indian companies use them in giving promotion to sales people and 62.5% Indian and 40% Multinationals use them for transfer of sales persons. These important results helped in making and testing a few hypotheses as under:
Hypothesis 1 (H_{01}): There is no significant difference between Indian and Multinational companies, as far as use of performance appraisal result in sales force compensation is concerned.

Since data are nominal and may be classified in 2×2 contingency table, $N = 39$ falls between 20 and 40, and we have to determine the significant difference

between two independent samples, χ^2 and Fisher Exact test may be used to test the hypothesis. χ^2 test is usually used if frequencies in all cells of contingency table exceed 5. It is, however, not an appropriate tool if any cell frequency is zero. Fisher Exact test, on the other hand may be easily used for testing hypothesis, even if any cell frequency is zero. Fisher exact test: Probability (p) is given by the following formula:

$$p = \frac{(A+B)! (C+D)! (A+C)! (B+D)!}{N! A! B! C! D!}$$

where A, B, C, D, and N are various row and column values of following type of 2×2 contingency table:

Variable	Group		Combined
	I	II	
+	A	B	A+B
-	C	D	C+D
Total	A+C	B+D	N

Let us fit the data of table 3 in 2×2 table and check the hypothesis at 5% level of significance.

	Indian Companies	Multinationals	Total
Use Performance appraisal result in determining compensation	15	15	30
Do not use Performance appraisal result in determining compensation	9	0	9
	24	15	39

$$p = \frac{30! 9! 24! 15!}{39! 15! 15! 9! 0!}$$

$$p = .00617$$

Since obtained probability .00617 is less than the chosen significance level $\alpha = .05$, we may reject the hypothesis. Hence, there is a significant difference between Indian and Multinational companies as far as use of performance appraisal result in sales force compensation is concerned.

Hypothesis 2 (H₀₂) : There is no significant difference between Indian and Multinational companies as far as use of performance appraisal result in promotion of sales force is concerned.

Let us fit the data of table 3 in 2 x 2 table and check the hypothesis at 5% level of significance using

	Indian Companies	Multinationals	Total
Use Performance appraisal for Promotion	21	15	36
Do not use Performance appraisal result for promotion	3	0	3
	24	15	39

$$p = \frac{36! 3! 24! 15!}{39! 21! 15! 3! 0!}$$

p = .2215

Since data are nominal and may be classified in 2 x 2 contingency table, N = 39 falls between 20 and 40, and we have to determine the significant difference between two independent samples, χ^2 and Fisher Exact test may be used to test the hypothesis. As the value in each cell exceeds 5, χ^2 test is appropriate tool for testing hypothesis.

Fisher Exact test.

Since obtained probability .2215 is more than the chosen significance level $\alpha = .05$, we may accept the hypothesis. Hence, there is no significant difference between Indian and Multinational companies as far as use of performance appraisal result in sales force promotion is concerned.

Hypothesis 3 (H₀₃): There is no significant difference between Indian and Multinational companies as far as use of performance appraisal result in transfer of sales people is concerned.

χ^2 test: χ^2 values is given by the following formula:

$$\chi^2 = \frac{N (|AD - BC| - N/2)^2}{(A+B) (C+D) (A+C) (B+D)}$$

where A, B, C, D, and N are various row and column values of following type of 2 x 2 contingency table:

Variable	Group		Combined
	I	II	
+	A	B	A+B
-	C	D	C+D
Total	A+C	B+D	N

Can we fit the data of table 3 in 2 x 2 table and check the hypothesis at 5% level of significance.

	Indian Companies	Multinationals	Total
Use Performance appraisal result for transfers	15	8	23
Do not use Performance appraisal result for transfers	9	7	16
	24	15	39

$$\chi^2 = \frac{39 (105 - 72! - 39/2)^2}{22 \times 17 \times 24 \times 15}$$

$$\chi^2 = .0528$$

Since obtained probability .0528 is less than tabulated value at 5% significance level (3.841) we may accept the hypothesis. Hence, there is no significant difference between Indian and Multinational companies as far as use of performance appraisal result in the transfers of sales people is concerned.

Conclusions

The study revealed that every company, Indian or Multinational, evaluate their salespersons on the basis of accomplishment of sales quotas and targets. 80% Multinationals and 37.5% Indian companies use 'job attitude' as yardstick for evaluating their salespersons. 40% Multinationals and 50% Indian companies use 'knowledge of company's products' for evaluating their sales force. Surprisingly, no Indian or Multinational company use 'customer complaints' as yardstick for evaluation. Multinationals also do not use ranking of sales men for evaluating them. 'Person to person comparison' and 'absenteeism' are also used very little in evaluating sales persons in cosmetic industry in India.

The study pointed out that, in Cosmetic Industry in India, all companies conduct sales force appraisal. 'Annual confidential report' and yearly 'Self appraisal report' are used by these companies. 75% Indian and 80% Multinationals give back appraisal

report to their sales people. All Multinationals and 83.33% Indian companies conduct formal evaluation interview to discuss the results with each sales person individually. The study also revealed that all Multinationals and 62.5% Indian companies use appraisal report in determining compensation for the sales persons. All Multinationals and 87.5% Indian companies use them in giving promotion to sales people and 62.5% Indian and 40% Multinationals use them for transfer of sales persons.

The study also accepted the hypotheses that there is no significant difference in Indian and Multinational companies as far as use of performance appraisal result in promotion and transfers of sales persons are concerned but rejected the hypothesis in the case of use of appraisal result in determining the compensation.

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Internet Banking: Customers' Profile

Dr Manmohan Kaushik* and Prof (Dr) Mukesh Dhunna**

Majority of customers are now showing greater interest in the new ways available to manage their accounts through accepting the internet technology in banking. Customers were thrilled with the speed and convenience of the internet banking services. The demographic profile of users of internet banking services comprised sixty per-cent of male and forty per-cent of females, who are relatively young, educated and serving in government offices or the private industrial houses

Internet-Banking services include 'inquiring the account balance', 'depositing loan applications', 'third party payment', 'utility bill payment', and 'on-line purchases'. The usage of the internet banking services was clearly linked with exposure to internet. More the access to internet, more was the usage of internet banking services. Concern over payments security, lack of trust in services and concern over confidentiality of information were considered among the top barriers to usage of internet banking services. Social contacts, ease-of-use, price, speed, and security seems to play a significant role in customers' profile.

The Banker defines a "true Internet bank" as one that provides transactional capabilities on-line such as inquiring account balance, credit card statements, pay bills, submit loan applications, transfer funds between accounts, paying mortgages, and purchasing financial instruments and certificates of deposit etc. to retail customers over the World Wide Web. Without actually visiting a brick-and-mortar institution customer performs banking transactions electronically with the help of a computer.

Internet banking is not limited to a physical site. Rather Internet banks can exist even without physical branches, (for example, Telebank-Attingham, Virginia and Banknet-UK, Eg in Britain and security First Network Bank in America, and Enba in Europe (Goldfinger: 2001)). Further, in some cases, web banks are not restricted to conducting transactions within national borders. Rather, they have the ability to make transactions involving large amounts of assets instantaneously, even overseas.

While some banks presume internet banking as a way to lower costs or to create new revenue streams, by attracting additional customers and selling more services to current customers, other banks have begun to offer internet banking services as a defensive step out of concern that current customers may switch to another banking institution with more advanced internet banking services especially those

having the capability to conduct transactions over the net. Although, Internet banks offer the same services as do the traditional brick-and-mortar banks, analysts view Internet banking as a means of retaining increasingly sophisticated customers, of developing a new customer base and of capturing a greater share of depositor's assets. Majority of customers are showing greater interest in the new ways available to manage their accounts and are now accepting the internet technology. Furthermore, the cost of connectivity has come down substantially while the availability of more broadband services has improved access and speed with the capability to provide more online services and value addition. There is also an increasing appreciation for the convenience of time saving and 24 hours access.

The increasing usage of online banking has also attracted a heightened focus of criminal activities and frauds in various forms and presents even a bigger challenge for banking professionals. Despite concerns about security, reliability, and privacy, internet banking is positioned for dynamic expansion. Though it is not free from ifs and buts, rise in competition has increased in a number of banking institutions who are introducing and expanding their offerings of internet banking products and have been concentrating on marketing efforts.

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The Indian saga

India has already achieved a significant level of internet penetration and usage (Singhal, 2003). India is beginning to take off, with 15 percent banking customers using internet banking services and 26 percent of those who do not, saying that they may adopt it in the coming year (www.pcworld.com/resource/article/0,aid,124156,pg,1,00.asp).

Impressive as these figures might be, the truth is that India lags behind other countries in Internet banking. In the US, the number of commercial banks with transactional websites is 1,275 or 12 percent of the total number of banks. Of these, seven could be called 'virtual banks.' Ten traditional banks have established Internet branches or divisions that operate under a unique brand name. At present, in the US approximately 78 percent of all commercial banks with assets more than \$5 billion, 43 percent of banks with \$500 million to \$5 billion in assets, and 10 percent of banks under \$500 million in assets have transactional websites (Singhal 2003).

In India, ICICI Bank has started online banking way back in 1996 and a host of other banks soon followed the move. After ICICI, Citibank, IndusInd Bank, HDFC Bank and Timesbank (now part of HDFC Bank), were the early ones to introduce internet banking. The public sector banks had remained laggards in the race for adopting Internet banking practices. Of late, many nationalized banks like State Bank of India, Bank of Baroda, Allahabad Bank, Syndicate Bank, Bank of India, Union Bank of India, Canara Bank and Punjab National Bank have introduced internet services for the customers.

The primary reason preventing public sector banks from introducing online banking services, has been the absence of a legal framework to back up and regulate Internet banking operations in the country (Rose 2000). Though the Information Technology Act, 2000 attempted to address a number of e-commerce regulatory issues, there are several grey areas which have neither been spelt out properly, nor have the courts suggested workable modes of implementation. Though Internet banking is only an extension of traditional banking services, there are several instances which contradict the legal framework for this banking in India provided by a set of enactments like the Banking Regulations Act, 1949, the Reserve

Bank of India Act, 1934 and the Foreign Exchange Management Act, 1999.

However, not many are willing to buy the argument that it is the lack of regulations that is preventing the public sector banks from taking the Internet plunge. Marketers contradict by saying, "More than a lack of regulatory framework, it is marketing efforts and lack of zeal and a mindset attuned towards resisting any new technology, that are holding back the nationalized banks. On top of this, the highly politicized unions are also an impediment as they feel that Internet banking would expose the low productive levels of the workforce."

Customers of public sector banks in smaller cities or towns have, of late, realized the potential of internet banking. Though time convenience and virtuality has been at the top of mind consideration for the customers, using internet banking, experts opine that marketing efforts have been successful in bringing the customers to the net. Some initial estimates point to large proportion of their customers being either senior citizens or at least 50+ who have a natural affinity towards adopting new technology.

Empirical studies on internet banking services

Kennickell and Kwast (2000) examined the determinants of demand for electronic media for banking transactions. They found that the likelihood of using electronic media to obtain banking services rises with higher levels of banking assets and education. Additionally, young consumers tend to use computers, ATMs, and debit cards more often. However, the use of direct deposit rises with age. Kolodinsky, Hogarth, and Shue (1997) also found that age and education has an influence on whether consumers use internet banking products or not. However, they concluded that positive attitudes toward e-banking services matter more than demographic factors in determining whether such services are used. E-banking users, in general, were found to have higher incomes and education.

As part of this study, households were clustered into three groups based on a series of 11 Likert-type statements regarding internet banking. These items included statements related to perceived use, convenience, relative advantages and risks

associated with internet banking. The resultant customers were termed "technophobes" (those most resistant to the use of internet banking technology), "technophiles" (those most accepting) and "in betweens". In general, technophiles were found to be younger with higher income and education. Analysis showed that use of internet banking services varied greatly across segments. Usage of PC banking was more than 10 times greater among technophiles than technophobes (31.6 percent vs. 2.7 percent).

Wartel (2000) investigated the factors that influence consumers' willingness to use electronic bill payment to report that the likelihood of using electronic bill payment is positively associated with age, PC ownership, income, holding credit cards, home ownership, desire for control (controlling when bill is paid, option to stop payment and desirability of paying bills when out of town are important), and desire for incentives (willingness to use if banking incentive is provided).

As regards the motivational aspects of internet banking usage, the research has pointed out that prior web experience has impact on the persons' beliefs about computers and technology in general and it is quite obvious to draw a conclusion that the same applies also for internet banking. Consumers who are at ease with computers and use them also for other purposes find it convenient to adopt internet banking. Although personal characteristics have been identified as significant predictors of consumers' adoption of an innovation, several researchers have shown that it is the perceived attributes of the innovation itself rather than the characteristics of the innovators that are stronger predictors of the adoption decision.

Diniz (1998) surveyed banks in the United States and reported that most of them offer basic and intermediate services at the transactional and informational levels and the adoption of internet banking services is to a large extent dependent on the value added services they can offer.

Some critics are skeptical of the Internet banking boom and offer caution to existing and new entrants. According to Weeldreyer (2002), Internet banking is not living up to the hype that surrounded it a few years ago. Customers' adoption rates are low, and their interest in Internet banking is waning.

Weeldreyer (2002) said that in 2000, there were only sixty banks with Internet, however, that number has now dwindled to about 20.

A major problem is that businesses are forgetting the traditional rules of business such as listening to the customer, and delivering the satisfaction that they are willing to pay for. Weeldreyer (2002) advises that banks need to know who they are serving, what are their needs and problems, and what their financial priorities are. The mistake that online merchants, and now online banks are making is redesigning the organization strategy to become an electronic strategy, rather than developing a strong organization strategy, which incorporates an electronic strategy. The contrasting viewpoints presented above beg the question "why would banks want to have an Internet presence?"

Performance measures enable banks to determine Internet customer satisfaction and identify the key drivers of customer retention so as to improve and maintain service level (Groenfeldt 2000). Without this information, successful competing in the Internet business environment will be difficult. A bank needs to make its website customer centric in order to attract people to I-banking (Williams 2000). Robinson (2000) suggested that banks must offer customers an "experience"—personalized and customized interactions that engage customers, capture their attention, and build an online relationship.

Timely customer service support is also critical, as the Internet customer wants an immediate response to a request (Davidson 2000). Customers express concern about the security of online transactions (Anonymous 2000, Hamlet 2000). Security practices should be established and enhanced, especially when banks offer transaction-oriented services.

According to Goldfinger (2001), security was seen as a major obstacle to Internet banking. Banks were concerned about unauthorized access to their systems, and customers were concerned about the safety of their personal data and the risk of fraudulent transactions.

Who uses the net, when and for what purposes in the context of banking services has entered into the researchable area of the bank marketers. The future of banking will be one in which customers can

middle ages and young customers. Utility services were used more by the aged and the middle age users.

Overall internet banking services usage score

(converted to percentage index) for each of the respondent was calculated. Table 3 shows the length of internet usage specified by the customers and the internet banking services usage.

Table 2
Internet banking services usage and age analysis

Purpose	Age group	means	f value
Information seeking	< 35	2.87	13.422*
	35-50	2.01	
	50-65	1.94	
	> 65	1.24	
Investment	< 35	1.87	01.489
	35-50	1.81	
	50-65	1.64	
	> 65	1.94	
Banking transactions	< 35	8.87	9.245*
	35-50	2.01	
	50-65	1.24	
	> 65	5.44	
Other Value added services	< 35	1.58	11.498*
	35-50	5.68	
	50-65	6.22	
	> 65	1.32	

*significant at 5% level of significance

The usage of internet banking services was relatively new amongst the users and most used the services for inquiring the account balance, for making public utility payments, for seeking loans, for paying school fees, for checking debit/credit cards applications and so on. The frequency of internet access vary from weekly to fortnightly. Most of the service users had either their personal computers at home or at the work place.

Approximately 55 percent of the respondents with Internet access had never bought products or services via the Internet using bank's credit card. Other modes usually deployed include prepayment

through cheque or payment on delivery.

The Internet was used much for booking of flights, hotels, or tickets but only by the elite class. A total of 74 percent used it rarely or never for these purposes.

Some of the factors, which affect person's usage of Internet banking, are pretty straightforward; obviously a person should have an access to a computer with an Internet connection either at home or in the office. It is possible to use computers with Internet connection also in some of the self-service branches. The research of online shopping has

Table 1
Internet banking services usage

Purpose	Percentage usage response
Information seeking	
Checking transaction status	86.66
Checking new schemes, if any	26.36
Checking interest rates	13.25
Finding service availability	9.03
Investment	
Checking stock trading options	58.64
Investing funds	45.25
Checking new opportunities	26.32
Calculating risks & projections	15.35
Banking transactions	
Balance inquiry	99.66
Bill payment	74.25
Loan application	68.24
Opening and closing of account	56.25
Third party transfers in the same branch	42.36
Self-account funds transfer across India.	42.12
Demand Draft requests	23.12
New Cheque-book request and much more.	21.84
Standing instructions	21.22
Other Value Added services:	
Credit card dues payments,	19.68
LIC and other insurance premia payments,	19.35
Utility bill payments	13.56
Railway tickets booking,	09.36
SBI Mutual funds Investments	8.66
Deposit taxes	7.66
SMS alerts for transaction information.	6.89
Remit Subscription to PPF account,	5.64
Donations to Red Cross/organizations	2.56
Donations to religious institutions	2.35

consumer groups seem to use Internet banking services more than the elderly group. The purpose of using the internet banking services by the users age wise has been presented in the Table 2 below.

There is a clear distinction in the information seeking behaviour of the different age groups. Younger people spent more of the time and energy on internet banking services in seeking more information. As the age increased, the extent of information seeking

decreased. Similarly, there was a significant difference in the age groups as far as the usage of the set of banking transactions was concerned (including the values added services that are available through internet banking). Irrespective of the age group, everybody was interested in inquiring about the balance in the account. Loan applications were prominent amongst the young customers. Bill payment and on-line purchases formed the scope for

middle ages and young customers. Utility services were used more by the aged and the middle age users.

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Table 3
Internet Banking Use

		Internet banking services usage		
		High usage	moderate usage	low usage
Duration of internet use	< 1 year	13.65	25.69	60.66
	1 year to 4 years	25.69	26.89	47.42
	> 4 year	69.00	35.85	4.85
Frequency of internet use	Daily	78.89	18.69	2.42
	Weekly	67.32	25.25	7.43
	Fortnightly	22.52	65.25	12.23
	Monthly	15.26	69.00	15.74
	Once in a while	9.00	81.26	9.74
Internet Access	Home	88.00	11.00	1.00
	Work place	49.26	44.25	6.49
	Internet Cafe	52.00	22.00	26.00

pointed out that prior web experience has an impact on the persons' beliefs about computers and technology in general and it is quite obvious to draw a conclusion that the same applies also for Internet banking. Consumers who are at ease with computers and use them also for other purposes find it convenient to start banking over the Internet.

Although personal characteristics have been identified as significant predictors of consumers' usage of an innovation, several researchers have shown that it is the perceived attributes of the innovation itself rather than the characteristics of the innovators that are stronger predictors of the usage decision (Black et al 2001, p 391, Polatoglu, Ekin 2001, p 157). Clients demand a minimum relative advantage in order to switch channels. It means that the new innovative service should be perceived to be better than its predecessor.

In the case of Internet banking, it is achieved by added convenience and at no additional price. The branch-banking venue is characterized by long waiting lines and slow service and it is quite logical that those who have the possibilities try to use Internet banks. The negative motivation of pricing has been successfully used by the banks. The transactions in

Internet banks are either considerably lower priced or without any fee at all. That is definitely one of the main reasons why the branch transactions are quickly losing their popularity.

The usage of the internet banking services was clearly linked to the exposure to internet. More the access to the internet, more was the usage of internet banking services. The data is a testimony that as the duration of internet usage amongst the customers increased, so increased the usage of banking services. Also, more was the frequency of internet usage, more likely it was that the customer will use internet banking as well. Customers accessing the net from home were more likely to use the internet banking services compared to customers who were accessing the net either from their work place or through the cyber cafes.

Customers expressed their degree of agreement or disagreement about the factors that motivated their decision to use internet banking services as summarized in exhibit 4.

Exhibit 4 indicates compatibility and ease of use as the most important factors affecting internet banking usage. Internet banking was considered as the

Table 4

	Weighted sample Mean score
Internet banking is easy to use	4.99
Internet banking is compatible to my life style	3.99
My friends are using internet banking	3.98
Internet banking makes conducting banking transactions easier	3.76
Internet banking is self service	3.56
Internet banking is a convenient way to manage my finances	3.56
My colleagues are using internet banking	3.49
Using internet banking is a sign of modernity	3.46
My family members are using internet banking	3.18
Internet banking offers greater control over my finance	3.10
Internet banking is compatible to my banking needs	2.92
Internet banking is a cheaper way to conduct banking	1.98
My bank offers additional benefits for internet banking users	1.32
My bank encourages me to use internet banking	1.00

Scale: 5=Strongly agree; 4=Agree; 3=Neutral; 2=Disagree; 1=Strongly disagree

Table 5

	users Weighted Mean score
I am concerned about the security of internet banking services	4.7
I do not trust internet banking services	4.5
I am concerned about the privacy of internet banking services	4.0
My bank does not offer incentive to use its internet banking service	3.8
I do not know how to use internet banking	3.8
My bank is conveniently located	3.5
I prefer personal and face to face banking	3.4
My bank does not offer training to use its internet banking service	3.7
Internet banking is not relevant for me	3.1
My bank does not offer internet banking	2.7

Scale: 5=Extremely Important; 4=Very Important; 3=important; 2=Less important; 1=Not important

cheaper way of conducting banking and one that makes the transactions easier. In terms of actual benefit and constraints, while time saving and better service have been rated as the most experienced internet banking benefits, frequent interruption of connection and longer page-loading times were rated as the primary constraints affecting internet banking usage. The basic benefit has been the any time banking, wherein a customer can access and make transaction at any time of the day/night as per his/her convenience.

Why people do not use internet banking services was a moot question. The results are summarized below in exhibit 5.

Concern over security of payments, lack of trust in services and concern over confidentiality of information were considered as the top barriers to usage of internet banking services. Customers even testified that their banks did not offer any incentives to use internet banking service.

Furthermore, respondents expressed that they are unlikely to pay any charges for using Internet Banking. Banks could take this for reference-if they want to impose a fee, their customers will probably switch over to other banks that do not have any charges unless quality and range of the Internet

Banking services are quite different among banks.

Many of the customers could not use the internet services as they never knew how to use it. The test versions of Internet banks are encouraging people, who are not so familiar with the Internet and who doubt their competence in an unfamiliar setting. They can test the user interface and various functions prior to registering as clients. In the field of services, it is especially important as due to intangibility, people are frequently not able to perceive the possible gains of an innovation. Video demonstration in banks' branches may also help potential adopters gain more knowledge about Internet Banking, especially those who are non-Internet users.

The top most reasons cited by the customers for using the internet banking services have been presented in Table 6.

The availability of the internet services at the banking premises has been the most crucial requirement of the customers. Customers were fascinated with the speed of conducting transactions over the net, 24 hours a day, seven days a week and from a vast geographical coverage area.

Some of the hindrances (see Table 7) to internet banking usage are: customers need to pay for the

Table 6

Reason for choosing the internet banking	Percentage response
• Availability in the vicinity	85.00
• 24 hour, 7 day a week access	84.28
• Speed with which the internet works	74.25
• No need to queue as you would at a bank	72.22
• You can access your account from any computer having Internet access	71.26
• Trust in communication technology	56.22
• Adequate knowledge of technology	42.28
• Security is integrated	41.00
• Applications for a majority of popular services can be made on-line i.e. loans, savings accounts, mortgages, etc	40.12

Table 7

Reason for not preferring internet banking (yet they were using the net services)	Percentage response
You pay for internet connection costs when using the service	64.28
If your internet connection fails to function, you cannot access Internet banking	62.22
There is no personal interaction between yourself and the bank (employee/advisor)	58.24
Internet banking can be slow with a 56k modem	42.28
You cannot deposit physical cash using internet banking i.e. cheque, cash in hand. This would require a personal visit to the bank	38.44
You still have to visit the bank to obtain cash and/or use an ATM machine to withdraw cash	24.00

connection costs, they cannot directly contact bank staff on the Internet if there is an inquiry or a problem and they also do not want to pay for Internet Banking service charges.

A small percentage of the respondents had mentioned in the survey, the instability of Internet Banking servers may be one of the main reasons why some users have given up using Internet Banking. Banks should try their best to maintain the stability of the Internet Banking servers in order to boost users' confidence for continual usage. Besides, the impossibility of cash withdrawal from the Internet is another problem because cash transactions are still the most popular payment method in India. Banks may encourage the public to use electronic payment methods, such as Visa Cash card etc.

It is usually assumed that interest in internet banking would be related to overall familiarity or use of the Internet for financial transactions. All respondents were asked whether, in the past year, they had conducted one or more types of transactions, ranging from product purchase to airline reservations. As seen in exhibit 8, 41.1 percent of all respondents had made a product purchase online, that figure increasing dramatically for those with Internet

connections at home or work (60.4 percent). This was followed by online reservations, stock trading and mutual fund trading.

Summarily, this effort aimed at finding out who is banking, where are they banking, how often are they banking, and what services are they using, and of course why customers are not banking online, and to develop strategies to get people to internet services.

Social contacts, ease-of-use, price, speed, and security seemed to be important for the customers. Usually, visiting bank branches is considered time-consuming due to long queues. Therefore, internet banking users are not eager to queue at branches.

The question of loyalty still remains. On the basis of these results, we might claim that nonusers are more loyal to their bank than users, because nonusers place more weight on the bank's name and contacts with the banking personnel than users did. However, more research efforts on this issue are needed.

Indian banks have adopted a long-term perspective -implementing internet in banking is not a campaign but a long-term process which is looked upon as an investment, not an expense. Success or failure in Internet banking is greatly determined by the

Table 8

Forms of current internet transactions

Transactions response	Percentage
• Purchased a product online	41.10
• Made airline reservation	27.20
• Made Hotel reservation	19.3
• Applied for a loan	5.00
• Traded stock	10.10
• Traded mutual funds	7.10
• Miscellaneous	12.70

integration of technology infrastructure with the business processes.

A critical factor for changing customer behavior is a feeling of comfort and security. Banks have been successful in delivering user-friendly solutions that are secure, and are also perceived to be secure. Indians are generally very technology prone and the small size of the market gives excellent conditions to experiment with new solutions.

The Internet banks provide bill payment services as well. There are user-friendly opportunities for conducting business over the Internet with telephone companies, electricity distribution companies, tax board and other institutions. Demand for those services influences the usage rates of Internet banks. This is increasing the benefits of Internet banks for the consumers and is a win-win situation for the banks and service providers.

One of the main reasons why the internet banking user base is limited to some customer groups is the poor connectivity. Banks have also found possibilities to contribute to improving internet access and user skills by participating in training projects and supporting public internet access points.

The results indicate that usage is strongly affected by subjective norms. In other words, opinions of friends, family or peers are highly regarded as important factors when deciding about the use of Internet banking services.

It was found that many of its retail customers are already using internet banking services. This is especially true for customers who are comfortable with technology. A total of 32.9 percent of all customers would be tempted to switch to a competitive Internet bank if rate incentives were offered.

In addition to measures of demographic, financial, and technology characteristics, we find that measures of banking relationships are useful in predicting the likelihood that a customer views the availability of internet banking services as a principal factor when selecting a primary bank. Additionally, measures of banking relationships are useful in predicting whether a customer views funds transfer, balance inquiry, bill payment and loan application services as useful. The implication of this finding is that managers of banks may find this type of information valuable when choosing which customers to target for new internet banking services.

It is imperative for the banks to note that getting customers to register for Internet banking does not mean that they will use the services. Most customers are aware of the I-banking services offered by their banks but they do not register for Internet banking. The more customers show concern for security, the less likely they will be to register for I-banking.

In terms of attracting more I-banking registrations, banks are recommended to consider firstly, target current high volume banking customers-aged more

than 20 and with higher education background before aiming at lower educated and younger people.

Besides, the security of transactions, up-to-date information, services free from technical problems, response time and download time are also important than other factors such as the provision of bank information and bank's product information. Customers considered that factors such as the use of attractive graphics and the use of animations on the portal are not as important because they perceived that the use of animations slows down response time.

Most customers use retail internet banking to check bank statements and account balances. Some activities such as the ordering of cheque or deposit books and the purchase of bank's products are only offered by few banks. This implies that customers consider these activities to be useful. Banks that do not offer these services should consider implementing them in addition to their current retail internet banking services. It was noted during the study that banks were adding features and functionality to their web sites.

Customers consider that banks perform quite well in terms of security, but as security is the most important concern, further improvement is required. Download time and for attractive graphics and animations was still a problem area. Large banks do not always provide better retail internet banking offerings than small banks. It implies that small banks could provide better retail I-banking services if they organize and correctly manage their service offerings.

Banks that aim at providing services free from technical problems, good response time, up-to-date information, easy to use interface and the consideration of security issues are more likely to be accepted by customers. Only offering a variety of services is not enough. Services must be of good quality in order to meet customer requirements and expectations. The consideration of these factors in a bank's web site increases I-banking performance. Providing good quality of services is a strategy for banks to differentiate themselves from competitors.

In general, retail I-banking has a high potential. Banks should consider the importance of factors for designing, implementing, maintaining and promoting

their websites. This would help to attract new registrants and increase retention.

Most of the interactivity provided by internet banking is at the basic informational and transactional levels. Applications at these levels are far from being developed in sophisticated ways that can give sustainable added value to all parties. Thus, customers do not see valid reasons for using the internet banking channel and still get the same services. This conclusion has serious cost and customer service implications for banks in the India. Business and Information Technology planners in Indian banks ought to address this gap as it appears that their websites are strategically underutilized.

Customers in general, and increasingly so, expect any internet banking activity to give them independence, but are very keen on assessing the security and convenience of the service before they develop positive attitudes towards it. Embedded in convenience is the concept of added value. In other words, customers will not use internet banking to replace the traditional channels unless they see a real added value and added advantage in the new channel.

Income appears to be a factor in satisfaction. Customers who earn Rs. 15000 or less saw convenience as their primary source of satisfaction with internet banking, while those who earn more than Rs. 15000 gave a priority to security. This finding seems logical as the higher the income the more likely for online transaction security to be an issue. Furthermore, those who earn less than Rs.15000 a month in the India are likely to be working in non-managerial positions which means that they are not afforded much freedom time-wise to leave their workplace and do their banking during regular hours, making internet banking a very convenient solution for them.

Future research in this area can focus on possible methods of introducing and advancing the interactivity levels towards the higher end of the matrix. For example, linkages between investments in web banks and organizational performance need to be established. In addition, it is worth investigating the impact of education on the usage of and satisfaction with internet banking. Also, one would expect notable distinctions in the behaviors and

attitudes towards internet banking among individuals, small businesses and corporate customers.

Banks in the India do not use their websites strategically to improve customer relationship or to add real value. For instance, if banks want more of their customers to use internet banking, they will need to provide more value added services than the ones provided by ATMs or phone banking. Once proper developments in the design, infrastructure, and interface of internet banking in India are established, customers can be encouraged to take advantage of online banking by providing them with incentives.

Numerous factors-including competitive cost, customer service, and demographic considerations-are motivating banks to evaluate their technology and assess their electronic commerce and Internet banking strategies. Many researchers expect rapid growth in customers using online banking products and services. The challenge for banks is to make sure the savings from Internet banking technology more than offset the costs and risks associated with conducting business in cyberspace. Marketing strategies will vary as banks seek to expand their markets and employ lower cost delivery channels.

Some of the market factors that may drive a bank's strategy include the following:

Competition-Studies show that competitive pressure is the chief driving force behind increasing use of Internet banking technology, ranking ahead of cost reduction and revenue enhancement, in second and third place respectively. Banks see Internet banking as a way to keep existing customers and attract new ones to the bank.

Cost Efficiencies-Banks can deliver banking services on the Internet at transaction costs far lower than traditional brick-and-mortar branches. These costs are expected to continue to decline and efforts are needed to workout these costs.

Geographical Reach-Internet banking allows expanded customer contact through increased geographical reach and lower cost delivery channels.

Branding-Relationship building is a strategic priority for many banks. Internet banking technology and products can provide a means for national banks

to develop and maintain an ongoing relationship with their customers by offering easy access to a broad array of products and services. By capitalizing on brand identification and by providing a broad array of financial services, banks can hope to build customer loyalty, cross-sell, and enhance repeat business.

Customer Demographics-Internet banking allows banks to offer a wide array of options to their banking customers. Some customers will rely on traditional branches to conduct their banking business. For many, this is the most comfortable way to transact their banking business. These customers place a premium on person-to-person contact. Other customers are early adopters of new technologies that arrive in the marketplace. These customers were the first to obtain PCs and the first to employ them in conducting their banking business. The demographics of banking customers will continue to change. The challenge to national banks is to understand their customer base and find the right mix of delivery channels to deliver products and services profitably to their various market segments.

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Knowledge Management in Indian Gaming Industry

Dr (Ms) Gunmala Suri*

This study is an attempt to extract a glimpse of Indian Gamers' perception about various games with respect to graphics, character generating, game play, and multi-player experience. This is a questionnaire-based study. The main aim of this study is to generate an overall picture of the Indian Gaming Scenario. Further work is needed to reach a greater understanding of the relationship between gamers, network service providers, entertainment software manufacturers, gaming peripheral companies and technology, as this embryonic market gradually matures.

Introduction

The gaming industry is a part of entertainment software industry. However, due to some reasons, it can be considered as a separate industry as such. Gaming industry, as such, includes three market segments. These are:

- Gaming related computer hardware sector that includes the graphics card, high end mouse, game pads, speed pads, processors, etc.
- Internet service sector.
- Gaming cafes

Market size of the gaming industry can be estimated from the digiplay international gaming survey that points out the following salient points about the industry. (www.digiplay.org.uk)

- In US 73% of 7-29 years old play computer games - Out of which 25.8% play games daily and 47.6% play most of the days
- 41.5% of people start playing with parents and 30% with friends
- Worldwide, there are over 100 Million computer games consoles
- The leisure software industry is worth \$5.5 billion in Europe and \$3.5 billion in the UK
- Europe, as a whole, now has a more lucrative gaming market than either the USA or Japan
- In the USA, sales of games outnumber the sales of books now
- In the UK, the games are of 80% more worth than video rentals
- In 1998, the UK leisure software earned more from exports than any other entertainment media.

It totalled £503 million as compared to £427 million for TV and £444 million for films

- The balance of trade for gaming in 1998 stood at £219m. UK film industry generated a surplus of £53 million while TV recorded a deficit of £248 million.
- Computer hardware and software accounts for approximately 40% of the whole business of consumer e-commerce in the UK.

Indian Gaming Scenario

In the year 1999, first gaming cafe was launched in Bombay. Though the cafe was a slow starter, it hit the market by the year 2000. Also by this time, a number of cafes were started in Bombay, Pune, Hyderabad, and Bangalore.

In January, 2004, Reliance opened a nation wide chain of cyber cafes, providing Broadband Internet access and also Gaming to its users. This point is important for it changed the whole scenario as gaming awareness increased. This can be supported by the increase in number of Kawabonka and IPL forum users and also from the increased participation in World Cyber Games-2005.

Research Objective

Here in this research, an attempt is being made to understand more about:

- The expectations of Indian gamers, with respect to games, graphics, cards and gaming scenario as a whole.
- To identify the various bottlenecks in Indian Gaming industry.

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Method of Research

A survey was conducted in the form of a questionnaire. Taking the intricacies of the Gaming into consideration, the players who participated and won at some level of WCG tournaments, or IPL tournaments, or are senior members of IPL or Kawabonka, (both popular Indian Gaming forums), or are playing games for more than 3 years. This is done for those players who are actually role models for most of the competitive players, and have a good awareness about the gaming scenario as such.

Sample size

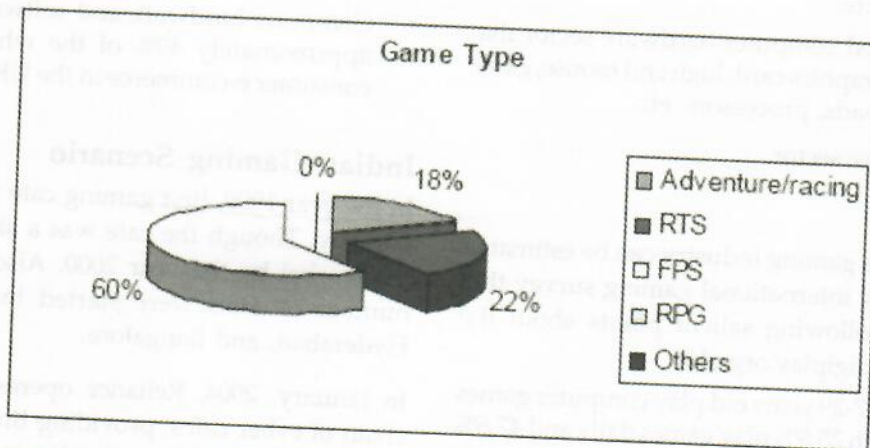
A sample size of 250 players was taken. The questionnaire was posted on these forums, for people to respond. The responses received were, however, filtered by the above criterion. 190 responses were

collected through chat with moderators and pros on these forums.

Finding and analysis

First Person Shooting (FPS) games rule the scenario, whereas Real Time Strategy, is second (Graph 1). The primary reason being that first person games are faster than most of the RTS (Real Time Strategy) games. Adventure/ Racing games are liked but not as much because of the monotonous game play. RPG (Role Playing Games) does not score a vote, for they lack the multiplayer capability as such. Sports based games, from time and again have been great failures for they lack the speed of any FPS, and also the critical strategy of RTS.

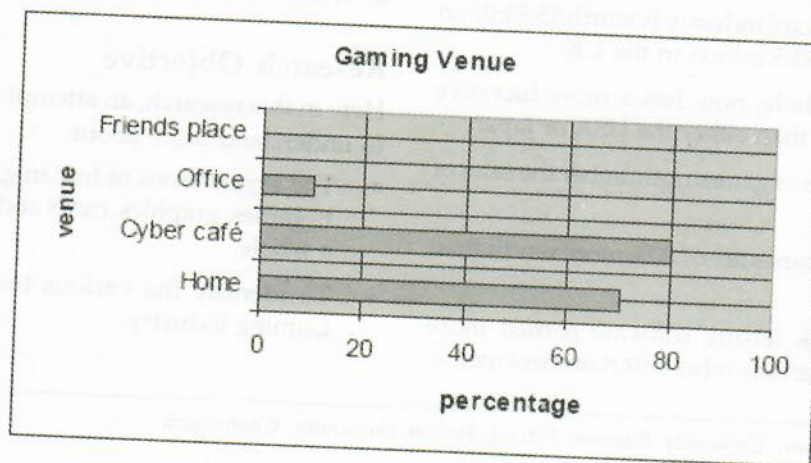
Graph 1



As far as gaming venue is considered, 10 per-cent gamers who play at their offices, (Graph 2) are either in gaming related industry or have a job related to computer games, be it programming, graphic designing or game tests. The responses show that

players like playing games from their respective homes etc., however for clan matches or for better multiplayer experience they like visiting gaming joints.

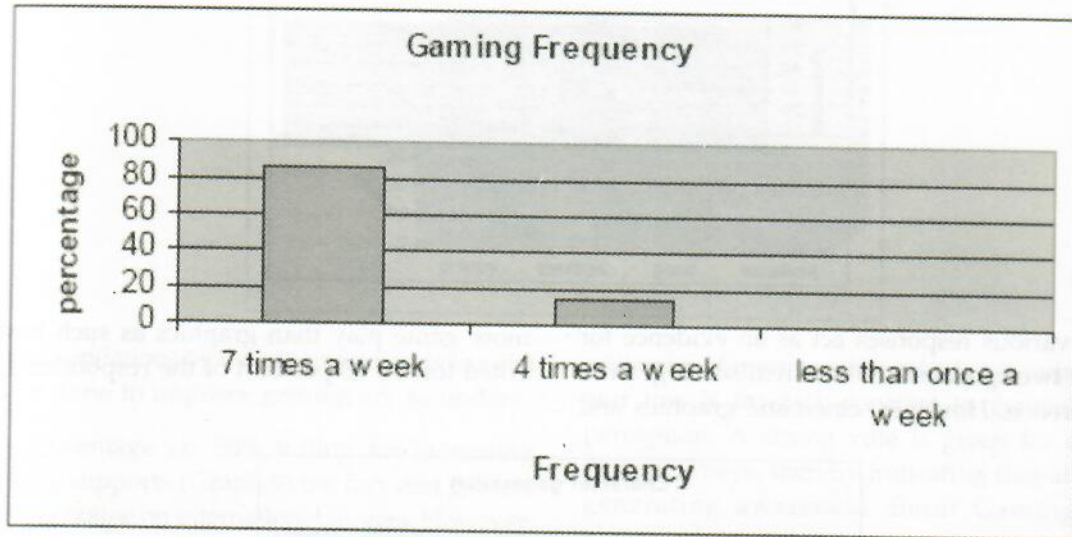
Graph 2



Further, the various responses to test the gaming frequency (Graph 3) show that the respondents are more or less regular as far as their gaming schedule is considered. This implies a tendency of people

taking gaming as a relaxing activity, and considering the demographic profile of India, it can be safely concluded that gaming industry can generate high revenues.

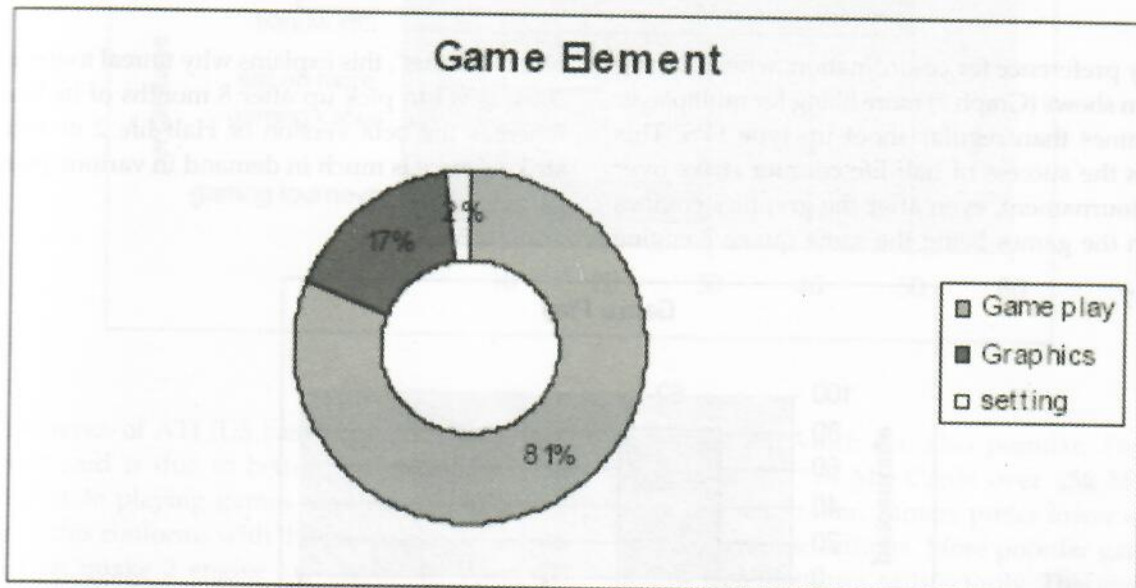
Graph 3



About personal preferences, a higher weightage to game play explains as to why generally newer

versions of older games, with modified game play and heavier graphics, fail to perform in the market.

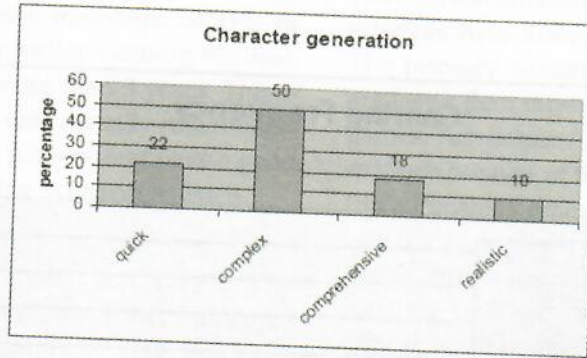
Graph 4



A higher preference for complex character generation indicates that gamers like to play on high-end computers, whereby the complex generation does not cause much lag. There are, however, a little

appreciation for quick and comprehensive character generation, but interesting finding from this question is that Indian Gamers give a low preference to realism.

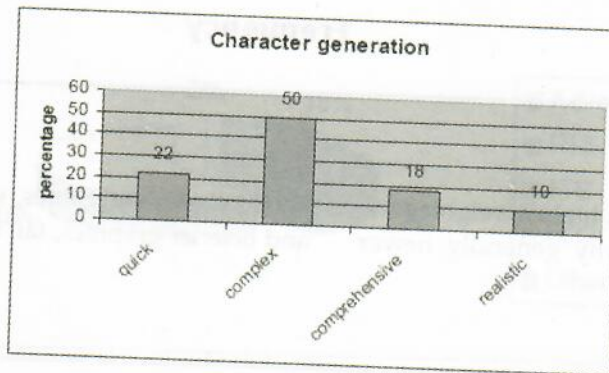
Graph 5



Also, the various responses act as an evidence for the above two questions, where realism is given a low preference. However, cinematic graphics and

more game play than graphics as such have been voted for, by 40 per-cent of the respondents.

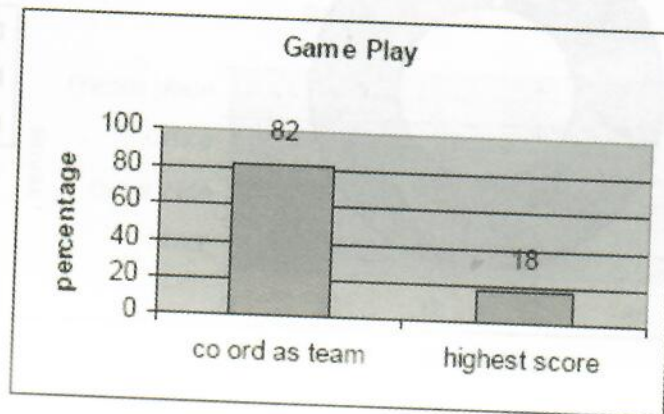
Graph 6



A heavy preference for co-ordination, when playing as a team shows (Graph 7) more liking for multiplayer team games than regular shoot up type FPS. This explains the success of half-life counter strike over unreal tournament, even after the graphics engines for both the games being the same quake 2 engine

based. Further, this explains why unreal tournament 2004, is yet to pick up after 8 months of its launch, whereas the beta version of Half life 2 or counter strike source is much in demand in various popular gaming cafes.

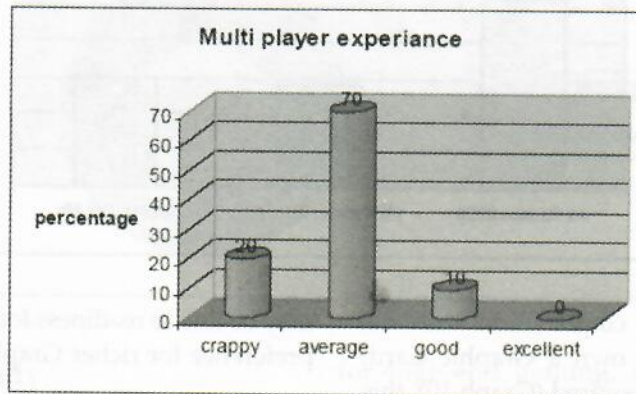
Graph 7



Most players rate their multiplayer gaming experience as average. (Graph 8) Relatively new players, however rate it as good, but then almost all old timers report it as crappy, which is bad. This

points out a potential which can be improved upon and, thereby, can be exploited for appropriate growth of the Indian gaming industry.

Graph 8

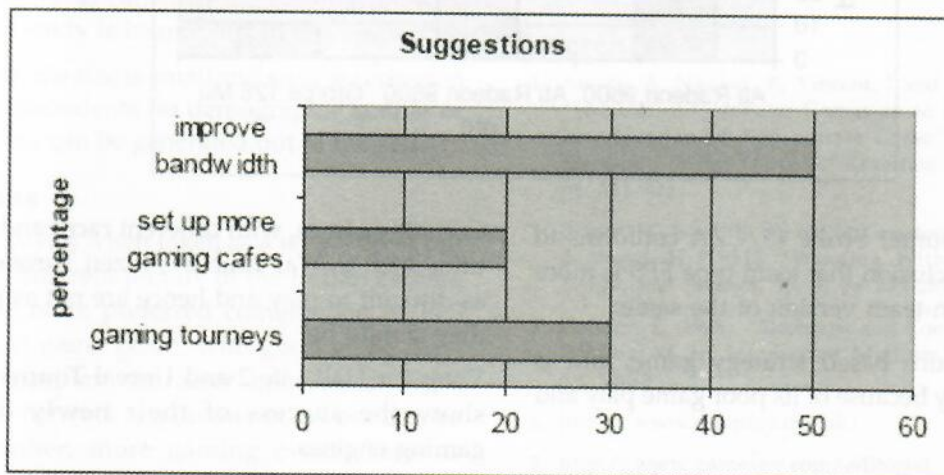


The recommendations by the programmers as to what should be done to improve gaming are as under:-

A high percentage i.e. 50% voting for increasing bandwidth, supports (Graph 9) the fact that gamers like playing online on international servers. However,

setting up of more gaming cafes is not recommended, and this is in stark contrast to general industry perception. A strong vote is given for organizing more tourneys, thereby indicating that at this point generating awareness about Gaming is more necessary.

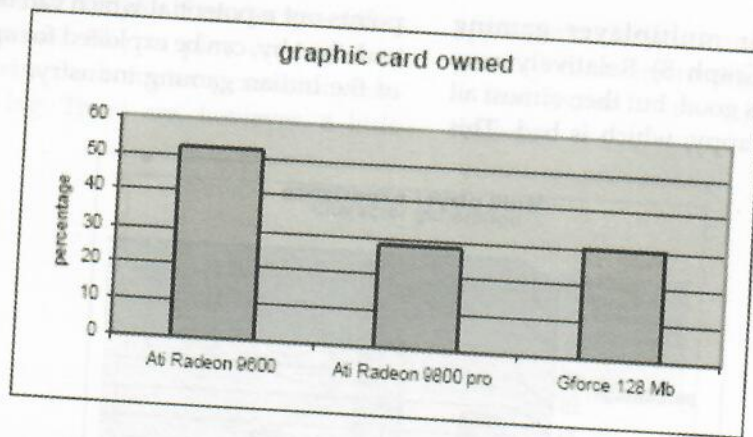
Graph 9



A preference of ATI (US based company) platform graphic card is due to better performance of ATI cards, while playing games designed on open GL format, this conforms with the preference for games based on quake 2 engine i.e. essentially open GL based. However, the Intel g force platform gets a fair share of preference on account of various direct 3D

based games which are also popular. Further, a preference for 128 MB Cards over 256 MB cards point out that Indian gamers prefer lower and cost effective graphic settings. More popular games run on low tech platforms satisfactorily. This also points out why Doom3 (game) has been a flop because of its high graphic requirements.

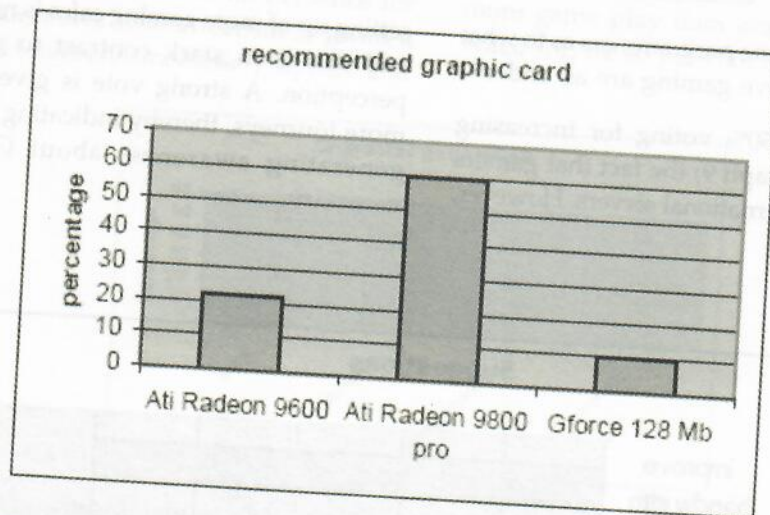
Graph 10



Analyzing this response in combination with the above, most of the gamers own a Graphic Card, having more capacity than required (Graph 10), this

may be due to readiness for future games or personal preference for richer Graphic experience.

Graph 11



Popularity of Counter Strike 15/CZA conforms to the previous conclusion that team type FPS is more popular than non-team version of the same.

Ragnarok is a turn based strategy game, and is disliked primarily because of its poor game play and slow speed.

Adventure, Racing Games score more as fun games, i.e. for occasional play. Games like Worms also score high because of their simple nature. This implies that regular games are played in a more serious manner.

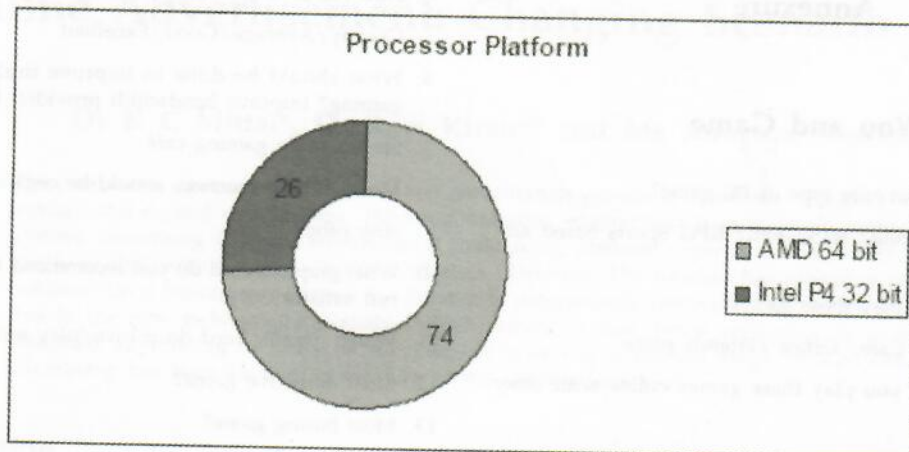
Most popular games are rated as easy games, showing that there is a liking for good and simple game play.

Complex games, with different races and without a tutor such as War Craft 3- Frozen Throne are rated as difficult to play and hence are not as popular as they should be.

Votes for Half Life-2 and Unreal Tournament 2004 show the success of their newly developed gaming engines.

74 per cent vote for AMD (Advance Micro Devices/ Chip Manufacturer) and 64 percentage for Bit Platform for PC gaming (Graph 12), show the success of the AMD's advertising campaign and product differentiation strategy of targeting gamers. This backed by increased performance, while Running Games, and over Intel P4 platform has helped AMD in increasing its market share in computer processor market.

Graph 12



Limitations of the study

The various limitations of the study are:

1. The sample size taken for the study is too small to generate a Gestalt or holistic view of the gaming scenario as such.
2. The survey was done only on professional / expert players with relatively higher level of computer awareness. Further, these gamers have been gaming for more than about two years. At present the growth engines for the industry are the newbie of the noobs, as called in the gaming phrases. Thus, the study is incomplete in this respect.
3. As the sample size is small and so is the criterion for the respondents no demographic profile or conclusions can be generated out of the study.

Conclusions

The above analysis when taken as a whole gives out a completely different picture of the Indian gaming scenario. The more preferred combination of FPS having a team game genre, with good game play, quick and complex character generation, light graphics, low network requirements, is bound to be popular. Further, more gaming events such as tournaments or any awareness generation events must be organized. As far as Graphic Cards are concerned, the market is more receptive to price of the card as such, taking into consideration that a ATI Radeon 9800 XT (Chip Manufacturer) costs Rs 12,500 in Indian retail market. With release of 512 MB version of the card, and subsequent price reduction of 256 MB cards, the ATI cards can be a huge hit, and AMD is emerging as a cheaper and more reliable platform

for high-end gaming, and thereby for general use PC.

The major bottleneck that can be identified from the above analysis is the lack of mass awareness. Further, the available Internet bandwidth for home users is another critical parameter that acts as a bottleneck. The pricing of graphic cards is not much of a hassle, as most popular games are those with comparatively lighter graphics, which run satisfactorily on most entry level computers available today.

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Annexure

Questionnaire

You and Game

1. What is your favorite type of PC game?
Adventure/Racing/ RTS/ FPS/ RPG Sports based any other
2. Where do you play these games?
Home /Cyber Cafe/ Office /Friends place
3. How often do you play these games online with other people?
7 times a week
4 times a week
Less than once a week
4. What in a game is more important?
Game play/Graphics Setting
5. How should be the character generation?
Quick/Complex/Comprehensive/ Realistic
6. What form of graphics do you prefer?
Cinematic/Realistic/Does not matter as far as game is good
7. When in a team game what do you try to do?
Coordinate as a team/Go for your highest score
8. How has been your multiplayer gaming experience?
Crappy/Average/Good/Excellent
9. What should be done to improve multiplayer gaming? Improve bandwidth provided by ISP
Set up more gaming café
More gaming tourneys should be organized
Any other...
10. What graphics card do you recommend for your system to run satisfactorily
11. Which graphic card do u own/play on?
12. Most addictive game?
13. Most boring game?
14. Most fun game?
15. Most easy game?
16. Most difficult game?
17. Best game ever?
18. Favorite platform for PC gaming?

Name:

Screen name:

Age:

Occupation:

Online Advertisement: Changing Scenario in India

Dr K C Mittal*, Dr Ravi Kiran** and Ms Anupam Sharma***

The continuous economic liberalization and globalization process is drastically changing the way we conduct and expand our business. The communication environment is increasingly getting crowded. Current advertising industry worldwide is undergoing platform expansion from traditional offline media to the various new online and wireless platforms. The Internet has created a fast moving industry. On a broader perspective the Internet is progressively gaining a larger share in people life due to the new technologies available which reduce its cost, while enhancing its potential. The classified advertising in India on the Internet is still at a nascent stage, though this genre of advertising has been gaining momentum at the international level.

Introduction

Globalisation and economic liberalization are the emerging trends the world over. Countries started becoming borderless and this process gathered pace with the introduction of new communication technologies. Technologies related to telephones, televisions, computers and data transmission channels evolved with the help of satellite technologies in providing the consumer easy and quick access to information and knowledge. The latest addition of Internet is a boon to marketers in boosting the sales of their products. Naturally, these developments demand the marketers to review their advertising techniques.

As consumers are exposed to a deluge of advertisement messages in a variety of media, the number of advertisement messages and the number of media has soared in the recent years. The communication environment is increasingly getting crowded. Business firms spend huge amounts of money on advertisements in order to inform and persuade the consumers about their products and services. They release a large number of advertisement messages in the broadcast media, as well as on the Internet, by making their web sites and by sending mails to the various people according to their interests.

Current advertising industry worldwide is undergoing platform expansion from traditional offline media to the various new online and wireless

platforms. In the fast developing times, Internet is a very powerful and fast growing communication medium. Internet has been a commercial medium; as a result, it has also become a platform for advertising. The number of Internet users over the world was estimated at more than 100 million by the end of the year 2000.

As the world is moving into an era of e-commerce, it is imperative to use net, which connects people globally, as a medium of advertisement. The content and form of advertising we witness today was introduced around 300 years ago. Over the years, the technology used for creating advertisements for better communication has been constantly upgraded. In 1999, online advertisement spending reached US\$ 3.5 billion. Continued sharp growth is expected, accounting for its greater accountability, better targeting and its ability to optimize quickly. E-commerce studies clearly show an upward trend in global online shopping.

The advertising industry crossed Rs. 500 crores (1998) with a growth rate of 6.9%. Global in reach, the Net is considered as the fastest growing medium in the near future with a monthly growth rate of 10-20%. Still the penetration of online advertising is pretty low across the globe. According to international projections, the Internet advertising will account for 7 per cent of the total advertisement amounts spend globally in 2005. In the 1970's, advertising was like a pure art form. Today it has become more scientific

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and accountable, and a good blend of art and science. The recent invention of the Internet technology has made the job of advertisers a lot easier and more effective.

As we are aware, today Internet has become pervasive in every facet of our life. It has become an important shopping medium, priority tool for accessing information and communicating with people whom we might not frequently converse with, and also who are great distances away. Business has seen the growth of the Internet as a potent opportunity for cheap & accessible marketing because people spend countless hours daily on the World Wide Web. The web sites are designing and devising innovative advertisements to attract their potential clients to their websites. This is the ultimate purpose of any advertisement, whether it is online, television, newspaper or the radio. The basic purpose is to inform, communicate and convince the potential customers about the product's desirability and thereby creating demand for the product in the market. Online advertisement is one of the strongest medium due to its lower cost and speed of communication.

Advertising as a tool of communication

Advertising is as old as man. There is a semblance of advertising in the many activities of a human being, especially those that influence others, either favorably or otherwise. The effectiveness of advertising depends upon the extent to which the advertising message is received and accepted by the target audience. Research has identified that to be effective an advertisement has to:

- Attract attention,
- Secure interest,
- Build desire for the product, and
- Obtain action.

Advertisement communicates an idea, a message or a belief. An advertisement would be effective only if the media audience accepts that message and is motivated to take the required action. Several models have been developed which have specifically identified the sequence of events, which must take place between receipt of the message and the desired action.

Online advertising Vs Traditional Advertising

The Internet has created a fast moving industry. It is expected that a larger portion of advertisers' media budgets, within the next decade, will be dedicated to this newly developed online form. Online advertising does not neatly fit into the mould of any traditional advertising model. It disseminates information in order to affect a buyer-seller transaction, as would any traditional model (i.e. television, radio, newspaper, magazine, etc.). However, there are four major differences between the online and the traditional method. They are interaction, customization, tracking, and deliverability.

Web advertising enables direct interaction with the advertisement. The goal is to enthrall the consumer with a brand or product. This is done effectively since the consumer has the option to interact with the advertisement. A consumer can use mouse and click on the advertisement for additional information. One can also take the next step and purchase the product/service in the same online session.

The other advantage of online advertising is customization. Companies can tailor the advertisements to a precise target audience or even deliver advertisements that are customized to the consumer. They can focus on specific geographical regions, computer platform, time of the day, nation, or even the type of browser. However, they cannot accurately target gender or other demographic parameters. Nevertheless, advertising to consumers' preferences is something traditional models cannot do.

Tracking is another benefit. This is the feedback loop to the advertising company. Advertisers can track how consumers interact with their brands and learn what interests them. They can also precisely measure the response to an advertisement by sampling click-through rates. Television, radio and print media cannot do this.

Lastly, deliverability is another important aspect. Online advertising can be delivered any time of the day and in real time. In addition, advertisements can easily be launched, updated, or cancelled immediately. This flexibility is not seen in the traditional methods where it takes much time until

the next edition of a newspaper changes a published advertisement.

It is true that Internet has changed the basic concept of advertising. However, it has put a whole new spin on it. The most popular form of Internet advertising is the banner advertisement (appearing at the top of a Web page). However, new forms of advertising include: pop up windows, interstitials and sponsorship.

The online advertisement is not based on hype; it is about simple human behaviour. Internet has changed the way we communicate and now it is even changing the process of advertising. It is found that people spend more hours on the Internet than on the traditional medium, television. Without question, television can reach a mass audience with an emotional message. But how many viewers actually care about the message? The CSRA study indicates that 60% of the people they would like to notice an online advertisement provided these online ads have an impact. The web reaches a large, quality audience when no other medium reaches them: at work during the day. Study after study has shown that daytime is prime time for the Internet. Even more importantly, people who access the web at work spend more time online than they do watching television, listening to the radio or reading publications.

Web offers all this at a fraction of the cost and with virtually unlimited availability. In many campaigns, a point is reached where television simply cannot be bought, because it is not available or it is too expensive. The Internet offers far greater flexibility and allows limited amount of money to be spent more efficiently. In a recent IAB cross-media study, Colgate found that it costs 23% more to get the marketing results the company wanted when they used only television as opposed to online advertising, in combination with television.

Internet advertising also allows for rapid response. On the web, a new advertisement can be up and running in hours, and the message can be changed as events warrant. The web allows for the unmatched level of interactivity and flexibility. It can be an ideal medium for putting the message out, with its space flexibility and multimedia possibilities. Rapid developments in the web advertisements are making

it an ideal medium. Internet marketing would appear to have the hallmarks of a management fad whose bubble has burst. The reality is that electronic commerce and Internet marketing will continue to gradually encroach on traditional marketing channels. Large-scale technological change does not occur overnight. It will be 20-30 years before the "information society" envisaged by contemporary trendsetters becomes a reality. Central to this transformation will be the development of novel marketing paradigms for the new era.

Current scenario for online advertisement in India

Empirical studies show that the fast growth trend reported globally is reflected in India too, since here the share of advertising on the Net doubled to reach a number in the order of 8%, thus even relatively higher than the one recorded on a worldwide basis. The same source quotes an absolute number of about US\$ 200 Million (INR 9000 Million), which would actually seem on the high side for the Indian market: this would make the Internet the third largest medium after TV and Press, by far bigger than Outdoor and Radio. Since media spending estimates are anyway difficult to assess, given the ad-hoc discount structure of each individual channel and magazine, it is advisable to look at the estimate of the different media in terms of growth trend, rather than in absolute figures. In this case, online ad is by far the fast growing medium, having grown in 2004 by about 100% vis-à-vis an average of 14% by the others. The limit to prospective further growth of this medium lays both in the literacy (vs. the TV, which does not require any) as well as in the computer penetration, particularly in non-urban areas. An additional limit, even where computers and connectivity to the Net are present, is the availability of a broad band connection, without which the innovative formats of advertising are not fully usable. Also, for direct marketing and sales purpose, the finalization of a purchase online is normally done through credit card. The relatively limited spread of electronic money in India, is also another limit to the amount of online transactions. Users of the world-wide-web in India are now making more purchases online than the global average. Airline tickets have become the number one item on the shopping list, with over

one-third of online Indians buying their tickets by this mode. A recent study by AC Nielsen, covering 38 markets and over 21,100 respondents across the globe has revealed that more Indians are taking to shopping online. Considering that net savvy people are still a minority in India, this is a revelation. Despite all this, computer literacy is spreading fast among the urban population, as well as among the younger strata of the population, making online advertising an extremely potential and cost-effective channel at least for some important market segment in India.

India had close to 40m or just 4% of the total population using internet. On an average, Indians clocked 5.2 purchases in the most recent month of online purchases. This is higher than the global average of 4.9 purchases in the corresponding previous month. ACNielsen ORG-Marg attributes this higher number of purchases to two factors. One, the advantages of convenience in terms of shopping and the ability to compare offers. Two, the ability to purchase items not available nearby would matter to people. The most important items purchased online are books (34%), followed by videos and games (22%), airline tickets/reservations (21%) and clothing/shoes (20%). According to ACNielsen research, more than 627m people have shopped online globally. In India, books followed airline reservations closely, with 35% buying them online. Nearly 24% have bought electronic items and more than 20% have purchased items such as apparel, music and electronic entertainment such as movies, DVDs and games. The most favoured mode of payment for online purchases in India is the use of credit cards followed by cash-on-delivery. Online shopping in India is poised for greater acceleration as more manufacturers and providers integrate the Internet into their sales model.

Policy Implications

However, classified advertising on the Internet is still at a nascent stage, though this genre of advertising has been gaining momentum in the international arena. "The transition in India is just getting started and as the Internet penetration grows and as younger audiences shift from the traditional newspapers to online and to mobile devices, the transition will get faster and more important. There

is plenty of opportunity." Globally, classified advertising is a \$100 billion-plus industry. While citing the examples of Naukri.com and Shaadi.com, the transition had already started and envisaged a promising future for online classifieds because of the Internet business, which was growing at a rapid pace in India. On a broader perspective, it is clear that the Internet is progressively gaining a larger share in people life, also thanks to the new technologies available which reduce its cost, while enhancing its potential. As of today, the majority of the Net surfers are visitors or purchasers and only a few are advertisers: despite this, the percentage of advertising allocated to the Internet in some countries (including UK 10) is already higher than some other traditional medium. With the major FMCG approaching the Internet for advertising, the share of this medium is bound to grow further. Today TV has become globally the most utilized medium with a share close to 38%, but it might have achieved its peak: in a few years, possibly during the next decade, the Internet might even overtake TV and gain the leadership, thus doing in less than 20 years what took TV over half a century.

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The Emerging Scenario of Life Insurance Business in India

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With the entry of private companies, the life insurance sector has become highly competitive and LIC, which until the end of the year 2000 was a government monopoly, is now experiencing the emergence of a competitive market. This paper is an attempt to study the emerging scenario of life insurance business in the light of liberalization and entry of private players in the insurance sector. New players focus on improving customer services, product innovation, appropriate pricing and speedy settlement of claims. Old players are struggling to face competitive challenges and IRDA is playing a vital role in order to regulate and promote life insurance business in India. Success and overall growth of the insurance sector depends on the efforts being made by the insurance companies, the consumers and the regulators. No doubt, new entrants have done a good job in terms of life insurance business, but it will be a difficult task for them to move the customers away from LIC and gain their trust. Their track record and brand value in the overseas market will not help them in getting immediate brand recognition in India, because LIC is considered to be the best in the world in its incremental growth and dynamic development. It is growing at better than average rates in the industry across the world. The LIC's New Business and Business In Force has been showing a steady growth over the years, which indicates that public awareness towards life insurance is growing. That is to say, entry of private players has pushed up the sales of LIC and it still continues to be dominant player in expanding the insurance market by selling its policies. In the coming future, building trust and being innovative will be the key areas for life insurance companies in order to do well in the long road ahead.

INTRODUCTION

Insurance is a multi-billion dollar business in India. It provides financial recompense for losses suffered due to incident of unanticipated events, insured within the policy of insurance. Life insurance is nothing but a contract under which the insured (the purchaser) pays a premium in exchange for coverage of specified losses. Life insurance business in India was nationalized on 19th January, 1956 and Life Insurance Corporation (LIC) came into existence on 1st September, 1956 by an Act of Parliament, i.e., Life Insurance Act 1956, with a capital contribution of Rs. 50 million from the Government of India (Bodla et al, 2003). Liberalization of insurance sector has opened up tremendous business opportunities to Indian as well as foreign operators. Earlier, there was a lack of marketing ability, poorly trained agents, inadequate infrastructure, investment restrictions and absence of uniqueness in services.

Growth of life insurance business was very low and the premium charged by LIC was very high. Because of such limitations, the Government of India decided

to liberalize the life insurance sector in March 2000. The doors of life insurance business were opened to private sector in August 2000, as per the recommendations of Malhotra Committee. This was done to give an opportunity to private players to win the confidence of the people and to provide better services, new and innovative products, and better coverage to benefit the customers.

The most significant and potentially influential developments since nationalization are that, LIC, which until the end of the year 2000 was a Government monopoly, is now experiencing the emergence of a competitive market, working at lower cost, has better underwriting standards and its liabilities are backed by good quality assets. LIC's performance continues to be at par with international standards (Ramakrishnan, 2003). With its wide branch network, trained staff and decentralization of servicing functions, LIC has been trying hard to move closer to the customers and avoid delays in servicing. The awareness of public towards life insurance is also on the increase.

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An Insurance Regulatory and Development Authority (IRDA) was set up as per IRDA Act in 1999 to regulate the life insurance business in India. Minimum capital fixed by IRDA for doing life insurance business is Rs. 1 billion (\$21.5 million). Since its incorporation as a statutory body in April 2000, IRDA has speedily struck to its schedule of framing regulations and registering the private sector insurance companies. IRDA has power to issue licenses to start insurance business in the country. New private life insurance players can commence business within 15-18 months of getting the license. The most challenging provisions put in by IRDA are for private players, to compulsorily reach out to the rural market in order to achieve healthy potential. IRDA has proposed 10% penalty for late claim settlement for the protection of the policyholders' interest (Agarwal, 2001). IRDA with its developmental and regulatory guidelines is likely to promote competition, fairness and reliability and at the same time protect insured against excessive, inadequate or unfairly discriminatory rates (Shrivastava and Shrivastava, 2001). In other words IRDA will play a significant role in the new scenario for customer protection, strict entry norms and high solvency criteria. The main objectives of this body for developing the emerging Indian insurance market are:

- The insurance companies should manage or expand its current business in order to achieve rapid growth.
- The insurance companies should deliver high quality products in order to build strong market position in the world.

This paper attempts to; (i) examine the impact of changing market scenario on the life insurance business; and (ii) analyze the growth of LIC's business and also brings out future prospects.

IMPACT OF Changing Market scenario

After liberalization, the life insurance industry has totally changed and has become highly competitive with full of challenges. New entrants focus their attention on smart marketing, efficient customer services and also in increasing the coverage of the life insurance market.

Private Players

As the insurance sector has been opened up, the monopoly of government companies has broken and many new private players through their joint ventures have entered the insurance sector. The private players have done a good job in terms of life insurance business. The focus of the new players has been on need based selling of life insurance business, which allows integration of assets, liabilities, fund inflows and outflows and reconcile them with important life events such as children's education, marriages, death, disability, critical illness and retirement (Prudy, 2003). The entry of private players in the life insurance segment seems to have affected LIC's performance to some extent. After privatization of the life insurance sector, LIC's first premium income fell by 20% and the number of policies sold dipped by 7% (Khanna, 2004).

Table 1 shows that, in the changing scenario, there are at present 20 new players in the Indian insurance market and there could be more to follow in the near future. The Birla Sun Life Insurance Company plans to focus on rural segment by leveraging the network of the Aditya Birla center for community initiative and rural development in rural areas. The partnership with Old Mutual Plc, provides the Kotak Mahindra Group with an international perspective and expertise in the life insurance business. Tata-AIG plans to provide impressive life insurance plans to cover both individuals and groups. Met Life India offers a range of innovative products and aims to build financial freedom for everyone. Max New York Life is a partnership between Max India Ltd, one of India's leading multi business corporations and New York life, a fortune 100 company. ING has joined hands with Vysya Bank, one of India's leading private sector banks, to form ING Vysya Life Insurance, which is expected to be the first bancassurance venture in the country. SBI is marketing its insurance products through selected branches of SBI and its associate banks. AMP Sanmar is targeting to sell 30,000 policies in the first year of its operations in India and hoping to collect Rs. 26 crore in premiums (www.bimaonline.com).

HDFC Standard Life and ICICI Prudential have been taking active and special interest in rural India to spread their business, followed by other insurance

companies. ICICI Prudential entered in the rural market with a basket of policies specially designed for the rural segment (Nagarajan, 2004). The Indian private life insurance sector is well developed and has the capacity to face new challenges in a competitive environment. They predict good prospects for new business through alliances and partnerships with domestic outfits. With the entry of private players, now the customers have a wide range of choice of insurance products.

Penetration of Life Insurance

Indian insurance business, which remained underdeveloped with low level of insurance penetration and insurance density, has shown signs of improvement. The life insurance penetration i.e. premium as percentage of Gross Domestic Product (GDP) has increased from 2.32% in 2000 to 2.88% in 2003, although non-life premium has also grown from 0.55% to 0.67% in the economy. The percentage of premium income to GDP of non-life business is lower than the percentage of premium income to GDP of life insurance business. It means that growth

of life insurance business has been more rapid than the overall growth of the economy. This improvement in insurance penetration is significant, and now it is near to the world average of 8.14%. The insurance density, i.e. premium per capita has increased from USD 9.90 in 2000 to USD 16.40 in 2003. The overall world ranking in terms of total premium volumes has improved from 23rd in 2000 to 19th in 2003 (Rao, 2004; Agarwal, 2004a). India has the highest number of life insurance policies in force in the world and total investible funds with LIC are almost about 8% of GDP. It reveals that, the liberalization has a positive impact on life insurance business in India.

Though the Indian insurance industry has been growing between 30%-35%, yet it lags far behind its global counterparts. The main reasons for this are: low awareness, expensive insurance covers, low return on insurance products, weak marketing network and lack of innovative products (www.strategies.ic.gc.ca.). So there is need to improve the marketing network and to increase customers' awareness towards life insurance cover.

TABLE 1
Several New Players

Indian Partner	Foreign Insurer	Specialization	Present Status
Aditya Birla Group	Sun Life, Canada	Life	Received licence
Kotak Mahindra Finance	Old Mutual, South Africa	Life	Received licence
HDFC	Standard Life, UK	Life	Received licence, Commences operation
Reliance	No Foreign Alliance and Health	Life, Non-Life	Received Licence for Non-Life
ICICI	Prudential, UK	Life	Received Licence, Commences Operation
Max India	New York Life, USA	Life	Received licence
Tata Group	AIG, USA	Life and Non-Life	Received licence
Vysya Bank	ING Insurance, Netherlands	Life	Applied for licence
Hero Group	Zurich, Switzerland	Life	Not applied
Cholamandalam Group	Undecided	Life	Not applied
Hindustan -Times	Undecided	Life	Not applied
Dabur	CGNU Life, UK	Life	Not applied
Undecided	Metlife, USA	Life	Not applied
Sanmar Group	Amp, Australia	Life	Not applied
SBI	Cardiff, France	Life	Not applied
Corporation Bank	Undisclosed	Life	Not applied
Undisclosed	Aegon, Netherlands	Life and Pensions	Finalizing its partner
Undisclosed	Cigna, USA	Life and Health	Finalizing its partner
Undisclosed	Nationwide, USA	Life and Pensions	Finalizing its partner
Undisclosed	GE Capital Services International, USA	Life	Finalizing its partner

Source: Kundu (2004a).

Restructuring Organization

There is going to be a large scale restructuring of the insurance industry on various fronts such as organizational structures, policies and practices relating to hierarchical structure, marketing, and claim settlement, distribution system and even ownership in the case of public sector (Palande et al, 2005). At present, with the changing technology, LIC is restructuring its business and indulging with the banks for strategic partnerships known as 'Bancaassurance'.

Whereas, LIC's emphasis will be on making the profits more efficient and more responsive to the customer needs through better systems, more transparent working and decision-making process.

Technology Up-gradation

Information technology has become crucial for the success of the insurance industry. LIC has begun a countrywide exercise to upgrade its existing technology and to provide a facelift to all its existing offices. It has completed computerization of all 2048 branches across the country, 1764 branches have been covered by the Wide Area Network (WAN). Total number of policies covered under WAN are 13,99,28,800 (including policies under salary scheme also). The wide area network is implemented in about 91 cities (www.licindia.com). This network enables the customers to pay their premium and get policy status report as well as quotations for revival, loan, surrender, etc. from any of the branches connected to the WAN. All branches within division have also been covered under Metro Area Network (MAN). With a network of 2048 fully computerized branch offices, LIC is making continuous efforts to spread the awareness of life insurance business into the backward and rural areas for steady all round growth in the life insurance industry.

With a compound average growth rate of 35% during 2001-02 to 2004-05, the IT investment in insurance business is expected to grow rapidly (www.expresscomputer.com). Today, LIC is one of the first and largest users of information technology (IT). In the changing scenario, advanced information technology will provide the following benefits to the insurance companies and customers:

- Prompt, efficient and courteous service.

- Better and cheaper information collection about products and services.
- Reduced cost per transaction.
- Immediate premium collection and funds transfer.
- Overall improved efficiency of the life insurance business.
- Long-life customer relationship.

Marketing of Services

Life insurance is now treated as a protection-cum-savings product rather than a tool for tax savings only. In the changing scenario, the differentiators among the different life insurance players are the products, pricing and service. Consumers are increasingly more aware and are actively managing their financial affairs. They are looking not just at products, but also at integrated financial solutions that can offer stability of returns along with total protection. In terms of returns, insurance products offer competitive returns ranging between 7% to 9%. Besides returns, the benefits of life protection from life insurance products along with health cover are also going to increase (Kundu, 2004b). Today, along with the traditional life products, the customers also have a choice of term, group, child, endowment and pension products from the basket available with the private players and LIC along with riders. The sale of traditional and new life insurance products like retirement plan and unit-linked plan is increasing, because such new products involve strategic research & planning and have better packaging. Product innovation and product development are essential, in order to meet ever changing needs of the customers.

The growth and overall success of life insurance business will depend greatly on the distribution network. Before liberalization, the only mode of distribution of life insurance products was through agents. But now various new channels of marketing have been introduced. The pattern of distribution of life insurance products has totally changed. In the emerging scenario, the new life insurance companies are thinking of new systems of intermediaries. Today, alternate channels like corporate agents, brokers, bancaassurance and direct marketing through Internet are available in the life insurance market. It is expected that the future market will be

intermediary driven, where agents and brokers will play a major role. A strong focus on training of the distribution force will help to build long lasting relationship with customers. Multi-channel distribution and marketing of life insurance products will be the smart strategy for the Indian life insurance market.

The emerging competition is going to compel the LIC to advertise its products more intensively. LIC has efficient marketing strategies to provide better services to its customers. Adequate publicity campaigns are launched by LIC to create awareness about the concept of life insurance and its products. LIC must follow a combination of centralized and decentralized advertisement policy. In India, LIC has been successful in creating a strong brand, but in the wake of competition, it needs a considerable brand building exercise at least in urban India. For brand building, the life insurance companies will require to incorporate legitimacy, distinctiveness and consistency. As competition has intensified, the life insurance firms have focussed on the Customer Relationship Marketing to increase sales force automation. Insurance firms are spending close to 12% of their IT budgets on Customer Relationship Marketing software and services (www.expresscomputer.com). LIC has appointed Customer Relationship Managers at Divisional Offices to give information about products and services and also for redressal of grievances in relation to policy servicing.

Need of the hour is to promote the interest of the entire marketing organization by retention of customers, getting repeat business from customers and creating relationship with the customers (Palande et al, 2003). LIC and other life insurance companies will have to compete with each other in every aspect of their functioning ranging from product design, delivery and pricing to settlement of claims (Agarwal, 2001). That is to say, in the changed scenario, LIC and private players in the life insurance sector will have to provide benefits to the customers in terms of better product mix, reduced price of insurance products and better customer services.

Reinsurance

Reinsurance gives protection against eventualities and supplements the need of insurance companies

by limiting their loss from any single incident or accumulation of loss arising out of any event. Apart from this the practical considerations of protecting the solvency margins also leads to reinsurance (Das, 2004). Reinsurers have been closely involved with all new companies in developing business plans, products, underwriting standards, and providing reinsurance support (www.rgare.com). Life reinsurers are playing an important role in the growth and dynamism of the Indian market. It is expected that government may increase the foreign investment limit in the reinsurance business from 26% to 74%. This move is aimed at attracting private investments in the insurance sector, which has not witnessed the entry of any new player in three years since the insurance market was opened up (Das, 2004).

It is estimated by Swiss Re that reinsurance *cession* rates in China and India are less than half percent and in Southern Asia, the rate is still a low 5%. IRDA has directed LIC and other insurers to share more of its risks with GIC rather than going to foreign companies. IRDA has also asked the LIC to reinsure policies ranging between Rs. 30 to 50 lakh with GIC, and beyond that with Swiss Re (Rangaachary, 2004). In this manner, reinsurance will help in reduction of risk in the international market and primary insurer will be able to accept risks beyond their capacity. It will also help them to settle accumulated losses and still maintain their financial stability. Strong international reinsurance support will be essential for further development of risk products in India.

Growth Of LIC's Business

LIC is considered to be the best in the world in its incremental growth and dynamic development. It is growing at a better rate than average rates in the industry across the world. Entry of private players in the life insurance business has pushed up the sales of LIC and it still continues to be a dominant player in expanding the insurance market by selling 2.70 crore policies in the Individual Business as against 2.45 crore of last year and an additional 3.33 lakh policies under Varishtha Pension Bima Yojana during the year 2003-2004, showing a growth of over 11% in total sales. The Group Insurance Business of the LIC has touched to new heights by recording the ever-best performance of 119% growth in new

premium and 50% growth in number of lives insured during the fiscal 2003-2004 (www.licindia.com).

The total premium collected by the insurers, both life and non-life, in the year 2003-2004 was Rs 82,415 crores (life: Rs 66,288 crore; and non-life: Rs 16,127 crores) as compared to Rs 44,985 crores (life: Rs 38,898 crore; and non-life: Rs 10,087 crores) during the year 2000-2001. This represents an 83% increase in the last three years over the base year 2000-2001. If we take the three-year block prior to the opening of the sector, we find that the total premium collected was Rs 27,089 crores in 1997-98 (life: Rs 19,354 crores; non-life: Rs 7735 crores), which has grown to Rs 44,985 by 2000-01, represents an increase of 66%. Insurance sector is obviously growing at a rapid pace after its opening for private players. The private sector accounts for nearly 13% of the first year premium income in the life insurance market. The average size of life insurance policies before the opening up of the sector was around Rs 50,000. This has now risen to about Rs 80,000. The policies sold

by private insurers are in the range of Rs 1.1 lakhs to Rs 1.2 lakhs (Rao, 2004).

New Business-Individual Assurance (Excluding Annuities)

The New Business under Individual Assurance has been showing a steady growth. The New Business from rural areas amounts to sum assured of Rs 23457.69 crore under 45,23,457 policies representing 18.90% and 13.37% share of policies and sum assured respectively completed during the financial year 2002-03. Table 2 shows that the total sum assured under New Business during 2002-2003 was 179,811.17 crore under 242.79 lakh policies as against Rs 192784.96 crore under 225.00 lakh policies during 2001-2002. New Business under Individual Assurance has been showing a steady growth over the years in terms of the number of policies. The annualized growth over a period of last two years is 10.75% in number of policies, 20% in sum assured and 24.41% in first premium income.

TABLE 2
New Business-Individual Assurance (Excluding Annuities)

Year	New Business in India			New Business Out of India			Total New Business		
	No. of policies (in lakhs)	Sum assured (Rs. crores)	Annual premium receivable (Rs. crores)	No. of policies (in lakhs)	Sum assured (Rs. crores)	Annual premium receivable (Rs. crores)	No. of policies (in lakhs)	Sum assured (Rs. crores)	Annual premium receivable (Rs. crores)
1996-97	122.68	56740.50	3345.39	12,296	253.44	15.39	122.81	56,993.94	3360.78
1997-98	133.11	63617.69	3841.12	13,904	310.14	18.07	133.25	63,927.83	3859.19
1998-99	148.44	75316.28	4863.41	13,356	289.98	17.11	148.57	75,606.26	4880.52
1999-00	169.77	91214.25	6008.28	12,648	276.69	17.14	169.89	91,490.94	6026.02
2000-01	196.57	124771.62	8851.89	7,911	179.01	11.46	196.65	124,950.63	8863.35
2001-02	224.91	192572.27	16009.44	8695	212.69	12.57	225.00	192784.96	16022.01
2002-03	242.68	179512.22	12505.38	10359	298.95	18.85	242.79	179,811.17	12,524.22

Source: www.licindia.com, and Mathur (2003).

Business in Force-Individual Assurance (Excluding Annuities)

Business in force under Individual Assurance has been showing a steady growth over the years. Table 3 shows that in India, the total sum assured in force with attached bonuses under Individual Assurance during 2002-2003 was Rs 9,56,675 crore under 1,388.77 lakh policies as against Rs 8,11,017 crore under 1,258.76 lakh policies during 2001-2002.

TABLE 3
Business in Force-Individual Assurance (Excluding Annuities)

Year	in India			out of India			Total		
	No. of policies (in lakhs)	Sum assured & Bonuses (Rs crores)	Annual premium Income (Rs crores)	No. of policies (in lakhs)	Sum assured & Bonuses (Rs crores)	Annual premium Income (Rs crores)	No. of policies (in lakhs)	Sum assured & Bonuses (Rs crores)	Annual premium Income (Rs crores)
2000-01	1,130.24	6,43,241	34,117.92	0.87	1,801	89.85	1,131.11	6,45,042	34,207.77
2001-02	1,257.89	8,09,170	42,336.84	0.87	1,847	96.60	1,258.76	8,11,017	42,433.44
2002-03	1,38.88	9,54,501	48,148.98	0.90	2,174	106.33	1,388.77	9,56,675	48,255.31

Source: Mathur (2003).

LIC's Market Share

In a country of one billion people, mass marketing has always been a profitable and cost effective option for gaining market share. The rural sector is a perfect case for mass marketing. Rural insurance should be looked upon as an opportunity and not as an obligation. The life insurance industry grew by 64% recording Rs 1354 crore in premium income from New Business in June 2003 alone, with the LIC contribution of Rs. 1096 crore (Aggarwal, 2004b).

India's share in the world market has increased from 0.41% in 2000 to 0.59% in 2003 and it is expected to rise at a higher rate now with the opening up of the sector. The world ranking in terms of life insurance premium volumes has improved from 20th in 2000 to 18th in 2003 and the share in the world market has increased from 0.50% to 0.81% (Rao, 2004).

Table 4 shows that in the life insurance segment, LIC holds nearly 88.59% share in the overall premium, while all private life insurance companies' together account for about 11.41% of the life insurance business. It indicates that LIC's market share is higher as compared to the private life insurance players. LIC has done business to the tune of Rs 7059.49 crore while all private players have done life insurance business of Rs 909.41 crore during the period April-November 2003.

Prospects

The progress of life insurance business is linked with the overall progress of the country and rapid

industrialization. The competition will create not only awareness but also lots of opportunities for using sophisticated technology resulting in high growth of business. Life insurance companies collected about Rs 388 crore through sale of pension policies in 2002-03. It is expected that growth of Asia's insurance business will increase annually by 7.9% to 8.9% in real terms from 2001 to 2005 (www.swissre.com). Keeping in mind the parameters of annual growth rate in GDP and population growth, National Council of Applied Economic Research (NCAER) estimates that the insurable population will grow to 650 million by 2005. According to a report of the Confederation of Indian Industry (CII) on the potential of the Indian insurance market, life insurance premium is expected to touch a high of \$13.03 billion by 2004-2005 and \$31.01 billion by 2009-2010 (Bhatt, 2001). This report also states that insurance premium will account for 18% to 20% of the Gross Domestic Saving of the country by 2010 for the life insurance segments compared to around 8% currently. The report estimates life premia collection to reach US\$ 30-35 billion by the year 2010 (www.pwc.com).

Conclusions

The life insurance sector has been operating in a liberalized environment in India. The new millennium has exposed the insurance sector to new challenges of competition. Competition will compel the life insurance players to bring new and innovative products and to provide improved

TABLE 4
Life Insurance Companies' Premium Underwritten, Policies Issued and Market Share
(upto November 2003)

Insurers	Premium Underwritten (In Crores)		Policies Issued (In Crores)		Market Share (%)	
	November	Apr-Nov	November	Apr-Nov	November	Apr-Nov
TATA AIG	17.10	96.34	179.39	992.37	1.21	0.79
OM Kotak	8.14	40.93	47.65	250.13	0.51	0.20
Birla Sun Life	16.36	115.21	125.44	614.54	1.45	0.49
Max Newyork	9.31	61.95	101.79	621.87	0.78	0.49
ING Vysya	5.33	22.05	61.87	330.36	0.28	0.26
HDFC Standard	14.80	90.78	135.55	934.64	1.14	0.74
Met Life	1.98	10.75	21.26	113.30	0.13	0.09
Allianz Bajaj	10.32	68.54	131.49	938.36	0.86	0.74
ICICI Prudential	54.68	301.11	285.18	1656.43	3.78	1.31
SBI	12.95	57.24	013.52	370.57	0.72	0.29
Aviva	6.41	34.31	55.62	374.98	0.43	0.30
AMP Sanmar	2.09	10.16	41.61	205.03	0.13	0.16
Total	159.47	909.37	1200.37	7402.58	11.42	5.86
LIC	1140.83	7059.49	19128.51	118984.70	88.59	94.14
Grand total	1300.3	7968.86	20328.88	126387.28	100.00	100.00

Source: IRDA (2004).

services to customers. The Indian life insurance market is full of potential. The need of the hour is to frame such marketing strategies that will help in tapping the whole insurance market in more efficient and effective manner. The awareness of public towards life insurance is growing, as a result of which life insurance business in India has increased in terms of sum assured, number of policies and number of persons insured.

LIC, with its fully computerized branches and trained staff, has been trying hard to move closer to the customers and to avoid the delays in servicing. It is growing at better than average rate in the industry across the world. IRDA plays a significant role in protecting policyholders' interest and to ensure financial soundness and healthy growth in the life insurance market. Indian insurance market offers tremendous opportunities to private insurers to build awareness and trust in the mind of customers for rapid growth in the life insurance business. In a

nutshell, the key success factors for life insurance companies in the new world may be: (i) cost effective and strong distribution networks; (ii) integrated training and development programs; (iii) customized solutions and integrated marketing; (iv) implementation of high technological standards; and (v) financial stability.

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Green Packaging Practices of Selected Indian Industries-An Empirical Study

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Concern about environment has started gaining importance through out the world and has now become a worldwide phenomenon. Corporations, under the influence of various laws and Non Governmental Organizations, have started changing their style of working and are being forced to be more considerate towards their environment. On one hand where business units will be forced to produce green products, it becomes all the more important to study the packaging styles being followed by Indian organizations for their products. Packaging is one part which is usually disposed off after the product is consumed and therefore forms an unwanted part of the environment thereby leading to environmental pollution. Recent floods in Mumbai is one such example where disposed off packing materials and plastic hand bags had created havoc leading to aftermath well known to us. Based on the data collected through a field survey, this paper makes a modest attempt to assess the practices being followed by Indian organizations regarding the types of packaging being used by them and various factors that lead them to use such type of packaging.

Environmental Issues

Environmental systems attempt to explain the relationship between organisms and their environment. It describes the environmental range over the biosphere, the distribution and abundance of species in time and space, the organization of communities and the changes that can be expected in the face of a disturbance. It includes features like food chain and food web, productivity, energy flow and biochemical cycling. Ecological systems or ecosystems are immensely complicated and diverse, ranging from a small pond to a mature forest. An ecosystem can be defined as a unit of the biosphere consisting of organisms and their physical and chemical environment tuned in a machine like organization and driven by the energy received from the sun. The system is self sufficient for as long as it receives energy. The ecosystem represents a distinctive combination of air, soil and water along with an assemblage of plant, animal and microbial species in a particular habitat, which interact with each other and with their physical and chemical environment in such a way as to constitute a self maintaining and self regulating unit.

Today, every one is concerned with environmental issues as they influence all human activities. One area where environmental issues have received a great deal of attention in the popular and professional media is marketing. As society becomes more

concerned with the natural environment, businesses have already begun to modify their behavior in an attempt to address society's 'new' concerns. Some businesses have been quick to accept concepts like environmental management system and waste minimization and have integrated environmental issues into all organizational activities. Some evidence of this is the development of journals such as 'Business Strategy and the Environment' and 'Greener Management International', which are specifically designed to disseminate research relating to environmental behavior of business houses. Thus terms like 'Green Marketing' and 'Environmental Marketing' appear frequently in the popular press (Das and Nath, 2003). The issue of environmental protection is permeating our everyday lives. It has brought the government, business and consumers on a common platform where each has to play its role. Most product-related 'green' innovations focus on modifying single product attributes, such as designing a computer to power-down when not in use. Only limited environmental improvement can be gained from simply enhancing existing products. At some point, the product concept itself becomes the barrier. Further, environmental improvement requires development of new product concepts that provide substitutes for existing products and development of new types of packaging, which are environmental friendly.

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Review of Literature

Jitendra Kumar Das (2002) discussed about *Green Products*. According to him, products that provide benefits and have minimal adverse impact on the environment can be termed as Green Products or Environmental goods. According to the researcher, products cannot be absolute green because all products are made from raw materials and would necessarily produce waste that may have adverse - to whatever degree-impact on the environment. Refrigerators, for example, that use ozone friendly refrigerants can be termed a green product, but the environmental hazard in the form of waste when the refrigerator is no longer in use, still poses some threat to the environment. In the Indian context, the environmental concerns to the Indian consumer are on the rise going by the increased coverage of the issue in the media in the last few years. This potentially provides a set of new opportunities to Indian companies. Das and Nath (2003), in their study on Fast Food industry, found that 50% of the producers expressed concern for environment but did not have any waste management system. It was found in the study that 85% of the producers used paper bags and other paper accessories to avoid environmental pollution. It was interesting to find that even consumers (70%) said no to poly bags. Half of the respondents (50%) in the study were also aware of ISO-14000 certification but none of the outlets studied had ISO-14000 certificate. Thus, it is evident that scenario in India is now changing and people are getting more concerned about the environment though their percentage may be small. In a study conducted by Chand (2001), the researcher had discussed concepts like *Green Purchasing and Eco-Mark Labelling*. Green Purchasing is a new concept emerging in the country as the concern for the environment is growing all over the world. The researcher has cautioned by stating that the developed countries, in order to protect their own environment, has started transferring obsolete technologies to the developing countries which has led to increased pollution in these countries. Thus emphasis should be laid on Green Purchasing, which refers to purchasing of such products, which have been produced by green processing and have got least impact on the environment. Paramasivan (2002) had also suggested that environmental issues are business issues and have considerable implication for 'audit'

leading to development of a specialized area viz. 'environmental auditing'. Within a short span of time, the environmental auditing has moved from being considered a marginal topic to one having a central role in the deliberations of the international accounting profession. It is being seen as an essential element in any organization's environmental response. Nath and Pateriya (2004) have highlighted the ways by which today's organizations are trying to attract people by making false claims about environment and are trying to brainwash the minds of the customers by projecting an environmentally conscious organization. The authors had emphasized on the fact that pollution is bound to increase as India moves into the category of developed nations but it becomes the responsibility of every organization to protect its environment and not make false claims to promote and advertise their products simply to increase their market share and profits.

Banerjee (1999) defined corporate environmentalism as "the organization wide recognition of the legitimacy and importance of the biophysical environment in the formulation of organization strategy, inclusion of environmental impact of business actions in the strategic planning process, organization wide communication of corporate environmental goals and the organization wide responsiveness to environmental issues. Sheth and Paravatiyar (1995) argued that only proactive corporate marketing and active government intervention could achieve sustainable development. They suggested a two dimensional shift in the approach to ecological problems: from consumption marketing to sustainable marketing and from invisible hand to a more visible hand of the government. They called this a 'new orientation for ecological marketing'.

Davis (1990) laid down many interesting points towards sustainable business practice. However, the criteria used to assess the 'sustainability' of certain companies vary among researchers and is difficult to formulate. According to Davis, sustainable development is a complex idea which, from a business point of view, can be described as something that a) uses renewable resources in preference to non renewable, b) uses technologies that are environmentally harmonious, ecologically stable and

skill enhancing, c) design complete systems in order to minimize waste, d) reduces as much as possible the consumption of scarce resources by designing long life products that are easily repairable and can be recycled and e) maximizes the use of all services that are not energy or material intensive, but which contribute to the quality of life.

Miles and Covin (2000) defined two mutually exclusive philosophies towards environmental management:

- (a) The compliance Model of environmental management
- (b) The Strategic Model of environmental management.

The compliance model suggests that corporations must simply comply with all applicable regulations and laws implicitly following Friedman's model of business ethics in an attempt to maximize stockholder returns. This can be considered as typical traditional "defensive" environmental management approach.

The Strategic approach to environmental performance suggests that firms attempt to maximize stockholder returns by utilizing an environmental strategy proactively to create a sustainable competitive advantage. Further more, they divide the strategic model into two somewhat synergistic approaches to the utilization of environmental policy as a strategic tool of competitive advantage. They argue that firms primarily marketing commodity products and competing primarily on the basis of price will adopt compliance model of environment management, whereas firms that primarily market highly differentiated products will tend to adopt the strategic model of environment management.

Porter and Van der Linde (1995) emphasized environmental responsibility and improvements as a source of competitive advantages in today's dynamic economy. They argue that innovating to meet regulations can bring offsets using inputs better or improving product yield. Certainly, some companies do pursue such innovations without, or in advance of regulation. Furthermore, they list six major reasons why regulation is needed but also define 'good regulations' supporting innovations versus 'bad regulations' damaging competitiveness.

According to them, now is the time for a paradigm shift to bring environmental improvement and competitiveness together. By innovations companies can reap offsets that will go beyond those directly stemming from regulatory pressure.

According to Wilkinson (1992), green economists argue that sustainability is fundamental to the concept of income. Conventional national accounts undervalue nature's contribution to our welfare and so make for unsound economics. For instance, GNP is measured without putting any value on natural resources and their depletion. Thus, conventional accounting unreliably indicates the health of the nation. It is a slippery guide to policy choices. Focusing on such defects, green economist sets out to formulate natural resource accounts that can measure the impact of resource degradation. They set out to design methods of cost benefit analysis that can enable policy makers to make better choices (DTE June 30, 1992).

Toffler and Toffler (1995) described the modern society by pointing out at a transformation of the economic structure of industrial society; the evolution of the service economy, the dominance of white collar workers and professionals, the emergence of communication and computerization technology, the increasing importance of theoretical and scientific knowledge in societal reproduction and the growing economic and social preoccupation with leisure and the quality of life. They called these changes 'The Third Wave'. The third wave brings with it a genuinely new way of life based on diversified, renewable energy sources; on the methods of production that make most factory assembly lines obsolete; radically changed schools and corporations of the future. The emergent civilization shall write a new code of behavior for us and shall carry us beyond standardization, synchronization and centralization, beyond the concentration of energy, money and power.

According to Welford (1995), in order to measure improving environmental performance, there is a need to define an ultimate goal towards which the organization must move. Welford (1995) defined this utopian form of organization as 'transcendent firm'. The firms have ideals very similar to those of green philosophy and perform in a way, which is

completely consistent with an ideal environment-friendly organization. He then placed this firm at one end of his 'green scale'. At the other end, there is a firm called 'resistant firm'. Thus the firm's environmental performance would be represented by extreme resistive behaviour. The organization's prime and ultimate motive would be profit and satisfaction of shareholders. Firms can therefore be categorized in between these hypothetical organizations according to organization's environmental performance on the scale.

Swallow and Sedjo (2000) argue that international organizations propose eco-labeling as a market incentive to cause industry to operate in an ecologically sustainable and biodiversity-friendly manner. A micro economic analysis question whether eco labeling will cause producer profits in a competitive industry to decline, even under a voluntary system and whether eco labeling will necessarily generate different prices for labeled and unlabeled products. The implications of this study were significant. For a voluntary system, if demand for certified product is small relative to overall, if the costs of certification are significant and if the amount of new demand created by certification is modest, then the market is less likely to generate a price premium for the certified product, even if there are substantial number of consumers 'willing to pay' a premium. However, to the extent that costs of certification are small and certification with labeling creates significant new demand, the two-price alternative is increasingly likely to be generated by voluntary market activities.

Kirchoff (2000) more explicitly has taken into account the nature of environmental quality under asymmetric information. Environmental quality is often considered to be credence good, one for which environmental quality cannot be observed by consumers even after the purchase. This gives the firm an incentive to exaggerate the environmental performance of its products. Kirchoff (2000) finds that a third party environmental labeling system will increase the likelihood that the firm will choose to produce a clean product provided that there is some monitoring in the label scheme and consumers believe in the label. Mason (2001) found that the label may not increase the number of green products and that an environmental label in some situations

may reduce welfare as the cost of transportation and shoring are equal across brands and when all brands are included, different brands may be sold at different prices and customers may go in for cheap products. Further, there are examples of companies whose sales dropped precipitously as a result of being labeled environmental unfriendly (Cairncross, 1993) and there is a great deal of survey evidence that consumers will readily accept a willingness to incorporate environmental information into consumption decisions (Russell and Clark, 1999).

Thus, it can be seen that environment and environmental concerns are drawing attention throughout the world and business activities need to change accordingly to save the physical environment in which it operates.

Justification of Present Study

In the backdrop of the above discussion, it is important to note that in spite of all the efforts and formulation of laws, the condition of environment has been deteriorating in our country. The present study attempts to find out the opinion and attitude of Indian industries about environment and its conservation by means of using environmental friendly packaging. It tries to study the packaging practices of four industries namely Plastic, Electrical, Automobile and Food. The study is an attempt to study their attitude towards social responsibility and efforts to protect the environment by use of environment friendly packaging.

Research Objectives

1. How far the selected industries are similar or dissimilar in terms of their green Packaging practices?
2. What are the differences in the practices of the organizations of the same industry and organizations of different industries and to find the reasons for these differences?

Research Methodology

There are 6950 companies in and around Delhi, covered under the four industries under study. It is neither feasible nor desirable to cover all the units in the present study. For the purpose of data collection, Balit's Publication "Delhi & Around Industrial Directory" was used to prepare an alphabetical list

of industrial units in Delhi. A sample of 20 companies, 5 companies from each industry was selected from this population for the study with the help of a Random Numbers Table. For collecting data from the industry, the respondents consisted of Managers, Proprietors, Managing Directors, Sales Managers, Vice Presidents, Technical Managers/ Supervisors, Directors, Deputy Directors and Partners.

Limitations of the Study

The study has the following major limitations:

1. It is based on a very small sample of 20 companies randomly selected from 4 industries namely automobile, plastic, electrical and food. Therefore, the generalizations of results of the study to all the industries in India are limited as defined by the size of this sample and findings to other industrial organizations are unwarranted.
2. The present study is largely exploratory in nature. Despite its external validity, it lacks internal validity. Thus, notwithstanding its richness of data, it lacks control of variables (either through experimental design or through statistical techniques) influencing the research results.
3. The study is based on two methods of data collection: questionnaires and analysis of records. Thus, the extent of reliability and validity of the findings of this study depends on the reliability and validity of these methods of data collection.

Findings

The packaging preferences have been shown in Fig 1. It was found that 65% of the organizations (13 out of 20) studied preferred "cardboard boxes" as the packaging material for their products, followed by "polythene packs" which was preferred by 60% of the organizations (12 out of 20). "Paper bags" and "tin boxes" were preferred by 30% of the organizations (6 out of 20). "Thermacole boxes" were preferred by 15% of the organizations (3 out of 20) and jute bags were preferred by only 10% of the organizations (2 out of 20) preferred.

Industry-Wise Breakup of Packaging Preference

Table 1 shows industry-wise breakup of packaging preferences. It was found that 80% of the organizations (4 out of 5) belonging to food industry preferred "cardboard boxes", followed by 60% of the

organizations (3 out of 5) from electrical, plastic and automobile industry preferring "cardboard boxes" as the packaging material. Overall, 65% of the organizations (13 out of 20) preferred "cardboard boxes" as the packaging material. It was food industry again where 80% of the organizations (4 out of 5) preferred "paper bags", 40% of the organizations (2 out of 5) of electrical industry preferred paper bags. None of the organizations from plastic industry and automobile industry preferred "paper bags". Overall, only 30% of the organizations (6 out of 20) preferred "paper bags". It was found that 80% of the organizations (4 out of 5) from food and plastic industry preferred "polythene packs" followed by 40% of the organizations (2 out of 5) of electrical and automobile industry preferred "polythene packs".

Overall, 60% of the organizations (12 out of 20) preferred "polythene packs". Food industry had shown maximum preference for "tin boxes". It was found that 80% of the organizations (4 out of 5) preferred "tin boxes", followed by 20% of the organizations (1 out of 5) of automobile industry and electrical industry preferred "tin boxes". None of the organizations from plastic industry had preferred "tin boxes".

Reasons for Using the Packaging

Table 2 shows reasons for using the packaging. It was found that the most important reason was that it "preserves the product"; followed by the reasons that the packaging should be "light weight", "cheaper and economical" being ranked second and third respectively. Being "strong" was ranked fourth, followed by "safe" being ranked fifth and "no other alternative" being ranked sixth.

Pair-Wise Comparison of Statements to Examine the Attitude of Industries under Study towards Green Packaging

Table 3 shows pair-wise comparison of statements to examine the attitude of industries under study towards green packaging. In order to compare the opinions of the industries, pair-wise comparison of statements regarding green packaging was done using Student's t-test. This was mainly done to find within which two industries there was a significant difference in the opinions regarding a particular statement.

It was found that there was a significant difference in the opinions of "food and electrical" industries regarding the material of their packaging being bio degradable. Similar observation was also found to be true regarding "food and plastic" industries. It was observed that food industry had laid emphasis on all types of packaging namely cardboard boxes, paper bags, polythene packs and tin boxes whereas electrical industry had mainly emphasized on cardboard boxes whereas plastic industry had mainly emphasized on cardboard boxes and polythene packs.

There was a significant difference in the opinions of "food and plastic" industries regarding the material of packaging being recyclable. Similar opinion was also found to be true regarding "electrical and plastic" industries. Food industry was of the strong opinion that its packaging materials were recyclable as it mainly comprised of cardboard boxes, paper bags and tin boxes, which can be recycled again and again, whereas plastic industry had emphasized on use of polythene packs which are not recyclable every time. There was no emphasis on use of tin boxes and paper bags by the plastic industry. Lastly, there was a very significant difference in the opinions of "plastic and automobile" industries regarding utilization of packaging for some other use. Plastic industry strongly reacted by saying that its packaging and also its products can be put to use for some other use but automobile packaging has to be disposed of after single use.

Awareness of Negative Impact of Packaging

Fig 2 (a) shows the awareness of negative impact of packaging among the organizations (n=20) under study and Fig 2 (b) shows the breakup of the organizations (n=10) having this awareness of the negative impact of the packaging on the environment. It was also found by the researcher that 50% of the organizations (10 out of 20) were aware of negative impact of their packaging on the environment. Out of these 50 % organizations, it was found that 40% (4 out of 10) were organizations from the automobile sector, 20% (2 out of 10) were from the electrical industry, 30% (3 out of 10) were from the plastic industry and 10% (1 out of 10) were from the food industry.

Efforts to Reduce Negative Impact of Packaging

Table 4 shows the efforts being put in by the industry to reduce the negative impact of packaging on the environment. Out of the 10 organizations, which were aware of the negative impact of their packaging on the environment, the best effort suggested by them was that they could "make packs in such a way that it can be reused", followed by putting "instructions to destroy/dispose off the package" in a safe manner and lastly by making the "exchange offer to return the package after use".

Table 5 shows consistency among industries regarding packaging. It was found that electrical industry had been most consistent in its opinion about the packaging being used by them as it had shown the lowest coefficient of variation of 40.82%. This was followed by the food industry having the next lowest coefficient of variation of 58.13%, followed by automobile industry having the coefficient of variation of 99.37% and lastly, the plastic industry had been the most inconsistent with the highest coefficient of variation of 135.78%, which reveals that there exists more consistency in the opinion of the electrical industry regarding the packaging being used by them to minimize the environmental damage.

Discussion

The study revealed that more than half of the organizations had shown preference for both polythene packs and cardboards. It was found that the two types of packaging were almost equally preferred as they were considered to be strong and capable of holding voluminous, big and heavy products. In fact the packaging style was that the product was first packed in polythene packs and then put into cardboard boxes. This gave maximum protection to the product and made handling and storing of the product rather safe. The most surprising reason for the use of polythene packs by some organizations was that they save trees by doing so. On the contrary, the organizations also supported the use of cardboard boxes by recognizing it as environment friendly and biodegradable. Some of the organizations, using *only* cardboard boxes, were of the opinion that polythene packs are dangerous for animals and considered them a real threat for the

environment and a big problem for the drainage and sewage system. Food industry had shown a very high preference for paper packs and the main reason in support of it had been the oil absorbing capabilities of paper and its light weight, which makes it easier to carry. Similar type of preference was shown by the food industry for tin boxes also as they were considered to be the best for preserving processed food items. The most important reasons for using a particular type of packaging had been very obvious and every one supported the fact that their packaging should be such that it preserves the product for a longer time, it should be light weight so that transportation charges are minimized and every one believed in cost cutting and therefore preferred cheaper and economical packaging. It was surprising to find that safety parameter was ranked very low, which again is an indication that the packaging preferences are profit oriented. The sense of safe and healthy environment for all, fails to occupy the top priority in the minds of the business executives of the four different industries studied. This supports the study of Wilkinson (1992) who said that green economists argue that sustainability is fundamental to the concept of income. Conventional national accounts undervalue nature's contribution to our welfare and so make unsound economics. Further, from the 20 organizations studied, only half of the organizations were aware of negative impact of packaging on the environment, which is a cause of worry because the organizations which are not aware of the negative impact of their packaging on the environment, have full potential of damaging the environment if they continue to follow the same practices and when it has been found that safety parameter has been ranked low by the industry, it becomes still a more serious concern. This shows that corporate environmentalism as defined by Banerjee (1999) has not been able to emerge successfully so far and further supports the study of Davis (1990) according to whom sustainable development is a complex idea from a business point of view. It was encouraging to find that among the other half of the organizations, which were aware of

the negative impact, preferred making the packs in such a way that it can be reused. This will not only lead to development of sustainable packaging but also will, in turn, minimize the waste of packaging material and encourage alternative and sometimes innovative uses of the material for some other constructive purposes. This supports the argument given by Porter and Van Der Linde (1995) who had emphasized that by innovating to meet regulations; it can bring offsets using inputs better or can improve the product yield. This shall lead to successful emergence of strategic approach to environmental performance as suggested by Miles and Covin (2000). Among the four industries studied, electrical industry had been the most consistent in its opinion about its packaging and it was found that it had been using almost all kinds of packaging with more preference for environmental friendly packaging like paper, cardboard and jute.

Conclusions

Cardboard packaging followed by polythene packaging has emerged to be top most priority of the industries studied as far as packaging materials are concerned. The combination of the two got wider acceptance due to better durability being provided by the two packaging materials when used together. Majority of the Indian organizations do not consider the negative impact of packaging on environment. The study reveals that not much work is being done by business units in this field of green packaging. Further, the Indian organizations have been found to be following the compliance model of environmental management (Miles and Covin, 2000), where corporations are simply complying with applicable regulations and laws following Friedman's model of business ethics in an attempt to maximize stakeholders returns. There is a need to define an ultimate goal towards which the organization must move (Welford, 1995). Environmental quality so far has been considered as credence good (Kirchoff, 2000) but the time has now come, where this attitude needs a drastic positive change.

Table 1: Industry-wise breakup of Packaging preferences

Industry	Electrical Industry (n=5)	Food Industry (n=5)	Plastic Industry (n=5)	Automobile Industry (n=5)	Total Industry (n=20)
Packaging					
Cardboard Boxes	03 (60%)	04 (80%)	03 (60%)	03 (60%)	13 (65%)
Paper Bags	02 (40%)	04 (80%)	00 (0%)	00 (0%)	06 (30%)
Polythene Packs	02 (40%)	04 (80%)	04 (80%)	02 (40%)	12 (60%)
Tin Boxes	01 (20%)	04 (80%)	00 (0%)	01 (20%)	06 (30%)
Jute Bags	02 (40%)	00 (0%)	00 (0%)	00 (0%)	02 (10%)
Wooden Boxes	01 (20%)	02 (40%)	00 (0%)	03 (60%)	06 (30%)
Thermacole Boxes	01 (20%)	01 (20%)	01 (20%)	00 (0%)	03 (15%)

Table 2: Reasons for Using the Packaging

Reason	Score	Rank
Cheaper and Economical	47	III
Safe (Health wise)	65	V
Strong	54	IV
Preserves the product	43	I
No other alternative	90	VI
Light weight	44	II

Table 3: Pair-wise comparison of statements to examine the attitude of industries under study towards green packaging

Statement	Industry Pairs	Significant Value of 't'
The material of packaging is bio degradable	Food and Electrical	4.430
The material of packaging is bio degradable	Food and Plastic	3.840
The material of packaging is recyclable	Food and Plastic	3.641
The material of packaging is recyclable	Electrical and Plastic	2.842
Our packaging can be put to some other use	Plastic and Automobile	3.164

Table value of $t = 2.30$ at 8 degree of freedom at 5% level of significance

Table 4 : Efforts to Reduce Negative Impact of Packaging on Environment by the Organizations (n=10)

Efforts	Score	Rank
Instructions to destroy/dispose off the package	21	II
Exchange offer to return the package after use	22	III
Make packs in such a way that these can be reused	18	I

Table 5: Consistency Among Industries Regarding Packaging

Industry	Coefficient of Variation
Electrical Industry	40.82%
Plastic Industry	135.78%
Food Industry	58.13%
Automobile Industry	99.37%

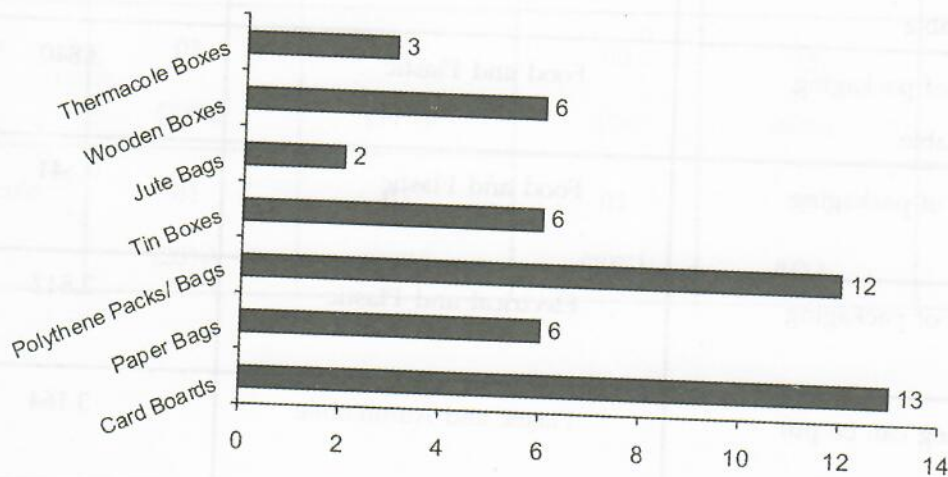


Fig 1: Packaging Preferences of the Organizations (n = 20)



Fig 2(a): Awareness of Negative Impact of Packaging (n = 20)

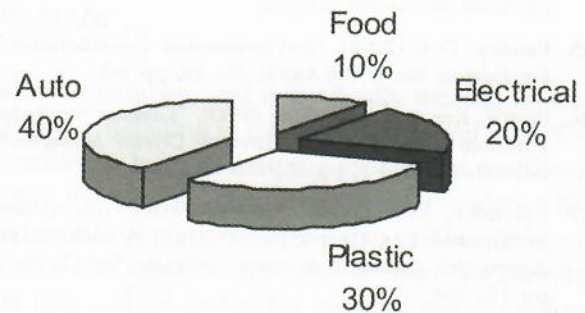


Fig 2(b): Breakup of the Industry's Awareness of Negative Impact of Packaging (n = 10)

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David Gilbert-Retail Marketing Management

Pearson Education Limited, New Delhi

2006, pp 457, Rs.325.00

Retail industry is one of the oldest industries for the last few centuries, and is gradually inching its way towards becoming the next boom industry, all across the globe. Retailing is the most active and attractive sector which has witnessed so much dynamics. It is witnessing a huge revamping exercise as traditional markets make way for new factors of shopping, introducing the consumers to a shopping experience like never before. It is the latest bandwagon that has witnessed words of players leaping into it. This emerging competitive scenario triggers the need to develop innovative and creative strategies to make a successful mark to achieve greater customer satisfaction. The time is ripe to think out of the box and use technology as a competitive weapon. The challenge is greater and the marketers need to address a host of issues relating to successful retail marketing practices.

The book under review is a vivid attempt to explore all dimensions of Retail Marketing Management, with elan. As the retail industry revolves around the customer more than any other industry, it becomes imperative to know the customer well in advance, before the action starts. The author throughout maintains this customer-end approach, as he draws upon various strategic issues of Retailing.

The contents of the book are put together in 16 chapters in all. In Chapter 1, the author builds the necessary background of Retailing as an activity and emphasizes on growing importance of retail industry. Chapter 2 dwells upon the fact that retail marketing has to be dealt with, within the broader context of marketing philosophy. Chapter 3 gives rich insights into consumer behaviour in the context of retailing and the implication of studying consumer behaviour for successful retail management. In the pursuit of serving the customer's need, better and faster than the competitors, the companies need to focus on quality and services to differentiate themselves. Chapter 4 advances this issue at length.

Chapter 5 lay stress on important marketing management issues in retail organizations and focuses on a better planned and well coordinated approach to leverage the benefits of marketing management mix with customer wants.

The development and implementation of a merchandise plan is one of the most important phases in any retail strategy. Chapter 6 elaborates on the fact that to be successful, retailers must make competent decisions over what is to be bought, in what qualities and at what time, thus focusing on planning and controlling of the retailer's inventories. In the times of tough competition, pricing strategies act as competitive tool. Chapter 7 raises issues relating to price sensitivity in retailing industry, including various approaches to pricing retail products and how it can add value to increase consumer benefit. Chapter 8 describes the range of promotional methods which can be employed by retailers to influence consumer response. It draws attention on how to successfully use complex series of communication to influence the target audience. Chapter 9 analyses the need and effect of successful relationship among channel partners for increased efficiency and mutual competitive advantage. The business arena is always changing and poses threats, if ignored. Chapter 10 discusses the role and necessity of careful planning and strategic management, with reference to this field. Chapter 11 employs extensive dimensions of location decision making. The marketers always have a study need to differentiate themselves from the rest of the competitors, and retail marketing is no exemption. Strong differentiation and positioning strategies become all the more imperative, as competition toughens. Chapter 12 deals with the core issue of how to successfully create and maintain the retail brand. The current success of many retail companies is related to the way, they have improved the operation of this business through the use of IT. Chapter 13 unfolds the growing importance of using Information Technology for comparative advantage. The last section of the book, comprising of Chapters 14, 15 & 16, make an interesting reading as the author touches upon the growing consumerism all over the

world, and the need to be sensitized to ethical and privacy concerns. The movement of retailing has spread its wings across national borders with strong developments in international retail structures and the future of retailing seems very bright.

Overall, the book represents a good scholaristic work of the author, with perfect blend of imperative issues and sensitive concerns of retail marketing management intricacies. The author deserves accolades for dealing so comprehensively with all pertinent issues in such a concise manner. The author has translated his rich industrial exposure, by giving insights into practical elucidations in the form of mini cases for easy comprehension. "Further Readings", section at the end of each chapter, is a useful guide for more serious readers. The book is a valuable aid for students, teachers, managers, and other thinkers and practioners, for its lucid style and content treatment.

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R C Sharma, Human Resource Management

Galgotia Publishing Company, New Delhi,
2003, pp131, Price Rs.125/-

The book under review is primarily meant for students of various postgraduate programmes as also for the human resource executives. The subject matter has been presented in a style and language that is easily understandable even by the beginners in the field. The book provides a broader outlook of the human resource function and covers almost all the main aspects of human resource management in a brief and concise manner.

The book comprises of 15 Chapters. Chapter 1 presents an overview of human resource management highlighting the objectives and scope of human resource management besides summarizing the future challenges before human resource management. The author concludes the chapter stating that HRM is likely to emerge as a more powerful functional area attracting the attention of all concerned and making significant contribution to the industrial world. In Chapter 2, the author has explained the nature and influence of environmental factors. He has identified both internal and external factors that influence an organization and its human resource function. Chapter 3 throws light on the concept of HRM and distinguishes the terms 'Personnel Management' and 'Human Resource Management'. The author has identified the various stages of the development of HRM since 1915 and presented them in a chronological order. Several main HRM practices being followed by the corporate sector have also been discussed, in brief, besides discussing the managerial and operative functions of HRM under different heads.

In Chapters 4, 5 and 6, the author has explained the various facts, related to the procurement of human resources which are so vital to any organization. For example, in Chapter 4, a fairly comprehensive treatment has been given to the concept, meaning, need and process of human resources planning and establishing that if HR planning is done properly, it will prove effective in the accomplishment of organizational goals. Similarly, in Chapters 5 and 6, the author has explained concepts, methods and processes of job analysis, selection, induction and placements – touching almost all the important core issues and their ingredients.

Chapters 7 and 8 have dealt with training and development function of the HRM. The process and methods of training and development and policies and practices of career development have been examined thoroughly. While Chapter 9 takes care of performance appraisal and also of potential appraisal, Chapters 10 and 11 have examined the compensation function of HRM. Both financial and non-financial incentives as well as the design and administration of compensation management have been explained nicely.

In Chapters 12 and 13, the core issues of development counselling, disciplinary action, health and safety measures have been given a good treatment. The two other modern burning issues, viz., labour relations and collective bargaining, have been examined in Chapters 14 and 15.

Keeping in view, the small size of the book, the author appears to have done full justice to the subject of human resource management. However, the value of the book would have been enhanced had the topics covered in the book been discussed in more length. Of course, there is no denying the fact that despite its compact size, the book has a number of useful and interesting insights and, therefore, can be considered as an outstanding contribution in the field of human resource management.

The book has a special significance for those who have limited time but want to have a reasonably good exposure in the area of human resource management. Hence, both the line and staff managers also can draw heavily from this book and make use of the information so derived in their respective organizations. The author really deserves appreciation for his expertise in handling a vast area as human resource management in such a precise and compact manner.

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S L Gupta, Financial Derivatives-Theory, Concepts and Problems
 Prentice-Hall of India Pvt Ltd, New Delhi
 2006, pp 616, Price Rs 375.00

The 'Globalization' and 'Liberalization' have triggered tremendous growth in the volume of international business activities and, therefore, the field of the international finance has become important for almost all medium and large-scale enterprises. This has caused increased volatility in economic environment, and to manage the adverse changes in the interest rates, exchange rates and stock market prices, a new financial instrument, 'financial derivatives' have been developed.

The book under review aims at providing an in-depth analysis of the underlying concepts of financial derivatives and deals with the technical aspects of the same. The book provides a broader framework of the modern financial derivatives and gives a wide coverage of the complex world of financial derivatives.

The book has been organized in five sections comprising twenty two Chapters. The first section comprises four Chapters i.e. Chapters 1 to 4. The author begins by defining the concept of financial derivatives and traces their historical developments, classifications and also discussed the myths of financial derivatives. In the second Chapter, the author has introduced the future markets and trading by describing the concept, nature and features of future contracts. The author has nicely describes the different participants of future market. The third Chapter deals with various aspects of forward trading and explained the mechanism of pricing forward in different assets like investments assets and consumption assets. The fourth chapter introduces the theory and mechanism of pricing the future contracts in different situations and describes how future prices and spot prices are converged. In nutshell, the author has effectively given the overview of financial derivatives in the first section

The second section consists of two Chapters i.e. Chapters 5 and 6, which deals with Indian scenario of financial derivatives, where, the author has describes the evolution and need of financial derivatives in India. The author has clearly presented the emerging structure of derivatives market and explained the regulatory framework of financial derivatives in India, so that before entering into financial derivatives market in India, the reader can have an understanding of its structure and regulations. The author has viewed that the future of derivatives trading in India is bright and growing day by day. Though financial derivatives are new to Indian financial market but the trading volume in Indian financial derivatives market has risen at very fast rate ranging from Rs 35 crore in June 2000 to Rs 2,60,470 crore in March 2004, which shows overwhelming interest of investors in this market.

The third section of the book includes six Chapters i.e. Chapters 7 to 12, in which the author has explained unique/specific futures derivatives instruments such as stock index futures, interest rate futures, foreign currency futures & forwards and touched almost all essential aspects of their operation and various hedging strategies used to control or minimize risk under different conditions.

The fourth section of the book contains six Chapters i.e. Chapters 13 to 18, focused on other financial derivatives instruments i.e. financial swaps and options. In Chapter 13, the author has thrown light on swap deals their nature, types, features and hedging with swaps. At the end of the Chapter, the author has stressed on the importance of swap technique for transforming the characteristics of financial claims. In Chapter 14 to 18, all important aspects of option instrument like its basics, various pricing models, trading with options, hedging with option and options on foreign currencies have been discussed and given a good treatment.

The fifth and the last section of the book includes four Chapters i.e. Chapters 19 to 22, in which the author has examined other important issues of financial derivatives like their accounting and tax treatment, management of derivatives exposure, introduction to other important advanced derivatives instruments and credit derivatives at the end.

The author has written the book with an objective to provide an understanding of both theory and practice of functioning of various financial derivatives. Each Chapter of the book is blended with both theory and relevant practical examples. To ensure more clarity to the readers, various charts, diagrams, and tables have been used in the book. Each Chapter begins with the learning objectives and ends with the summary, discussion questions and an extensive bibliography on the topic. A list of important stock exchanges all over the world where derivatives are traded and a rich glossary and solutions of the unsolved problems are incorporated at the end of the book. Overall, the book has been written in an excellent manner and the author appears to have done full justice to the subject. The author deserves all appreciation for his work.

The book would serve the need of teachers and students of finance, commerce and management. It would be also useful to the derivative practioners, Chartered Financial Analysts, Chartered Accountants, investors, researchers and policy makers.

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Kenichi Ohmae-Next Global Stage: The Challenges and Opportunities in Our Borderless World.

Pearson Education Limited, New Delhi

2006, pp 312, Rs 499.00

We all live in the Global arena and experience the essence of Globalization. The world has transformed into a borderless Global village, which seems to throw open numerous opportunities in the economic scenario, as the world economy open up its arm to embrace change, but also resulted in increased chaos, clutter and competition. The companies, in order to survive and compete at this Global stage, needs new paradigms, new set of rules and winning strategies. The traditional approach, methods and structures are failing to adequately accommodate a complexity-based worldview, which is characterized by discontinuous change, hyper competition and exponential explosion of information science. It is absolutely clear that the future demands fundamental rethink, and the strong and logical paradigm that can withstand the pressure of rapid change in a borderless, connected and wired world. The true assessment is required for the indicators of competitiveness, sources of economic powers and factors that can drive growth. The times ahead are all the more challenging and a well preparedness is what it all takes to emerge as winners.

The book under review reflects the ideology of learning from past mistakes, strengthening today and strategically preparing for tomorrow-The next Stage. The book gives a wonderful treatment to very pertinent and core theme of the present times. All appreciations for author's capacity and capability for throwing deep insights into what is successful and what is not in the turbulent and challenging times of today. Very amicably the author describes that changing times demand carving new set of strategies. The rules of the game demand a strategic shift. The framework presented here calls for formulating agenda for action at individual nation level, industry level and at personal level to gain from what lies ahead.

The rich content matter of this book is formatted into three stages, which depicts the staged process of preparing to take on the challenges of tomorrow, taking lessons from the past, and learning from each other's experiences. In the first section, the author examines into the overall world economy: it's characteristics, areas of growth and the pertinent drivers of growth. The attempt is to examine the various reasons for failure of traditional economies to pave the way for the next section, which elaborates on emerging trends at the global stage.

It makes an interesting reading while the author examines the emerging trends and emerging economies, explores the development of the nation state, introduces the platforms for progress like developing information, language and knowledge base as competitive weapons, and explores what process, part of the business require to unshackle chains to go global.

The third section provides a detailed analysis of how the change has a bearing upon and will continue to affect the government, corporations and individuals, identify potential regions that will shape the destiny of tomorrow's world and the strategic rethink that is required to craft a roadmap for success at all levels.

The present book is a masterpiece, well crafted and reflects the rich and diverse experience and exposure of this visionary strategist. His work is a reflection of his unparalleled insight into the global world of tomorrow. The lucid examples of countries, companies and incidents strengthen the issue by providing a logical base and makes the reading interesting, and illustrate the key issues with ease Author's command and comprehension of the difficult subject of economics of the Global trade, is remarkable and unmatched. There are engaging discussions that captivates the interests of the reader, pondering over one issue of strategic importance to another. It is an excellent reference material and is very valuable for the faculty, practitioners, economists, policy makers, strategists and students of International Business and Management.

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