IMPETUS

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St Xavier's College, Jaipur

FOREWORD

Business environment has been dynamic and has brought on newer and bigger challenges for managers. The incorporation of liberalization, globalization and privatization policies has augmented this dynamism and sparked colossal challenges. In the present day, in a globalized environment, business enterprises and corporations need to constantly reinvent themselves to give themselves an edge and gain competitive advantage. This new panorama requires corporations to institutionalize the process of innovation to surpass the routine performance indicators and develop sustainable values to all its stakeholders. Companies must anticipate the changes in the external environment and in stakeholder expectations and must call for major organizational transformations. The need for a detailed road map delineating path-breaking strategies to achieve such high-end goals assumes gravity in this context.

The Department of Business Administration of St Xavier's College, Jaipur, organized the National Conference on "Management Strategies and Innovations" keeping in mind the ongoing dialectic. It was a collaborative endeavor brought to fruition on February 9 and 10, 2013. The conference proceedings are recorded in this journal for future analysis and research.

IMPETUS is a multi-disciplinary journal and a research endeavor by St Xavier's College, Jaipur. All research activities involve significant contributions. It becomes imperative for me to thank Fr Glenn Menezez, Rector, St Xavier's College, Jaipur who invested faith in my capabilities to organize an event of such a magnitude. My sincere thanks go to Fr Augustine Perumalil who has played the crucial role of a referee for this edition of the journal. I would also like to thank my team of managing editors. This journal is yet another milestone in our journey of attaining better and relevant standards in research and higher education.

Dr Vidhi Tickoo
Chief Editor

CONTENTS

SOFTWARE SECURITY AWARENESS FRAMEWORK: MANAGEMENT PERSPECTIVE

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Abstract

World's economy depends on the secure use of software and adds value to it in terms of people trust. Statistics world-wide have shown that unsecured software makes the system vulnerable, prone to attack and endangers intellectual property, business operations and services resulting in severe financial damage. A wide range of technology is readily available to safeguard the system from outside attack but when it comes to inside attacks, apart from technology, a more strategic and tactical practice needs to be adopted by organizations which influences the psychological aspect of people involved thereby creating awareness among them with focus on inter-functional and intra-functional dimension. Awareness in terms of software security can be created among two key classes of people, those who develop software in an organization and those who use software in an organization. This research paper highlights the importance and utility of various manual and automated software security awareness tools, techniques, methods, methodologies, standards, etc developed by various academic and non academic bodies with their limitations. The paper further investigates and identifies the various teams and stakeholders involved in software development and practices with special mention of the Management Team in terms of development and use. The paper further proposes a software security awareness framework from management point of view which is a step further towards addressing of the software security awareness issue in its entirety.

Introduction

People, information, operations, and systems are significant assets of any organization. The confidentiality, integrity, and availability of these assets along with its safety and protection are indispensable to maintaining productivity, compliance, and a competitive edge. Almost all organizations face frequent threats which could endanger their employees, systems, operations, and information in a very substantial way. Apart from natural disasters, threats may include computer viruses, network attacks, hacking and cracking, denial of services, fraud, etc. Various tools and procedures are adopted by organizations to protect against these threats. But it is very unfortunate that even the best tools and procedures implemented by the organization can be ineffective

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because of the lack of awareness about how to use them and how the security is an important factor for the survival of an organization (Security Awareness).

Since 1977, there have been reports of security breach. In recent past, some of the security incidents of significant importance are worth mentioning. A security breach leads to numerous phishing scams and countless identity theft claims in which names and e-mails of millions of customers, which were stored in more than 108 retail stores plus several huge financial firms like CitiGroup Inc. and the non-profit educational organization like College Board, were exposed in March 2011. The personal information of 35 million South Koreans was exposed after hackers breached the security of a popular software provider in July-Aug 2011 (Armerding 112-115; Kizza 112-15; "Hacking and System"). Estimated revenue losses due to piracy worldwide reached 51.4 billion dollars in 2009, with 16.5 billion dollars loss along in Asia-Pacific region as compared to 11.6 billion during 2006 (Tsipenyuk 81-84; "Training and Awareness"). In 2012, a US woman was sentenced to five years in prison for her role in phishing ring that netted members more than US$1 million and a 31 year old US man, pleaded guilty to his part in a phishing ring responsible for defrauding people of over US$1.3 million ("InfoSec in the News")

The software is attacked and the system is threatened both by the outsider and the insider. The sole intention of the outsider is breaking into the system by manipulating access rights and permission resulting in unauthenticated and unauthorized access. The organizations in this regard may use available technological controls which are extensively being used to tighten access controls and minimize persistent threats, and thereby provide shield to the system from outside attack. Further, when there is an attack from inside the system, the authenticated and authorized user goes beyond their designated access rights and permissions to corrupt the system (Banerjee 1-5). In 2010 a joint survey in the name of Cyber Security Watch Survey was conducted by CSO Mazagine, the US Secret Service DELOITTE center for Security and Privacy Solution and Software Engineering Institute at Carnegie Mellon Institute, US and it was found that almost 51% of the participants experience an inside attack. Although 15 well known security policies and procedures aimed at preventing insider's attack were implemented in the system but they lacked management angle. Another survey shows that approximately, on an average, 72% of the insiders incident are internally dealt with, and no legal action or low enforcement is involved. This shows a lack of management perspective, and due to such incidents an estimated $691 million loss was reported ("Cyber Security Watch Survey"; Cappelli).

To safeguard the entire system management perspective should be given due respect and a sound mechanism should be devised along with its technological counterpart for proper implementation of security in its entirety. One such mechanism may be adopted by providing psychological treatment in the form of awareness for the people involved supported with interfunctional and intrafunctional dimensions (Banerjee 1-5). Security awareness can be created among two key classes of people, one who develops software in an organization and one who uses software in an organization taking into account a holistic and balanced approach to technology as well as management aspects (Olzak). Many such mechanisms developed by various academic and nonacademic bodies are available in the market but none of them properly address the software security awareness issue in its entirety. Further, these awareness programs lack adequate coverage of management and its processes related to security for incorporating software development and practices (Paul).

Keeping this in mind, we present the research advances in this area. The rest of the paper is organized as follows: section II encompasses the meaning and importance of software security awareness, section III highlights the importance and utility of various manual and automated software security awareness tools and techniques, methods, standards, etc. developed by various academic and nonacademic bodies with their

limitations. In section IV, further investigations and identification of various teams and stakeholders involved in software development and practices are being presented with special mention of the management team in terms of development and use. Section V proposes a software security awareness framework from the management point of view which is a step further towards addressing of the software security awareness issue in its entirety. The conclusion and future works are reported in section VI.

Security Awareness

Security awareness can be defined as the knowledge and protection of the physical and information assets of an organization which its people should possess. The understanding and addressing of various security issues is also reflected in the attitude and motivation of an organization's people. Security awareness promotes a cultural and behavioral change among the people of an organization regarding security. If the people of an organization have awareness about security, it means that there is a clear and evident understanding that the data and other resources of an organization may intentionally and deliberately or unintentionally and accidentally be stolen, damaged or misused by some people (Security Awareness).
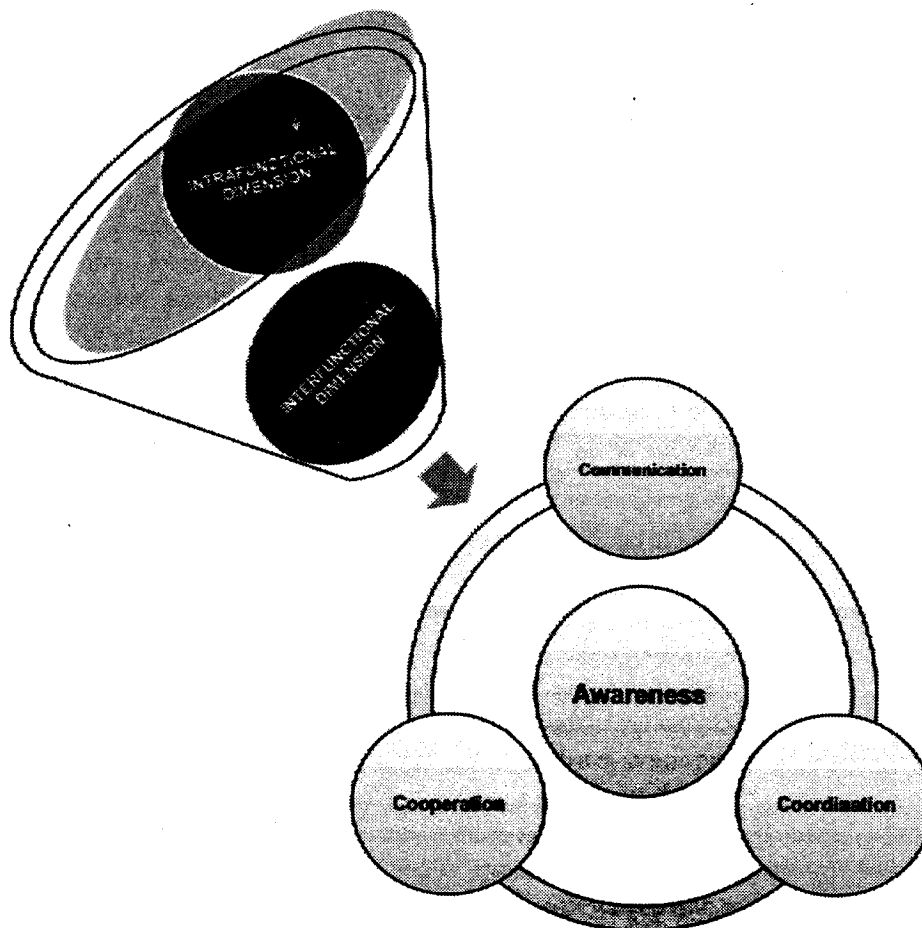
Figure 3: Cs for Creating Effective Security Awareness

Security awareness can also be defined as an organization's willingness to maintain the confidentiality, integrity and availability of information assets with a concentrated and focused attention of its employee. An individual or a group can be encouraged to recognize the various security concerns and decide how to deal with them appropriately when they arise (IT Blogs). The European Network and Information Security Agency states that awareness of the risks and available safeguards is the first line of defense for the security of information systems and networks (Sans). To promote awareness among the people with respect to technology and management perspective, the three Cs aspects needs to be dealt with as shown in the figure drawn above.

Standards, Models, Tools and Techniques of Security Awareness

Standards and models like Capability Maturity Model Integration (CMMI) (Becker 213-22), Team Software Process (TSP) (Humphrey), Trusted CMM/Trusted Software Methodology (T-CMM/TSM), Systems Security Engineering Capability Maturity Model (SSE-CMM) (Manar 83-99), Building Security in Maturity Model (BISMM) (McGraw), SysAdmin, Audit, Networking, and Security (SANS) (Information Security Research), National Institute of Standards and Technology (NIST) SP 800-50 (Computer Security) are available which, to some extent, focus on the issues of creating security awareness. Some methods like Comprehensive Light Weight Security Process (CLASP), Open Web Application Security Project (OWASP), Microsoft's Security Development Lifecycle (SDL), McGraw's TouchPoint, etc. (Pandey) are available which give due weightage to the issues of security awareness.

A number of workspace, real time and distributed architecture-awareness tools like Palantir, AUGUR, JAZZ, SeeSoft, FASTDash, etc. are available in the market for spreading security awareness (Sarma). Many researchers have proposed various security awareness techniques like awareness education and training programs, meeting the objectives like security dimensions, security strategies and policies (Olzak). Software security awareness campaign (Smith), security rules with special emphasis on the rule of awareness with focus on development of security awareness training program for acquiring new information and updation of existing knowledge related to various security aspects (Banerjee), primary level security awareness program using techniques like quiz, project and comics (Beyer), security group awareness training with emphasis on three levels of training, i.e., executive level awareness, management level awareness (Steven), and CYBERCEIGE simulation game for creating awareness regarding the need of information security and assurance (Fung).

Although many established and well-known standards are available in the market but none of them aids in spreading awareness among the stakeholders of the software development process in its entirety. Further, the models which are presently accessible are too broad to focus on the security awareness aspect of secure software development. The commercial tools available only cater to the needs of the programmer among the software engineering team. Many techniques like games, simulations, training and education, checklists, etc. are available through which any organization can spread awareness, but they are not comprehensive in nature and need massive improvisation. Further, all the present standards, models, tools and techniques are more technology oriented with less focus on the management front. Hence a more cooperative, collaborative and coordinated approach needs to be adopted in order to deal with the issue of creating optimal awareness among the people involved by exploring the unknown potentials of management perspective and blending it with technological perspective, thereby striking a balance between both of them.

Evolving Stakeholders of Software Development Process

To date, the various stakeholders of software development process – engineers, analysts, design engineers, programmers, test engineers, implementation engineers, and maintenance engineers – were seen as requirements. The individual roles were so far considered in the software development process. But with the increase in degree and complexity of software development process and the introduction of advanced software models like agile model, object oriented model, client/server model, component-based model, web-engineering model, individual teams took the place of individual roles. Specific teams like endeavor team, management team, strategy team, engineering team, post-development team and evaluation team were created to look into the specific aspect of software development process.

The endeavor team organizes and contains all other teams within an enterprise and fulfills the mission and objectives of the enterprise, program and contract.

The management team performs the following tasks:

- Oversees the development endeavor

- Performs the overall management and risk management tasks for an entire enterprise comprising of one or more related contact centers, data centers, reuse centers

- Determines when and if changes are to be implemented to baseline work products

- Manages the configuration of one or more related systems or applications and its associated work products

- Performs the disaster recovery tasks and disaster response task

The strategy team produces the digital brand identity of the customer organization's enterprise, the customer organization's new business strategy, and the technology strategy for the customer organization's reengineered business enterprise.

The engineering team performs the following tasks:

- Produces the various kinds of architecture work products, databases for one or more related systems/ applications

- Deploys a system or application to its production environments; produces and maintains one or more related environments and the hardware components of a system

- Performs most of the system and launch testing independently, without referring to the teams that developed the system or application

- Integrates the components of a system or application, responsible both for the productivity and quality metrics for an endeavor and for the methods and processes that are used on one or more endeavors

- Performs developer-independent quality engineering tasks on an endeavor, the primary requirements engineering tasks

- Supports reuse within a development, maintenance, or subcontractor organization

- Establishes and enforces the endeavor's security policies by performing the security engineering and security testing tasks

- Produces the software components of a system, application, or framework

- Provides training on one or more endeavors, and responsible for producing the user interfaces

The Postdevelopment team performs the following tasks:

- Manages the content of one or more systems or applications

- Performs the maintenance activity tasks on one or more systems or applications

- Keeps a data center and all of its applications and components functioning properly

- Keeps the list(s) of approved standard hardware and software products for the environments of an organization

- Performs the retirement tasks

- And staffs a contact center

- Provides support to the users of one or more systems or applications

The evaluation team performs one or more technical evaluations of the architecture work products,
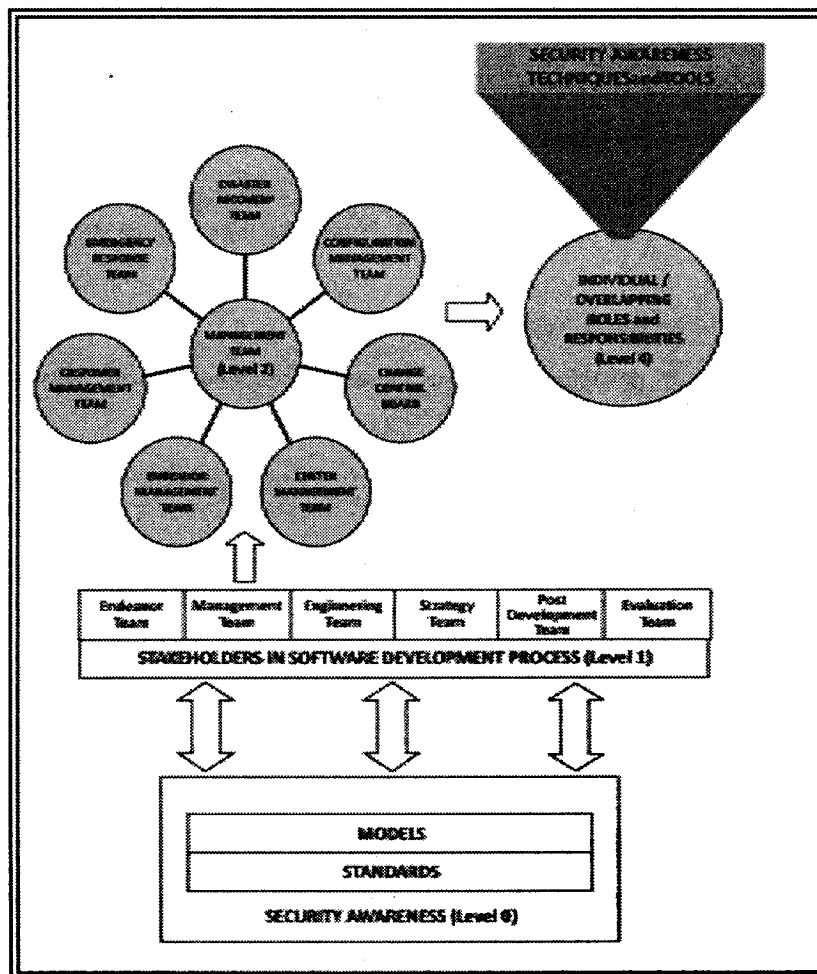
configuration management work products, content management work products, content management process, database work product, deployment work product, environment work product, hardware design, implementation, and testing work products, integration work product, management work product, operations work product, application development requirements work, retirement work products, safety work products, and software design, implementation, and testing work products.

It is evident from the study and identification of various stakeholders of software development process that over a period of time with the increase in degree and complexity in software development process, many new teams and roles have evolved and the existing roles have been subcategorized into classified sub roles. Many new roles were introduced or existing roles were sub categorized to ease the degree and complexity factor of software development process. Individual roles and overlapping roles were distributed as per the requirements of the teams with proper demarcation of common and individual responsibilities. The management team here is worth mentioning because it plays an important role in the software security awareness framework.

Software Security Awareness Framework

The software security framework that we have proposed is based on management perspective of software development team. In the proposed framework, which depicted through a figure drawn below, level 0 includes various established standards and models of creating security awareness which forms the basis of our proposed framework. Level 0 coordinates with level 1 which includes various core teams of software development process. Further, since our paper focuses on the management perspective of security awareness, we have expended the core management team into 7 sub teams which form level 2. Level 2 further branches off into individual and overlapping roles of the 7 sub teams of core management team. Further, the security awareness tools and techniques like education/training program, awareness checklists, games and simulation, survey, tests, quiz, online community, industry/academia interaction, etc.

Conclusion and Future Work

In today's information age, systems are being attacked from varied sources and the magnitude of such attack is growing day by day. Research findings have shown that the biggest threat to a system is from an insider's attack rather than an outsider's. The extent of security concerns increases when an insider's access conspires with the skills of an outside attacker to endanger the complete system. Hence, a security framework for creating awareness with a management perspective should be designed and put into place. This could promote a sense of awareness among the employees (insider) of an organization regarding the security of the system and its implementation. This paper tried to present a critical review of some of the tangible research work on various methods of creating awareness among the employees taking into account the management angle. At the same time, a number of noteworthy research areas for further investigations in the concerned area are identified which include extending the proposed framework to include branched off sub teams and new roles of the core teams in addition to the management team. The paper will help the researchers who want to pursue their research in security awareness by providing a brief but complete review on the existing literature along with the current research topics. It will serve as a base paper for the researchers who will pursue the research topics through our paper. Future work may include the development of a concrete system for creating and promoting awareness with proper mapping of various core and sub teams with their internal and external roles with available techniques of creating awareness. Then, metrics may also be developed and applied to

the mapping for the quantification of the values. This in turn will contribute to increase the precision level of the mapping. This work will surely help the industry in implementing awareness among the employees from the management perspective which takes into account the core management team and its 7 sub teams.

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UNDERSTANDING THE CONCEPT AND CHALLENGES OF ENGAGING CONSUMERS IN THE VALUE CO-CREATION PROCESS

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Abstract

Consumers have shifted their roles from being a passive audience to being more interactive and participative. The access to information and social media has brought them closer and has greatly empowered them. Hence, the role of consumers in value creation across the value chain has increased and has become vitally important in recent times. Engaging consumers to co-create value has been largely appreciated and applied in businesses. But from the firm's point of view, the biggest challenge is to figure out the best strategy to engage customers to co-create value with them. There are pioneers like Nike, Apple, Facebook, Starbucks, Harley Davidson, etc. who have benefited from this concept immensely, but widespread application of this widely- discussed concept is not commonly witnessed. This research paper tries to put forward the key concepts of value co-creation. The difference in service ideology showing the difference between goods-dominant logic and service-dominant logic has been discussed. This digression from G-D logic to S-D logic has become the basis for implementation of value co-creation. After developing an overall understanding of this concept, the key challenges pertaining to practical use of this concept have been discussed. The major challenges have been classified into three levels, namely, organizational willingness, organizational preparation and execution. This research work is useful for developing a comprehensive understanding of the new evolving concept of value co-creation, which holds the potential of addressing the evolving customer needs in the new era of information technology, social networking and personalization.

Introduction

Value co-creation is an emerging concept which holds the capability to create desirable competitive advantages for companies. Now, value creation does not happen only inside the firm but the contribution of consumers must be incorporated in all phases of the value chain. Thus collaborative consumers become a source of competitive advantage. This development was proposed in 2000 by Prahalad and Ramaswamy (2004a). So, the traditional consumer-producer relationship has changed. Still a majority of companies lag behind in this new development and fail to involve consumers and their innovative capacities. Even fewer examples are quotable in this context from Indian companies. Why is it that the companies find it difficult to adapt themselves to the demands of effective co-creation? This research paper will try to draw deeper insights into the major challenges in the process of value co-creation, especially when it comes to the Indian consumers.

The Concept of Value Co-creation

Value co-creation is an active, creative and social process, based on collaboration between producers and users that is initiated by the firm to generate value for customers. It can be seen in practice in two distinct

approaches. First where, co-creation is used to boost regular businesses and the second, where co-creation is at the center of the business model. The concept of co-creation can be well understood by looking into some real-world examples, where the firms have largely benefited from this concept.

The first example is that of Gillete. The firm wanted to find out newer ways to make the shopping of beauty and grooming products among males to be more attractive and popular, especially for those who were dissatisfied with their current retail experiences. So, instead of choosing a traditional market research approach, they adopted an interactive, projective co-creation campaign and received around new 100 ideas and insights.

The second example is that of Starbucks. When Starbucks was going through tough times, with growing competition, and the firm losing its individuality, the firm started a co-creation campaign by the name, 'My Starbucks Idea', wherein customers exchanged ideas among themselves and with Starbucks. Customers provided suggestions on various issues like, products, services, advertising, layout, location, CSR, in store music and so on. The campaign promised rewards for most active users. More than 93,000 ideas were shared by around 1.3 million users, and a good number of ideas they received were implemented.

The third example is that of Dell Ideastorm. To come out of negative perception built in the customer community for their brand, Dell started what they called 'Ideastorm' campaign. When around 45% of posts regarding Dell were found to be negative, Dell created platforms like Studio Dell and Direct to Dell where the users were invited to share new ideas and issues openly and discuss them among themselves and with the employees. This resulted in around 3.5 million page visits per month helped Dell to turnaround their brand image by solving around 5,300 customer issues.

Understanding Fundamental Concepts

Co-Creation

According to Prahalad and Ramaswamy (2004), co-creation can be defined as "a form of market or business strategy that emphasizes the generation and ongoing realization of mutual firm-customer value. It views markets as forums for firms and active customers to share, combine and renew each other's resources and capabilities to create value through new forms of interaction, service and learning mechanisms. It differs from the traditional ... consumer market construct of the past."

Co-Production

The distinction between co-creation and co-production has not been clearly made in most of the researches and these terms have been used inter-changeably, as they refer to almost similar concepts. Some academicians have defined co-creation as the involvement of customers in the creation or delivery of products and services (Ballantyne, Williams and Aitken, 2011). But, this definition has been used to describe co-production by Vargo and Lusch. On finer analysis, Gronroos (2011) has separated the two terms, and argued that these terms are equally important but still they are fundamentally different from each other and work within the ambit of S-D logic. Co-production is the process where the participating entities integrate their resources. Co-creation is a refined form of co-production, where the resource integration is done for consumption, which means, 'value-in-use' experience.

Value

The concept of customer value developed in the 1990s, and since then a lot of research was done over it. It

finds application in many forms of marketing literature, which broadly includes consumer behavior, pricing, relationship marketing, total quality management, customer relationship management, marketing strategy, value co-creation, etc. (Khalifa, 2004). The heterogeneous researches, done in variety of contexts have resulted in a multi-faceted and rather confusing knowledge about the concept of customer value.

The works on consumer value has its roots in the literature on human values. However, the two terms, consumer values and consumer value appear to be similar, but actually they are not. The term 'value' suggests 'preference given to something', whereas, the term 'values' refers to the 'criteria' on which the preference is made (Holbrook, 1994). Classically, 'values' are the enduring beliefs which are deeply imbibed in a person (Rokeach, 1973), whereas, the term 'value' signifies the notion of preference, which can result from evaluation of benefits and costs or the quality of interaction.

Service Dominant Logic (S-D Logic)

Value co-creation and S-D Logic are directly related to each other. Or, it can be said that value co-creation has its origin in the S-D Logic. It is because co-creation occurs during the exchange of service, which is the fundamental premise in S-D Logic, that is, service is the fundamental basis of exchange (Vargo and Lusch, 2008c, 2008a). The tangible goods are only the tools for availing the service.

Goods-Dominant (GD) Logic	Service-Dominant (SD) Logic
Tangible product – services are considered as aid to the production of goods	Skills and knowledge
Products (units of output) = Operant resources usually tangible resources) and knowledge)	Service (a process) = operant resources (static, (dynamic resources as competences like skills
Customers as a target group	• Collaborating with customers and partners
	• Customer = Partner who co-creates the value with the firm and promotes a market with philosophy
	• Customer is treated as endogenous
4Ps	3Cs
• Products	• Co-create service offering
• Promotion	• Co-create conversation and dialogue
• Price	• Co-create value proposition
• Place	
Competitive advantage is goods	Competitive advantage is knowledge creation and application
Value is added to the products in production process – value delivery	Value can be only determined by the user in the consumption process – value creation
The external environments are considered as uncontrollable and forces to which needs to adapt	The external environments are considered as largely resources the firm draws upon for support by firm overcoming resistances and proactively co-creates

Table 1: Comparison of goods-dominant (G-D) logic to service-dominant (S-D) logic
(cf. Lusch and Vargo, 2007; Mc Carthy, 1975, reproduced by Wollenick, 2012)

Service Experience

Service experiences are "the outcomes of the interactions between organizations, related systems/ processes, service employees and customers" (Bitner et al. 2006). Customer experiences are developed as the resultant of 'what is offered' and 'how it is offered'. Co-creation of service experiences was initially proposed by C. K. Prahalad and Venkat Ramaswamy of University of Michigan Business School. The co-creation of experiences is the final outcome of any value co-creation process. This co-creation of experiences involve platforms such as the web site, personal networking devices, call center, a social interface, to put the consumers and communities and the firm to have transparent access and dialogue (DART Model of Prahalad and Ramaswamy, 2004).

Co-creation Concept

	Traditional exchange	Co-creation experiences
Goal of interaction	Extraction of economic value	Co-creation of value through compelling co-creation experiences, as well as extraction of economic value
Locus of interaction	Once at the end of the value chain	Repeatedly, anywhere, and any time in the system
Company-customer relationship	Transaction based	Set of interactions and transactions focused on a series of co-creation experiences
View of choice	Variety of products and services, features and functionalities, product performance, and operating procedures	Co-creation experience based on interactions across multiple channels, options, transactions, and the price-experience relationship
Pattern of interaction between firm and customer	Passive, firm-initiated, one-on-one	Active, initiated by either firm or customer, one-on-one or one-to-many
Focus of quality	Quality of internal processes and what companies have on offer	Quality of customer-company interactions and co-creation experiences

Table 2: Migrating to co-creation experience (cf. Prahalad and Ramaswamy, 2004c, reproduced by Wollenick, 2012)

Benefits of Co-Creation

Based on various examples of co-creation discussed above, such as Gillete, My Starbucks Idea, Dell Ideastorm, and other popular examples, such as Nike Plus, BMW Co-creation Lab, Threadless.com and Lego Toys, three primary benefits can be charted out. These are:
- Ideas for new product or service
- Enhancement of existing product and service, and
- Suggestions for improving business processes

Apart from these direct benefits of co-creation, there are three indirect benefits. These are:

* Increased customer loyalty, by acquiring greater mind share of customers

* Access to customer resources

* Development of competencies which cannot be easily acquired by the competition

Risks of Co-Creation

To understand the negative side of co-creation let us take the example of SPAR Bag Design Contest. SPAR is the biggest food retailer of Ireland, with over 450 high-quality outlets across the country. The retailer launched a re-usable bag design contest in Ireland. The objectives were to create a reusable bag which can be used in place of the existing Spar bag. The design was supposed to be appealing and the main focus was on facilitating customers to delegate work in teams and effectively communicating with each other. The idea was to take an existing idea, developing it further and to reusing it. The contest ran from 8th June to 27th July, 2009. Around 5,300 bag designs were submitted by over 2,500 members. The designs got more than 50,000 community evaluations, 12,000 comments, 5.5 lakh page views. So, the statistics show that the contest was highly popular and successful, but strangely, this contest proved to be a disaster for Spar. The jury's decision of the best design was not acceptable to the other participants, resulting in customer irritation, frustration and even revenge.

SPAR's experience illustrates that although there is a great mass of literature professing the benefits of co-creation, it has its share of risks. The risks are basically associated with the 'execution' of co-creation, and they can be avoided if carefully handled. The risk in co-creation, which requires them to invest their resources, ideas and feelings, is that it involves the consumers in a living relationship with the process. This sort of involvement leads to great hope and many expectations. When hope is belied or expectations are not met, customers are disappointed, which can harm the firm in the following ways:

* Spreading negative word of mouth

* Conflict arising among the participants of co-creation

* Co-destruction, where the customers join to use the company platform for destructive outcomes

* Mass defections because, co-creation works in communities and not in isolation

The Challenges within the Co-Creation Concept

Challenge Levels
• Organizational Willingness
• Organizational Preparation
• Execution

Organizational Willingness

It refers to the willingness of the organization to critically evaluate the need of co-creation and accepting the risks and challenges involved. The willingness needs to travel from the top to the bottom of the hierarchy.

Most of the firms are unable to implement co-creation due to lack of willingness at the top level, e.g., Nike or Threadless.com could co-create successfully, but such success could not be seen for their direct rivals such as Adidas, Puma, etc.

Organizational Preparation

The challenge of proper preparation is the biggest hurdle in the way of developing a fully functional co-creation mechanism. The preparation can be dissected into:

- Making action plan based on market study
- Platform selection, design and management
- Re-configuration of organizational architecture
- Creation of new roles and ensuring role clarity
- Re-defining existing roles across the value-chain
- Re-configuration of resources
- Developing new capabilities
- Setting objectives and benchmarks

Execution

- Reaching the target customers through right platforms
- Developing and maintaining customer interest in the co-creation project
- Checking conflicting situations and dissatisfaction among the customers and other participants
- Checking co-destruction activities and proper handling of customer grievances
- Filtering and processing of large amount of data
- Managing copyright issues
- Serving heterogeneous audiences with a common co-creation process
- Remaining prompt and fair in handling individual customers
- Remaining cost-effective
- Providing desirable results

Conclusion

The concept of value co-creation is relatively new and there exists a sense of ambiguity in the practitioners. Therefore, its widespread application is not evident in the market. There are certain clear benefits of co-creation, which makes it indispensable for any firm to understand and implement co-creation for ensuring competitiveness. The company can be best described as a part of the value creation concept which provides relevant resources and access to the customers to enable them to co-create value. The concept of co-creation must be properly understood and tested before application because improper execution of co-creation can lead to serious damages, such as, spreading of negative word-of-mouth publicity, conflicts between participants,

co-destruction and mass defection.

Looking into the challenges in the value co-creation process, it can be summarized that the firm needs to focus on three key dimensions while co-creation of value with the customers. These three are namely, organizational willingness to co-create, organizational preparation to co-create and execution of co-creation. By applying these concepts in the co-creation process, a long-term and fruitful relationship can be established with the customers, where a customer is the value creator and the firm acts as a value facilitator.

While transforming a company in a co-creating enterprise, its direction and scope needs to be defined from the customer perspective, where the employees must be considered as internal customers. It can be done only when the providers can understand customer's value creation process.

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CLOUT OF INNOVATIVE MEDIUM AND VARIANTS IN COMMUNICATION: A SUBSEQUENT TRANSITION

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Abstract

The past decades have witnessed exhilarating changes in the way the world communicates using the alluring new technology. In the field of business communication, people are aggressively discarding the old order and welcoming innovations. The key drivers of this transformation are increased speed and efficiency provided by these variants. Technology has intervened in human life like never before and has influenced almost all spheres of life. From business to personal life, education to training, information exchange to beliefs, communication to culture – almost every field of human life has witnessed some kind of transformation, in terms of not only what we do but also how we do it.

Over the years technology has grown and changed rapidly, and it was natural for communication media to keep abreast with these technological advances. As the use of internet is becoming more common place, professionals are hooked to it and even ordinary people are using technology more frequently to communicate with each other. The modern, technology-driven world is not only coining words but also creating unique expressions. Words are contracted, clipped and are given new meaning and dimensions.

The paper focuses on the role of technology in reshaping the way people communicate and on how technology affects the overall communication process in society. For instance, the importance of e-mail in the corporate sector and in academia is well acknowledged and the introduction of Web 2.0 technologies has indubitably altered the environment along with new and well-established variants like blogs, social networking sites, web applications, etc.

Introduction

We are living in a society where technology plays a key role. Communication has dramatically changed by new and ever-improving technologies. Technology has always influenced our social, personal, corporate lives and lifestyles. Changes in communication technologies are inevitable, as we are constantly experimenting, innovating and adopting new tools and techniques of digital communication. Digital mediums of communication convey unique messages to the end user in a way which is most appealing to them. New media of communication are portable, networked, ever connected, user specific, infotaining and low cost.

For the vitality of any language, change is one of the unavoidable requirements; without change, language leads to fossilization. In this process of change, the social circumstances and technological advancements provide a fertile ground for its dynamic growth and spread. The demand for language change comes not only from within the language itself but also from society. Society plays a major role in language change because

language is a highly systematized manner of communication and people play a pivotal role not only in its patterning but also in enhancing its communicative efficiency.

Today, in the age of information technology, communication has become faster than the blink of an eye. According to a study carried out by Google, in the activity of accessing the internet via smartphones, the numbers of Indians outweigh that of US citizens. ("More Smartphone Users"). Since the arrival of the twenty-first century there was an appreciable change in the way we communicate. The changes in the last ten years has have been so dramatic that we all have become a kind of so-called cybernetic.

The changes in communication have been so dramatic that today, for a large number of people, life is unimaginable without the social media. Nowadays various facets of daily life take place on social sites like Twitter and Facebook as they are helpful in sharing the latest and instant news, videos, pictures, images, etc. and for keeping abreast with the latest trends in technology. The present study discusses the user-friendly nature of innovative mediums and contends that they have not only changed people's linguistic behaviour but also made it easy for them to adapt to a new language.

Review of Literature

Frequently, individuals are probably going to be anxious about exactly how fast technology is transforming their interaction. One can possibly argue that often the fast pace is not really a desirable thing. Nevertheless, innovative technology could be equally bad and good as Murray contends (12).

Marshall McLuhan's The Medium Is the Massage can also be an additional example of somebody who feels that technological innovation is an excellent factor since it affects each of the human senses. Nevertheless, you will discover other individuals who may differ on this perspective. Birkerts is a critic who disagrees by simply commenting that technology is certainly shifting so fast that it is too confusing for the writers and readers.

In his work The Gutenberg Elegies, Sven Birkerts argues that by taking to the brand new electronic era, humankind is compromising literary traditions. The pace with which we have been moving forward is so swift that ultimately we are likely to feel lost. Such swiftness is likely to hold people back rather than directing their way in the right course. In my view, however, there exists a lot more good than bad as we move ahead with the momentum of the new technology. Electronic medium is one method that can easily help us move ahead with new techniques which were earlier unimaginable.

No everyone will probably be ready for the changes in the current mode of communication. Murray writes, "The birth of a new medium of communication is both exhilarating and frightening. Any industrial technology that dramatically extends our capabilities also makes us uneasy by challenging our concept of humanity itself" (Murray 1). She is right in her perspective. Anything innovative yet unknown will usually result in mixed feelings, just as a child feels when confronted with unknown things. One more argument for technological innovations, especially in book publishing, is that it makes literary works easily accessible in the form of cyber books.

Murray states in her book titled Hamlet on the Holodeck: The Future of Narrative in Cyberspace that "this book is an effort to imagine what kinds of pleasures such a cyber literature will bring us and what sorts of stories it might tell. I believe that we are living through a historic transition, as important to literary history as it is to the history of information processing" (67). Exactly what she calls cyber literary works is something which will be able to provide us fresh experiences as well as narrate stories exactly like books have been doing over the years.

Murray generally seems to believe that books usually, and will probably, teach as well as articulate experiences. Murray states:

Those of us who have spent our lives in love with books may always approach the computer with something of my grandmother's terror before the crystal radio, but our children are already at home with the joystick, mouse, and keyboard. They take the powerful sensory presence and participatory formats of digital media for granted. They are impatient to see what is next (67).

This specific book definitely enforces us to think about an upcoming electronic digital medium, designed by the hacker's spirit as well as the enduring power of imagination, including the worthy eagerness of our youngsters towards it. Cyber literature will only carry on the convention differently as it helps our means of understanding further. The modern era has already been there, it is just a matter of time that the rest of the world will likely be there as well.

Marshall McLuhan's "The Medium is the Massage" is definitely an exciting book mainly because it states contrary to what Birkerts believes in his book. McLuhan carries a different opinion that technology is actually our way of continuing to move forward and it has an effect on communication. Rather than just being a written text that is straight-forward, the technological innovation helps us all use our other senses. Birkerts however states that the modern technological age will hinder humankind once we intentionally make an effort to move ahead. Birkerts concentrates more on how books take over people, places and also provide some kind of escape and particular teaching that no new technology could ever provide. However, anything electronic or even innovative generally doesn't take that away. Technology can also take us places and even instruct us a lot more than the texts in books possibly at any time. Unlike printed text which is fixed and similar at all times, technology-driven text is now open to modification. This makes the text not just more interesting but easier to comprehend.

Birkerts and Murray are generally opposites within their perspectives towards technology. Murray is of the view that technological innovations are a contributing factor to language change. While Birkerts believes that the pace of the new technology is an unfavourable thing that takes us away from 'actual' learning. In my opinion, technology is something which enhances our capacity of contemplating or imagining. This is an excellent augmentation to an individual mind since it facilitates us to manoeuvre ahead. Technological innovations are undeniably something that will help us all. Electronic digital media along with cyber literature are ways that will help us to move forward at a pace that was previously unthinkable.

Objectives of the Study

The objective of the study is to explore the usage of innovative mediums and variants of communication for new generation professionals.

- To identify the most popular new medium of communication among the professionals
- To find out how often they are using new variants of communication
- To investigate the positive and negative phases of modern communication
- To identify the impact of these modern ways of communication among the users and their language
- To assess and comment on the style of language being used by the professionals.

Research Methodology

Critical analysis of new emerging technologies and trends in globalized modern world with latest applications will be the central agenda of the proposed research paper. The basic aspects of the usage of technological advancements are explored and explained with understanding from different perspectives with the help of web pages, blogs, Twitter, Facebook and through emails.

Findings and Impact of Innovative Mediums and Variants in Communications

Language has certainly changed a lot over the centuries. From the Victorian Era to the Technological Era, English as a language has always changed with the time. There was a time when speaking English was based on a certain protocol of grammar and usage of words. Though new ideas were accepted, they were very few in number. The Technological Era has been the most dynamic and changing period for the English language. During this period, focus shifted from using the nuances of English grammar to using those words which express the matter in the most concise way and in the most succinct possible manner. Though portmanteau words were known earlier, social networking sites made use of these words more frequently as they save time and space. Some of the most used portmanteau words are: Ginormous (gigantic+enormous), confzzled (confused+puzzled), WiFi (wireless+fidelity), chunnel (channel+tunnel), etc.

Words coined by the growing networking sites also made their way into the 2010 edition of Oxford English dictionary. Some of the words which are frequently used by networking sites are:

- Staycation: a money-saving holiday at home
- Chessball: something lacking taste or originality
- Frenemy: a person with whom one is friendly despite having a fundamental dislike

Some abbreviations were also accepted like OMG (oh my God), LOL (laughing out loud), TMI (too much information), FYI (for your information), PFA (please find attachment), BFF (best friends for ever), OOS (out of style), etc.

Letters became more impactful than words. With the growth of the new slogan "time is the new currency," these words got universally accepted and acknowledged. Some people advocate that this new growth of language is destabilising the very pillar of traditional English, the grammar. They feel that this change in language kills the traditional, monumental and formal part of English language while others feel that since networking sites focus of interaction and communication, the language used over there bears the sign and symbol of innovative and prosperous ideas. This new language reduced the geographical distances and brought the world on a single, huge platform where communications and ideas can be shared at a lightning speed.

Paul Parry in "The Impact of Technology on the English Language" gives the following statistics:

- For accessing internet more and more people prefer mobile phones to PCs with net access.
- Texting is taken as simpler than talking over the mobile phone and it has become more popular.
- Out of the 12% of mobile users, half are above 65 years of age; they never use their mobile phones for texting.
- 70% of the youngsters of age group 15-24 years say that they 'could not live' without their mobile phones.
- The estimated blogs in existence are 110 million–150 million; many of them are deserted soon after they are started.

Technology plays an astounding role in our lives and its effect on communication has changed the English language drastically. To be more specific, the kind of language we are speaking today seems to be more enriched with vocabulary vis-à-vis the internet. The ways of telephonic conversion to a large extent remains the same, for example, to greet and sign off.

However, there appears to be a drastic change in the written format of a language with the beginning of technological advancements. The advent of email altered the structure of language as it brought with it the new standards, new protocols and innovative abbreviations, such as BRB (be right back), GBTW (get back to work), IIRC (if I remember correctly) and GFO (good for you). A new understanding emerged that the WORDS IN UPPER CASE INDICATES DOMINATION, while the lower case indicated the accepted form.

The level and extent of the change in the use of language brought by the mobile phone users is far more surprising as compared to the changes brought by internet users as they write emails.

Computer communication and the internet have contributed to what came to be known as "information overload shock," sometimes also referred to as "techno-stress." The term "information overload" has its roots in the context of computer-mediated communication, where it might particularly be applied to individuals who experience some difficulty in processing the volume of some information they receive. Lest one is tempted to think of "information overload" as a new problem, let us recall the words of T. S. Eliot (1934), "Where is the wisdom we lost in knowledge? Where is the knowledge we have in information?"

It's often believed that the terminology on the growing media is usually homogenizing English. In fact, every person watches the identical television networks that have dialectally simple English, which is one of the conventions, despite the fact that TV programs apparently added several words and phrases to the vocabulary and facilitated the quick spread of several well-liked expressions. The influence of mass media is greatly exaggerated because people tend not to mould their expressions by following mass media personas with which they may have simply no social interaction. For every-day conversation, most of the people desire to speak like their close friends and associates.

Widespread dialogue, face-to-face conversation as well as social support systems like the internet sites would be the ways by which vocabulary alteration occurs. Language diversity is alive and is in a continuous flow which is evident from the vocabulary alterations that are happening on everyday basis.

'Sharing mantra' is the new mantra of the young generation. This generation, which remains online 24x7, is sharing every small detail of their daily life amongst each other. Micro-blogging site Twitter helps them to share few lines of update, Facebook and G+ help them to connect with friends and share detailed information with photos, Filcker, Instagram and Picassa, etc. help them to share photo albums, YouTube and Vimeo, etc. help them to share videos, and Blogger, Wordpress, etc. help them to share opinions as blogs.

Languages change for a variety of good reasons. Large-scale alterations usually take place in response to social, economical and political constraints. Examples of dialect change through invasions, colonization as well as migration are embedded in history. With these sorts of influences, the vocabulary can alter considerably when adequate number of users alter the way they speak.

Generally, the needs of speakers push vocabulary change. New technology, industrial innovations and service encounters bring new terms. Plastic material, mobile phones and also the Web did not exist in Shakespeare's time. Such innovations call for vocabulary change, and by using fresh and rising phrases, we drive towards language evolution. A language tends to modify itself when different individuals use distinctive manner to

communicate the similar thought. The actual terminology and what is considered the keyword and key phrase, depend upon the cultural context–place of abode, age, education and learning, social standing, etc. Through our interactions, we all grab fresh words and phrases and incorporate all of them into our own vocabulary. The youth frequently learn various phrases and words from their parents, and disseminate them to the entire population. This way the language alters gradually.

Three primary facets of language that change over time are vocabulary, syntax of a sentence and pronunciations. Vocabulary can transform rapidly because brand new terms tend to be borrowed from other languages, or because words get combined or shortened. When vocabulary grows easily, sentence structure–the order of words in a sentence–alters more slowly. But it may be very clear that today's English speakers construct sentences in ways that are far different from the way their Medieval and Renaissance contemporaries constructed them. Changes in sound also occur periodically. For instance, during the alleged "Great Vowel Shift" five hundred years ago, British audio speakers altered their vowel pronunciation significantly. This change signifies the greatest distinction between pronunciations associated with self-proclaimed Central as well as Contemporary British.

Before any language can be altered significantly, speakers need to first embrace fresh words and phrases and alter patterns of word buildings and sounds, and then not only propagate these among contemporaries but also broadcast to the next generation. Today, technological innovation has become a major driver of vocabulary and language change.

The World-Wide-Web has emerged as a new tool, to ensure that anybody may become not only a consumer of information, but also an author, or even a broadcaster. Whenever you develop a web page in cyberspace, it may be accessed by thousands of people worldwide.

Several scientists have observed that although technological innovation is continuing to grow by leaps and bounds, teachers' usage of it stays extremely outdated; limited to basic tasks and internet searches (Cuban, 2001; MacDonald, 2004; Oppenheimer, 1997, 2003). Some have argued that this continues to be because of educators' restricted vision. Others have warned against turning the use of computer into a method rather than using it as a medium. For example, Garrett pointed that "the use of the computer does not constitute a method" and it is only a "medium in which a variety of methods, approaches, and pedagogical philosophies may be implemented" (75).

Undeniably, computers will do things better and faster for us. They are altering the way in which all of us live and function: rest, manage expenses, trade and exchange views. The modern technological innovation is irrefutably altering the way in which all of us understand individuals, civilizations, nations and conduct our business.

Conclusion

Today, it seems, there will definitely be a computer in every pocket in near future. People are using text messages, the instant messages, social networking sites plus electronic mails on regular basis to communicate. Everyday fewer individuals decide to meet personally or answer the telephone. Whenever we have face-to-face discussion with somebody, we have numerous aspects which assist all of us. We have eye contact, body language, vocal inflection and most importantly, the ability to correct a miscommunication immediately. Over the phone, conversations still have the vocal inflection and ability to correct a miscommunication.

Some are of the view that in a text message, you simply include typed thoughts, having very weak sentence structure, and the means of your personal thoughts are likely to be at the mercy of the one who is receiving your text. The text messages may lead to a distortion of communication and to misunderstanding between the sender and receiver. The only respite is the emoticons that allow us to put the communication in a particular sculpt. It might be advisable to use the cell phone or even try to communicate face-to-face. We are not against technology, but are concerned about the social change that technology brings about.

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INNOVATIVE ONLINE ADVERTISING: PERCEPTION AND PURCHASE BEHAVIOR

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Abstract
Online advertising is a form of promotion that uses the Internet and World Wide Web to deliver marketing messages to attract customers. Advertising on the Web has matured over the last ten years. From banner ads to search engine optimization to pay-per-click advertising, marketers have several options for creating brand awareness and direct response campaigns on the Web that hold advantages over traditional advertising (Sharma, 271). But its growth rate in terms of advertising revenue is relatively slower as compared to other traditional advertising forms. The prominent reasons for this slow acceptance rate in online purchase are the implications on the privacy and anonymity of Internet users on use of online advertising and the perception that they are intended to distract or irritate, detract from the design and layout of their Web sites.

This paper is an attempt to understand the perception of Internet users about the innovative ad forms, more specifically the pop-ups. The variables like the content of ad, language, amount of time on the screen, color contrast, size, and graphics used in pop-up ads are studied in relation to their effect on the purchase behavior pattern of Internet users. By carefully investigating these variables in formulating advertising strategies, marketers can cultivate brand recall and gain a formidable competitive edge. The study concludes with practical suggestions on how to design effective online ads to fully utilize the advantages of the Internet-based media.

Introduction

Interactive technology is the new form of advertising media which allows for selectivity while reaching out to mass audience group. Unlike radio and television, the interactive technologies provide for two-way communications and the receiver has more control over the processing of information. Internet is the most widely used form of interactive media and advertising through the Internet takes place in various formats. Web pages delivering selling messages, banner ads, sponsorships, pop-up, push technologies and Web links are the common form of Internet advertising. As the Internet is drawing the advertisers away from the conventional print advertising, the trend of innovative online advertising is rising rapidly.

For online advertisers, Internet allows for specificity in targeting the markets, because only those who are interested in specific product category are likely to visit the sites. Online advertising is not merely an information provider. It is equally capable of its sales potential. There are a number of product categories like books, music, etc where sales through Internet are significantly large and leading to rising prospects of its use for various types of products.

Online advertisers face problems of clutter (ad crowding), rising cost, lack of accurate audience measurement and deception (like hacking). Internet users also face another set of shortcomings like hacking, credit card number thefts and data collection without the user's knowledge. Such problems can be dissolved by taking

measures like speed, scope of creativity, specific message designing and other such variables. The main success factors that can improve the future potential of online advertising formats are targeting, content, creativity and frequency of ads.

Innovative Online Advertising Formats

Banner ads, also called display ads, are the oldest, most common online advertising tool. In this form or advertising, a surfer clicks on the banner for more information or to make a purchase. This format entails embedding the Web site of the advertiser, usually placed on the Web pages that have interesting content, such as news article or an opinion piece.

Rich media option ad uses media-rich ads to attract the viewers. Some of the prominent formats are floating ad (an ad that moves across the user's screen or floats above the content), expanding ad (that changes size altering the size of the content of Web page), polite ad (a method by which a large ad will be downloaded in smaller pieces to minimize the disruption of the content being viewed),wallpaper ad(an ad that changes the background of the page being viewed), trick banner(a banner ad that looks like a dialog box with buttons and stimulate an alert) and video ads (Datta 425-435).

Blog marketing – A blog is a website that provides an individual's opinion on a particular subject. A typical blog consists of text, images, and links to other blogs and web pages. Some of the blogs consist of photos, video and audio. Nowadays the trend of companies advertising on blogs through banner ads is also common.

Mail Advertising – To exploit the power of electronic mail, the companies are doing mass mail with the help of mailing list to distribute quality information to a specific range of consumers/customers. But the problem of spamming is the biggest problem faced by the advertisers.

Viral Advertising – Viral advertising consists of marketing techniques that use already existing social networks to increase brand image with the help of computer virus-like techniques. But it works on the belief that consumers who are impressed would tell people what they like and also tell people what they do not like.

Interstitials – they include pop-ups and pop-under, where the display of a page of ads occurs before the requested content. A pop-up ad is an ad that "pops up" in its own window when users go to a page. It obscures the Web page that user is trying to read, so user have to close the window or move it out of the way. Pop-under ads are similar, but place themselves under the content that user is trying to read and are therefore less intrusive. (Brain)

Trends in Online Advertising

The Internet has the capacity to display ads in both voluntary and forced exposure modes. Where banner ads are normally viewed in a voluntary fashion, pop-up and pop-under are perceived to be intrusive because they put the audiences in forced exposure mode. Over the years, banner ads have provided less response for advertisers than originally anticipated. With the emergence of search engine optimization (SEO) and pay-per-click (PPC) revenue model for companies have increased their advertising expenditure on pop- up ads. Though these pop-up ads are facing increased resistance of Internet users but these intrusive ads are expected to continue in use as more innovative ways are being developed to deliver them. Thus this paper is an attempt to understand the perception of Internet users about the innovative ways adopted by advertisers specifically in the pop-ups and to answer that instead of a negative feelings about these pop-up ads, why marketers are still spending on advertising in this format.

Review of Literature

George N. Lodorfos, Tom A. Trosterud, Chris Whitworth (2006) used as a theoretical framework to interpret consumers' behaviour in the online environment and to study the antecedents of e-purchasing decisions. Notably, these beliefs were found to be 'trust', 'security' and 'convenience'. Masami Asakawa and Masao Okano (2009) examined the factors influencing consumers' perception of online shopping and developed a causal model that explains how this perception affects their online-shopping behavior. Azeem and Haq (2012) in their paper has provided thorough information on the impact of various factors on Internet advertising and the distinction of Internet advertising effectiveness among three demographically different variables. Dharmendra Mehta, Jitendra K. Sharma, Naveen K. Mehta and Atul Jain (2010) studied the effectiveness of pop-up and banner advertisements among young executives in India. Hooda and Agarwal (2012) studied the acceptance rate of e-marketing among the Jaipur consumers and its impact on their purchase decision. Sinead Cochrane (2006) has studied the relationship between Internet experience and memory retention of pop-up advertisements and suggested that pop-ups are ineffective, and online advertisers should focus on alternative forms of advertising. However, a survey has been done by Dominika Kowalczy (2006) on general attitude towards online advertising. Much less research is done on positive impact of using pop-up ads for Internet marketers.

Objectives of the Research Work

This research is aimed to understand the perception of Internet users about the innovative ad forms specifically the pop-ups and explore the main characteristics of pop-up ads that attract the Internet users. The research work is focused on the general attitude about the innovative online format of advertising of Internet users and the perceived image of the companies giving pop-up ads. On the basis of primary data analysis the research is also aimed to formulate the advertising strategies for effective pop-up ads for the companies involved in Internet marketing.

Research Methodology

The research is descriptive in nature and purely on convenience sampling method. The variables like content of ad, language, amount of time on the screen, colour contrast, size, and graphics used in pop-up ads are studied in relation to its effect on perception and purchase behavior patterns of Internet users. Data were collected from 50 Internet users among college students aged 18-21 year through a questionnaire. The questions on general attitude about online advertising are framed from study of Dominika Kowalczy (2006).The questions to study the factors affecting the pop-up ads effectiveness are aided by screenshots of advertisements' formats.

Research Limitations

The research lacks any statistical tools and study is restricted to a limited sample size that cannot be considered as an absolute representative of the whole population of Internet users. The perception of consumers may vary due to various personal and environmental factors which also hinder in absolutely generalizing the research findings.

Findings of the Research

On the basis of responses obtained from the questionnaire, the findings are as follows:

a. The demographic profiles of the respondents consist of 56% females and 44% males.

b. The time spent on Internet per day: Since the respondents are youth aged 18-21 year who are very frequent Internet users, to reach to the objectives of the study, this frequency is measured in detail. The result shows that 67% get Internet access very frequently in every half an hour. Minimum spending time on Internet is at least one hour per day according to 24% respondents. For these frequent Internet users, the major Internet access mode is through their mobile phone (78%) and remaining access time is on laptop (12%).

c. The purpose of using the Internet: For young Internet users the main purpose of using the Internet and incorporating it so much in their daily routine is to socialize through social media sites like facebook, twitter, etc, according to 62% respondents, while the purpose of only purchasing the products through online shopping is not significant (only 3%). From the sample, 23% of the youth agreed that they use Internet for exploring information about new products and offers.

d. Perception about online ads: As far as general perception about any kind of online ad is concerned, 35% dislike and get irritated with them and feel that online ad interrupts their work, and they get upset with it. But the feeling of intense hatred is marked by only 15%. 15% youth admire the online ads only if the product is of their interest or it has good advertising content. From Internet marketer's point of view, the response of 37% shows that they are perfectly Ok with them as they increase the awareness level of products and market.

e. Response towards the innovative online ads format: Among all the online format, pop-up advertising has the highest click through rate of any online advertising method as they are noticed by 25% of the sample. No matter that people complain about seeing them, or may have even installed pop-up advertising blocking software, but people see it, and they click on it. Pop-under ads are also giving a tough competition to conventional banner online ads. Both pop-up and pop-under ads are noticed only while viewing any content page. Thus ads on social media pages (10%), mailbox (9%), chatrooms (3%) and blogs (3%) are not noticed comparatively as these pages involve viewer-intense online involvement which by responding to ads can distract them.

Noticed Online Ads format

Format	Value
Pop ups	25
Banner online ads	23
Pop under	23
Social media page	10
Ad on your mailbox.	9
Chatrooms	3
Blogs	3
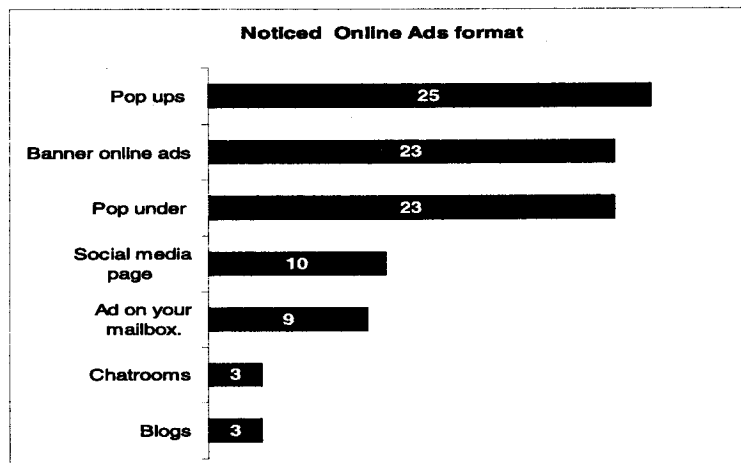
f. Action after viewing pop-up: Response of viewers about the action they perform after viewing pop-up argues with the general perception about pop-up ads that they are annoying and irritating, intrusive most

of the time with their appearance. Only 8% just ignore them and 14% close them without reading but 15% close them after reading the content. Though 20% of the respondents do not perform any kind of action with them but simply watch them, this kind of audience can be very critical from Internet advertisers' point of view as they can grab their attention by introducing creativity in pop-ups format.

General actions for Pop ups

Ignore Pop ups 8%

First read the ad and then close the ad. 15%

Click if product is of use. 22%

Close them without reading 14%

Click if ad is effective 21%

Watch only 20%
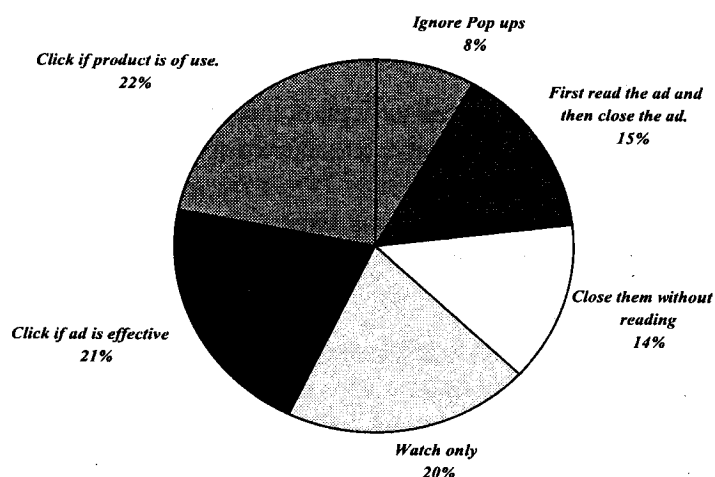
g. Variables of pop-up ads affecting perception

1) Content – The content of the ad is divided into three parts: Title, body text and call to action. Title may contain the brand name, special offer or any catching phrase to attract the customer. When the users are exposed with the screen shots of few pop-ups, the study revealed that as far as content of the ad is concerned, that it is the title of the ads that attract the viewer's attention the most. 70% of the respondents agreed to click on ad after reading the content, out of which 50% agreed by just reading the title part in content. Body text holds less weight in the content part.
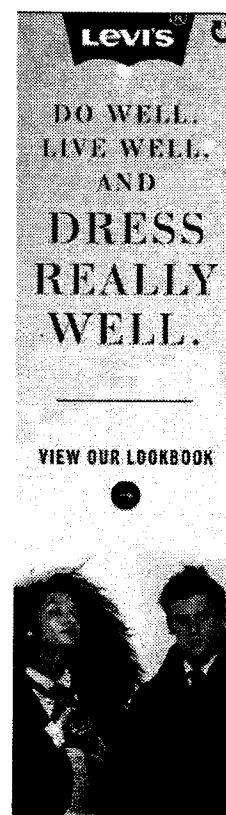
Fig 1: Screenshot used to get response for 'Content' variable

2) Special offers and discount – Among the famous four P's (product, price, place and promotion) of marketing, 'P' of 'price' factor is the most popular to attract the

attention. 80% youth in the study agreed to click on a pop-up ad which claims to offer less prices, or free gift with product. Rest 20% felt cheated because of their past purchase or clicking experience.

Fig 2: Screen shot used to get response for 'special offers and discount' variable

3) Colour contrast – Colour plays a significant role in attracting the viewer's attention. Screen shots of 4 pop-up ads was shown to respondents, and the result proves that more striking colour (specifically red, dark blue, yellow) and well-chosen colour combination selected by marketers do create a significant impact on users, as the ads with simple black, or white colour as the background were ignored by viewers.
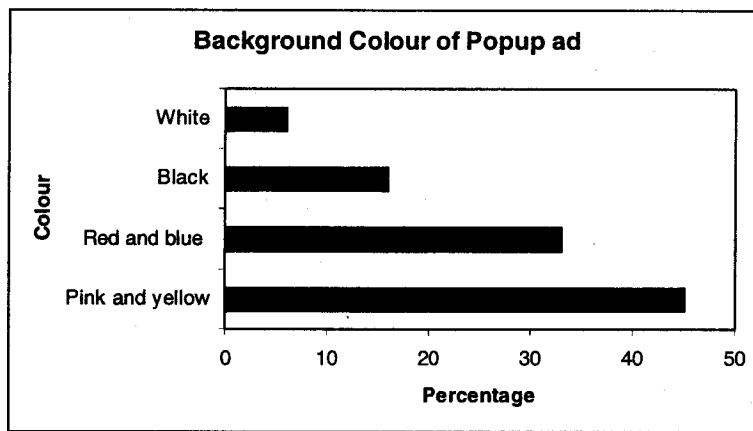
4) Visual effects – it includes the graphical representation of the products, using animation, 3 D vision, audio, visual graphics, etc. When screen shots of certain pop-ups containing visual effects was shown, then viewers believe that it improves product knowledge and generates a positive brand attitude.

5) Brand – As far as perception on brand image of the company going for innovative pop-up ads, 76% of the respondents feel that they perceive the company going for such ads as modern, technology advanced, dynamic and innovative. They treat brand as trustworthy that is why they never hesitate on clicking on pop-up ads for purchase intention if the prices are affordable.

6) Product category – Data collected reveal that if we go gender-wise discrimination on the pop-up ad

clicking frequency, then more of the females either watch, sometimes click and often purchase by seeing pop-up ads of products like books and fashion accessories. While most of the males have agreed that they have ordered products related to apparels and electronic gadgets by clicking on offers of pop-up ads while surfing Internet.

Pop up on the basis of Product category

Product category	Girls	Boys
Books	74	26
Apparels	51	49
Electronic gadgets	46	54
Fashion accessories	85	15

Percentage — *Product category* (axis: 0, 50, 100, 150)
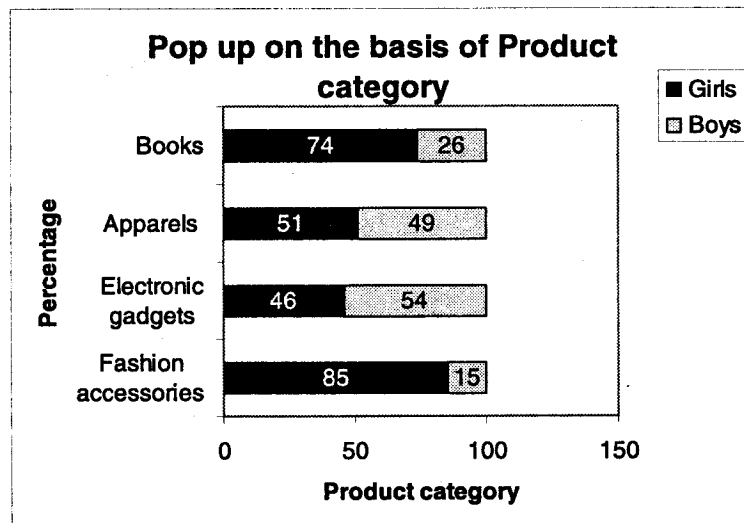
Conclusion

Youths are spending more time on Internet and it is an integral part of their life with a purpose to use social media sites. But online shopping is not the only motive for Internet use. Though some people complain about seeing pop-ups or have even installed pop-up-blocking software, many people see them, and even click on them. Youths admire pop-up ads which are innovative and creative enough to grab their attention. They do not hesitate to purchase anything from the Internet if the product is affordable according to their pocket money is of lower price than market price. Branded products are still favored by online purchasers. The title of the pop-ups has to be attractive and creative enough, as it is the most important component viewed by the audience. Colours used in the background and visual effects of the pop-up ads are significant factors for grabbing the attention of viewers. Thus the designing of pop-up ads is critical in the viewer's decision to keep that ad open.

Suggestions

Based on this study's findings it is suggested that online advertisers of pop-up ads should understand and develop strategies based on following factors:

- Selecting proper websites for placing pop-ups must be made.
- Formulating proper segmentation and targeting strategies.
- Understanding colour psychology.
- Using 3-D visualization to increase the audience interactivity.
- Inserting relevant keywords in the title.

- Creating a sense of urgency, for example, inserting in pop-up ads riders like 'limited time offer' or "available for overnight shipping."
- Adding credibility to the ad by guarantees like "30-day money back guarantee."
- Emphasizing low-price offers and free-trial offer.

Marketers should always keep in mind that the main purpose of placing pop-up ads is not only to create brand awareness but convincing them enough that they land up by visiting the main website so that advertisers are able to generate revenues through them. This can be done by linking the pop-up ads with the call to action conversation (buy, download, register) with the Internet users.

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DATA WAREHOUSE – A KEY TO MANAGEMENT DECISIONS

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Abstract

Internet technology with its world-wide presence has made day-to-day communication and interaction very easy. Extended availability, affordability and wide outreach of the Internet has enabled small, medium and large businesses to use it as one of the key sources for marketing their products and business. Internet has facilitated them to reach around the world with nominal cost. This has given rise to an all-time high competition.

Internet has helped to capture and store large amount of raw data. Now, there is the requirement for organizing the raw data in a meaningful format so that it can be used as a guide for business. The technique and process used in ordering raw data into more meaningful information is termed Business Intelligence (BI). BI requires large amount of raw data to be stored properly and efficiently. This has been made possible through data warehouse.

Introduction to Business Data

Business operations are the key sources from where large amount of data is collected and this huge data require better tracking and managing. Companies these days use a wide range of software programs such as Excel, Oracle, DB2 and other database applications in various departments throughout their organization. When multiple software programs are used in one business organization, it becomes very difficult to maintain and manage them. Timely retrieval of data and information also becomes very difficult.

With the advancement of technology and changing trends in the business sector, latest tools and techniques are being used. These tools are termed as Business Intelligence (BI). They enable companies to gather, store, access and analyze business data and subsequently help in decision making. Business executives who take strategic and tactical decisions cannot take decision merely based on financial statements available to them. They need answers to queries such as: "Which product is still in competition?" "What new venture could be made?" "What is the current market swing?" "What long-term effect could follow a particular decision?" etc.

These are some critical questions which need accurate answer. Here, BI system plays a prominent role in providing answers to these key questions. BI collects massive data from operations system and stores them in a format which is latest and understandable. The management of these massive data of BI system is handled through data warehouse.

What Is Data Warehouse?

The process of transforming data into information and making it available to the end user in a timely manner is known as data warehousing. The concept of data warehousing dates back to the late 1980s. A data warehouse is a repository of an organization's electronically stored data. It is designed to facilitate reporting and analysis (Inmon).

Different people have different definitions for a data warehouse. The most popular one came from Bill Inmon, who provided the following definition: "A data warehouse is a subject-oriented, integrated, time-variant and non-volatile collection of data in support of management's decision making process" ("Data Warehouse").

Ralph Kimball provided a more concise definition of a data warehouse: "A data warehouse is a copy of transaction data specifically structured for query and analysis" ("Data Warehouse").

Data, Information and Knowledge

In order to discuss the point, first we need to understand the difference between data, information and knowledge. These three keywords are the most commonly used terms in several IT-related (and other) communities. But it is very difficult to differentiate the three on representational basis, because representation is always based on signs (e.g. ASCII – characters, bits, or handwriting). But let us try to differentiate them.

To do this, let us first note that unless and until these signs do not include additional information, we cannot interpret them. These signs can be transformed to data, information and knowledge when we associate them with respective thought or view. For example, when we say "a motorcycle," this represents any two wheeler fitted with an engine. It can be treated as data but without a concrete thought or view. But when we say a Bajaj motor cycle, we have branded it, adding specificity and concreteness. Here we are referring to a real object (motorcycle) of Bajaj Company. But even here there is lack of specificity, for the customers are unable to decide which model of motorcycle from Bajaj Company. But if we say Pulsar Motor Cycle of Bajaj Company or Splendor of Hero Honda, we are more specific. This adds a valid meaning and it becomes knowledge.

Now, signs can be represented in a system which could be referred to as data-based system, information system and knowledge-based system or any other system. But all of them are similar within the computer system, i.e. all of them are sign/data. When these signs/data are associated with their respective context, users or customers, they become information and knowledge. Thus we can say that data warehouse is nothing but a data storage system which contains sings/data.

How Business Growth Can Be Increased by Data Warehousing?

The data present in data warehouse represents a major part of a company's knowledge, e.g. the company's clients and their demographic attributes. This data store will turn to be a good knowledge base if it can be transformed into information and made available to the end user in a timely manner. The objective of data warehouse is to facilitate reporting and analysis. Technically, it is referred to as Online Analytical Processing (OLAP) or Knowledge Discovery in Database (KDD).

Data analysis has resulted in the formation of components for data warehouse. These components have the ability to retrieve and analyze data, and to extract, transform and load (ETL) the data. Discussion of data warehouse always refers to these broader contexts.

There are many ways to integrate data and applications to provide important and timely information to the end user. Each business challenge and/or process should be analyzed to understand whether a data warehouse or any other type of information access tool presents the best solution. The following are the key reasons that determine whether the data warehouse is the best solution as compared to other business solutions (Guerra).

1. The reports and information written in any BI application software needs modification and upgradation based on their new releases and updates. Field names are often hard to interpret and some are just meaningless strings of characters. Format of data in any BI application is not well represented, especially dates and numbers. Retrieval and analysis of data in tables are usually very difficult because they are designed to facilitate data entry and field validations which are accordingly implemented. Another application of BI tool is that it does not provide any well-defined process to incorporate valid data from other sources. There is no clear, distinct way to maintain metadata for the data being stored. Transaction processing has the lead over reporting and analysis function. This results in poor performance in doing data analysis. Data is not secure in BI applications; they could get modified or mishandled by the users. This results in wrong data analysis.

2. Data warehouse has provided different ways for doing data analysis. OLAP and KDD provide facility to analysis data in the format that is best suited and required by the management. OLAP is one of the technologies that is being widely used by data analysts for generating reports. OLAP provides different reporting and visualization features, by the use of which data can be aggregated and presented from different angles. Besides this, graphical pictures could also be used to represent the report. A data analyst using OLAP can create wonders through data warehouse by using formulated queries and the output of queries to present the data to management. And this report could become a valid and authenticated source for further decision making and action. Here if we recall the definitions of data, information and knowledge, we identify a similar scheme. Data is stored in the data warehouse. The data analyst enquires parts of the data, which are then interpreted and represented in the format that is understandable to human users. The methods used to enquire data needs some knowledge, and if the yielded information helps the management in taking some useful decisions or actions, that, in turn benefits business or environment and then this information becomes knowledge.

The examples below will give a clear picture of how a business benefits from data warehouse:

First, let's consider the successful launch of Tata Nano by Mr. Ratan Tata. Popularly, Tata Nano is called a common man's car. The thought process that went through the mind of the great industrialist Mr. Ratan Tata when he asked his team to get a car on the road for just Rs 1 lakh, and the way his team responded to his vision tell an enlightening story. According to a featured story available on the Internet, "Suggestions came in like, a door-less car with a bar as a safety measure, having soft doors in vinyl with plastic windows, a cloth roof, two big doors (instead of four). But all these were turned down by Mr Tata; he was very clear that it had to be a complete car" (Agarwal).

A four-year-long research was carried out with full enthusiasm and zeal. The result was the big wonder, i.e. Tata Nano. During the development phase, it was decided that the major part of the work needs to be outsourced. So the company formed a vendor group comprising many Tata group companies "including TACO IPD, Tata Toyo Radiators, Tata Johnson Controls, Tata Visteon, Tata Yazaki, Tata Ficosa and Tata AutoComp GY Batteries. There's also Tata Ryerson for the steel service centre and roll form sections, Tata Bearings for bearings and Tata Steel Tubes for the engine cradle."

The designing and production of Nano is a persuasive example of efficient use of the latest technology. Nano would have remained a dream if the production team would not have had efficient and effective reporting mechanisms. The success of Tata Nano is actually the product of intelligent, effective and efficient usage of data, information and knowledge.

The second example is the way Vodafone wins customers by using BI approach. Vodafone India has a large customer base. It is the India's second largest telecom service provider with more than 14 crore subscribers across its voice and data services. The heterogeneous system, decentralized business process and high data volumes had made information analysis a highly complex task at Vodafone India. Prior to BI, the company faced data latency issues in its data warehouse, affecting timely information reporting. The volume of data amounted to more than 11 lakh files per day. Gaining valuable insights from such a large data pool was a formidable challenge.

To meet the challenge, Vodafone implemented a knowledge-based system from IBM. It includes the following:

- A multi-layered BI architecture InfoVision implemented by IBM
- Teradata v12 as Enterprise Data Warehouse
- IBM Data Stage as ETL
- IBM Tivoli Workload Scheduler as Monitoring Control
- IBM Cognos as OLAP and Reporting
- Oracle 11gR2 Database as Federated Data Marts ("Vodafon Wins").

This system brought many benefits. The benefits delivered by BI were:

- With InfoVision, Vodafone India has created a scalable architecture for BI which can integrate new functions and services such as 3G and ICR.
- IT governance, policy, processes and guidelines implemented in the data integration layer provides audit transparency into current business reporting and analytical channels related to CDR (call detail record) information needs.
- With BI, Vodafone has eliminated prepaid CDR information latency issues in data warehouse to enable timely reporting for business users.
- With the implementation of data mart and ETL along with BI, Vodafone India estimates to have already saved Rs 9.1 crore and expects an additional Rs 18.2 crore saving over the next two years ("Vodafon Wins").

Challenges Facing Data Warehouse

Now that data warehouse is being extensively used in decision making, it has turned out to be the silver bullet out of operational data abyss. When data warehouse is approached with some information and (mis)management principles, it could result in producing disintegrated and untrustworthy data, and this could result in the failure of data warehouse.

Analyzing the reasons for the failure of data warehousing projects, Larry P. English writes:

Data warehousing projects fail for many reasons, all of which can be traced to a single cause: non-quality. Poor data architecture, inconsistently defined departmental data, inability to relate data from different data sources, missing and inaccurate data values, inconsistent use of data fields, unacceptable query performance (timeliness of information), lack of business sponsor (no data warehouse customer), and so forth, are all components of non-quality.

Data or information of poor quality paralyzes virtually every area of a business, from mailroom to executive office. The time invested by the business in digging missing data, correcting inaccurate data, working around data problems, scrambling to assemble information across disintegrated databases, resolving data-related customer complaints, etc. adds to the cost, which is inflated and passed on to the customer. That time is not available for value-adding work. Senior executives at one large mail-order company personally spend the equivalent of one full-time senior executive in reconciling conflicting departmental reports before submitting them to the chief executive officer. (This means there is an equivalent of one senior executive redundantly required because of redundant and inconsistent (non-quality) data! ("Information Management").

With all the emphasis on data warehousing technologies, it is now important to understand that:

- The product of the data warehouse is information.

- The customers of the data warehouse are the knowledge workers who must make increasingly important decisions faster than ever before.

- If the data warehouse does not deliver reliable information that supports the customer's decisions and strategic processes, there will be a greater chance of failures in decision making which results in heavy business loss ("Information Management").

Solution and Further Enhancement

Non-quality data can be minimized by keeping an integrated data environment. This requires that data warehouse professionals need to perform the following steps:

- Map undefined and un-integrated data from many disparate and redundant database and files

- Standardize the schema and data representations.

- Remove redundant occurrences of data both within single files and across redundant files

- Integrate and consolidate data and format it into an integrated data warehouse data architecture.

- Identify and manage different data integration issues.

- Should not include the cost of customer complaints, product liability lawsuits, redoing defective work, etc.

- Purpose of information quality should be to improve customer and stakeholder satisfaction by increasing the efficiency and effectiveness of business process ("Information Management").

This could be further achieved by developing more powerful tools that are data warehouse aware-tools, designed for and are capable of dealing with very large databases. Some of the features that will appear in tools in the near future are:

- Optimizer-aware tools.

- Accurate query time prediction.

- Accurate resource usage prediction.

- Improved summary management.

- Improved integration of data generation, visualization and browsing (Anahory).

Conclusion

With the vast enhancement in business sectors and high competitive environment, there arose the need for some method that helps in taking proper decisions. Through this paper, a few ideas have been put together to show how data warehouse will help in taking complex business decisions. As compared to the invention age, today, the business world is known to be more dependent on knowledge base.

Quite often it has been quoted in magazines and discussions that nowadays information in the hand of the right people is more valuable than gold. All decision makers are dependent on how much information they have. A simple piece of information can make a big difference in the life of a company.

The great advancement in technology today has given a variety of tools to analyze data and information. It has also opened up a number of BI vendors like SAP, Oracle Apps, PeoplesSoft, Cognos, Micorsoft, Cognos, etc. to name a few. Business individuals are an expert in their field. Today, to succeed they will need to master business intelligence, or hire expert BI consulters from the above-mentioned vendors.

Business needs to choose the right IT solution to strengthen itself. It will not only create efficiency but also provide a number of opportunities to produce competitive advantages, revenue opportunities and new avenues for its customers and partners to communicate.

This paper can be enhanced to include advanced and proficient algorithms that could be used along with data warehouse in processing data and information more efficiently and quickly. More and more data is being collected and stored in data warehouse. Now the challenge before the data analyst and data manager is how the proficiency of data retrieval could be enhanced and how the queries could be improved so that the changing demands could be easily addressed.

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VALUE CREATION IN INDIAN RETAILS' SCM

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Abstract

Mindscape Technopak Venture describes the landscape changes taking place in the way retailing has been traditionally perceived and executed:

> *Emergence of organized retail in India is bringing a landscape change in the way retailing has been traditionally perceived and executed. However, it is not just the front end that is witnessing this frenzy, but the entire supply chain is going through a dramatic development. Effective supply chain management is the backbone of retail industry and, therefore, is crucial to its performance. From a mere operational obligation, supply chain management is going to become the key competitive tool for winning the consumer.*

Globally, effective supply chain management has created retail giants, Wal-Mart being the best example for this. Today, Indian retail stands at the crossroads of making key decisions regarding not only the front end but also the entire supply chain—decisions that could dramatically affect retail performance in the long run. Huge investments, government policies, third party intermediation, fast changing consumer preferences are all going to characterize this back-end revolution.

On a long term basis, supply chains would need to be made flexible, in order to respond to changes, drastic or slow, in demand, supply and technology. Further, flexible supply chains would allow retailers to tackle any dramatic events like natural calamities, terrorism, etc. Aligning the supply chain strategy to the business strategy would be of paramount importance in order to make strategic decisions more effectively, like entering new markets, new product introductions, new mode of sales, etc. Anticipating the future, and building a supply chain around it, is another way of looking at what the customer behavior would be in the long term. This research paper brings out, through several facts, figures and past experiences, the issues being faced by the Indian retailers in the development of a solid back-end and hence, important areas for them to focus on in the near future.

Value Creation in Indian Retails' SCM

Overview of Retail SCM in India

The Indian economy has been showing one of the fastest growths amongst the developing economies in the world, at 9% of the GDP (real growth rate) for the fiscal year 2006-2007, at an estimated level of INR 38,000 bn. The retail phenomenon is, and is projected to be, a major driver for this growth in the near future. Retail is estimated to be contributing 37% to the overall GDP, and is also projected to grow at 9% year on year, for

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the next 5 years. The share of organized retail, currently only 4% (INR 500bn) is projected to grow at 45% CAGR for the next 5 years to 15% (INR 3100bn) of the overall retail bandwidth by the year 2012, with investments to the tune of INR 1,360 bn in the retail front end during the same period. With such high growth rates and market sizes, investment in supply chain and logistics, the retail backbone, has become imperative. The major investment areas in retail supply chains lie in the area of sourcing, distribution centers (warehouse, cold storage), transportation networks, inventory (both store level and warehouse), supply chain information systems such as warehouse management systems, planning, forecasting, inventory management, etc.

Retail chains can choose to own or outsource one or more areas in the back end starting from inbound transportation, distribution centers, or even further upstream, value-adding operations. Currently, some of the retail chains like Subhiksha have outsourced most of their back end, while some, such as Reliance, are investing heavily in the supply chain network.

Comparison and Benchmarking with International Retail Supply Chains

Retailing inherently is a difficult business. Forecasting is merely 65% accurate, up to 20% of the orders are filled imperfectly, 30% of the merchandise is sold on markdowns, 75% of the new products fail to meet expectations, net margins are low (2-3%) and inventory is high. Supply chain and logistics costs currently in some cases go up to 10% of the organized retail sales (INR 50 bn), while it is less than 5% in mature retail markets such as the USA. Thus, there is a current improvement opportunity of up to INR 25 bn. In the next 10 years, this gap of INR 25 bn could go up to INR 300 bn. On other measures of supply chain effectiveness also, Indian retailers lag behind mature markets. Indian retail chains turn their inventory much slower, and stock-out levels are also higher. Even the more established retail chains are able to turn their inventory only half as fast as retail chains in the US or the Western Europe, and stock out levels are also twice or thrice as much.

In an article titled "An Analysis of Current Supply Chain's Best Practices in the Retail Industry with Case Studies of Wal-Mart And Amazon.Com" (2005) Colby Ronald Chiles and Marguarette Thi Dau have stated that Wal-Mart has invested heavily in its supply chain and uses a number of supply chain practices to leverage its "everyday low prices" (EDLP) strategy. Wal-Mart turns its inventory 10 times a year on an average (sales/inventory); this compensates for its relatively overall lower prices, and hence lower gross profit (gross margin/sales). Pick to pallet replenishment process—picking of products at the DCs (supplying to a particular set of outlets) specific for an outlet aisle, so that each pallet that is delivered to an outlet is moved directly to the appropriate aisle to be replenished. This process allows Wal-Mart to decrease replenishment costs at the store level by increasing restocking efficiencies. The replenishment strategy is based on 3 characteristics: volume, supply and demand variability. Products with low supply and demand variability are cross docked, and lower overall inventory is maintained; products with high supply and demand variability and high volume have a higher inventory in the warehouse, and so on.

Factors Affecting Organized Retail SCM in India

a. Retail–SCM Perception and Outlook

Currently, the retail industry is channelizing most of its energy into the front-end of the retail business, which is still developing, and the back-end supply chain is not of core concern for a number of players. This is compounded by the fact that there are few SCM professionals in the country and even fewer who have an experience in the retail sector. Even amongst them, the level of process expertise and best practice skills are low. However, with the growth of organized retail and with the mushrooming of academic courses and

training programs in supply chain management and retail, a number of SCM professionals are gradually focusing more towards a scientific methodology in dealing with the back-end supply chain.

The following figure gives an illustration of the evolution of retail SCM:
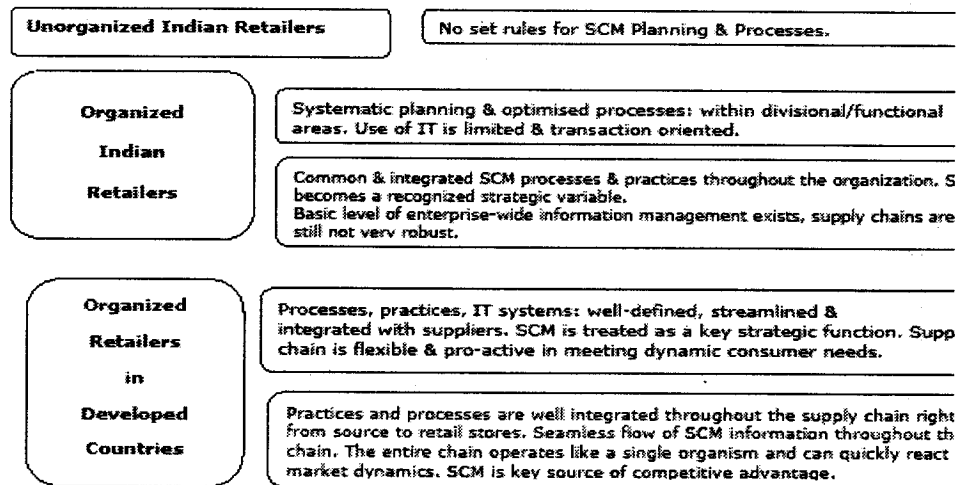
Figure-1 Retail SCM evolution Model(Source:Technopak analysis)

b. Infrastructure Hurdles

In India the logistics costs are around 14% of GDP as compared with 8% in the US. This is not a tribute to the size of the logistics sector in India, but a symptom of the inefficiencies resulting from poor infrastructure. For example, losses form 14% of the total logistics expense. Also, investment in infrastructure is less than 4% of the GDP, as compared to 9% in China. At present there is very little unused capacity in the country's warehouses. Most of the warehouses are poorly designed and operated and certainly not fit for supporting world-class retailing. Compounding the problems are ever-rising costs of energy and real estate which make logistics investments and running costs high.

Countries below and Above India
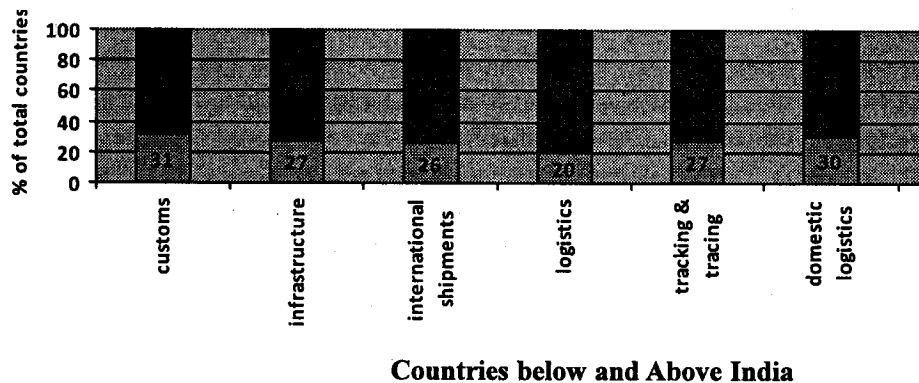
Figure 2 – Comparative Standing of India on the logistics performance indices (Source: Trade logistics in the global economy – 2009)

At present, 40% of our fresh fruits and vegetables get wasted, but cold chain development may not be viable unless incentivized by the government.

c. The Impact of VAT

The move from varying tax structures across different states and across different industries to a uniform tax structure as envisaged ultimately through central and state level Goods and Sales Tax (GST) is fraught with a number of stages of implementation, which will impact short to medium term planning and long term planning of distribution networks and sourcing decisions differently.

d. Supply Base

Besides dealing with large number of SKUs and categories, Indian retailers have to deal with a fragmented supply base and a number of intermediaries (especially non branded products), leading to low margins and fluctuation in price and availability. An illustrative example regarding fresh fruits supply chain, as well as wastage in the value chain for some fruits and vegetables is presented in the following figure:
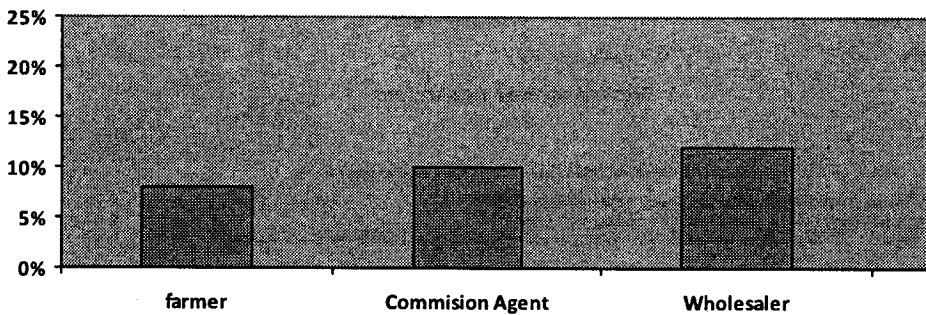
Figure 3 – Scope of Disintermediation: Case of Apples (Source: Technopak analysis)

Most food supply chains in India are congested with numerous intermediaries that add little economic value. Also, poor handling and storage causes huge wastage. Supply fluctuations, sometimes due to the intermediaries, create price uncertainties that hurt the farmer and consumers. The opportunity for Indian retailers is to buy from the right source at the right time and in the right condition so as to get the best prices for themselves and the consumers and also to minimize supply uncertainties.
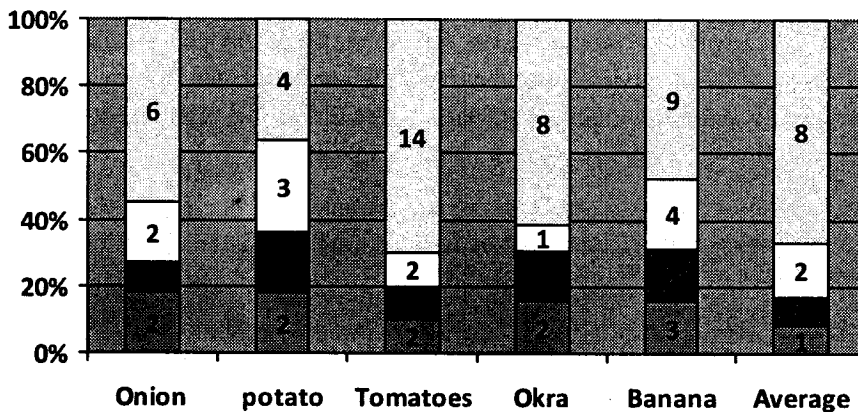
Figure 4 – Wastage at various sources of the Value Chain [% total production in India] Source: "en route" – In house magazine of group TCI (July – Sept 2009), 3.

SC Objectives

The following framework represents how the starting point (symptoms of inefficiencies) and end goals (SC objectives) are linked together. The symptoms are the effects (related to higher costs and/or lower service levels), caused by inefficient processes (pain areas). Solution to these pain areas require professional expertise in some strategic SCM area(s), the effect of which is finally linked back to the SC objectives (lower costs and/or higher service levels).
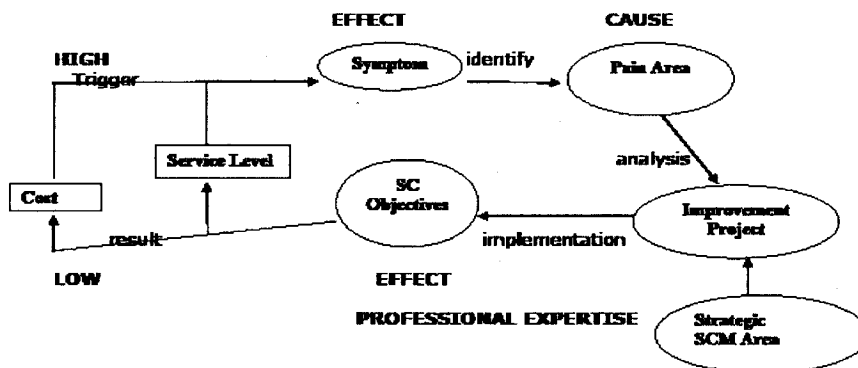
Figure 5- Retail SCM improvement framework

An efficient supply chain strategy has two tradeoffs to make:
- To reduce cost: cost of goods sold and selling expenses.
- To improve service levels: linked to increasing revenues by increasing customer satisfaction.

Symptoms and Pain Areas

The Indian retail industry is still at its nascent stages. Factors such as poor infrastructure, fragmented supply base and the absence of a mature 3PL industry compound this problem which in the end results in an inefficient supply chain. Some of the symptoms of the poor supply chain are high material costs, high transportation costs, high warehousing costs, high wastage costs, frequent stock-outs, huge markdowns, high rate of return/ quality dissatisfaction, low inventory turns, etc. These symptoms are the trigger points to often larger issues such as an unoptimized distribution network, inefficient transporters, poor infrastructure, poor design and layout of DCs, absence of an inventory policy, etc. As an example, the transportation industry in India is fraught with small truckers, who add to the problem of poor infrastructure. As an estimate, approximately two-thirds of the trucking companies generating 80% of the revenues have a fleet of less than 5 trucks, and the average speed on Indian roads is 20 mph as compared to 60 mph in the West, even though India has the second largest road network in the world. As a result, lead times are high, long-term relationships are absent, and retailers hardly have any visibility of the goods being transported. Add to this an unoptimized distribution network and rising fuel prices, and the transportation costs go high as well.

IT implementation is low, e.g. Warehouse Management Systems; and the human resource is poorly trained to carry out the processes efficiently and safely. All these add up to high warehousing costs, which is further fueled by rising real estate prices.

Strategic SCM Areas

Expertise in several strategic SCM areas is required to cover the issues outlined in the previous section. Proper execution of these in the Indian context, however, is not straight forward because of the absence of historical data and good infrastructure. Indian retailers, therefore, will have to find creative ways to overcome these shortcomings. The following table outlines some of the key success factors and the impact of strategic SCM areas:

Network Design & Optimization	• Stock-outs, • All logistics costs, • High inventory, • Quality deterioration	• Accurate data and business plans should be used • Socio-economic factors should also be considered before selecting a network • Network planning and refinement should be done periodically and systematically • Use of quantitative techniques e.g Mixed Integer Linear Programming constructs lends more accuracy to the exercise
Transport Optimization	• Product quality deterioration • High in-transit inventory, • Stock-outs, • Transportation costs	• Effective Transport vendor management • Use of technology and tools such as vehicle tracking, Transport Management Systems etc • The freight strategy should have alternatives in place to counter poor availability of transport and transport infrastructure
Supply & Demand Planning	• Stock-outs, • High inventory level	• Use of expert validation to system generated forecasts especially for new products and promotional products • Good data management systems to make use of historical data for planning activities • Close integration and co-ordination between forecasting and planning processes and people • Continuous measurement and improvement of forecast and planning accuracies • Use of IT tools for planning and forecasting only after thorough testing and training of personnel
Replenishment Policy and Inventory Optimization	• Inventory levels, • Stock-outs, • Warehousing costs	• Continuous monitoring of inventory levels and throughputs of SKUs to adjust replenishment policy • Simulation modeling and good use of historical demand data for arriving at optimum inventory levels, especially safety stock levels • Supply Chain team: work closely with merchandising to be aware in advance of changes in assortment
Retail Merchandising	• In-store stock-outs, • Store inventory levels, • Product quality deterioration	• Assortment planning: in close co-ordination with the back-end chain • Inventory and replenishment policies: synchronised with rest of the supply chain
Warehouse Design & Operations	• Warehousing costs, • Product quality deterioration, • Wastage costs,	• Right balance of labour and automation • Designing scalability and flexibility • Extensive use of personnel training and process improvement • Lease and CFA agreement for long-term yet allowing smooth and easy exits allowing stability, flexibility and protection from rental variations at the same time • Nurturing the right 3PL relationships is of utmost importance
SCM IT	• Indirect impact on overall logistics costs and services	• Integration of systems to gain synergies and provide information more useful for decision making • Selection and up-gradation of systems for changing needs • Good execution and project management skills in the team for meeting deadlines and expectations • Ability to quantify savings to secure funding and support in the organisation SCM – IT
Procurement	• High material costs, • Product quality,	• Extensive market and material research documented into a knowledge base • Expert negotiation skills • Disintermediation • Development of trusted suppliers over the long term Procurement

Table 1 – Strategic SCM areas

Improvement Areas for Indian Retailers

A number of opportunities exist for Indian retailers today in terms of reducing cost and improving service levels in the existing supply chains. Network design, DC design and engineering, supply chain IT systems implementation and decisions to outsource part of the network are some of the typical projects. A number of projects, including process improvement at the DC level or the store level, improving forecasting accuracy, reducing of stock, increasing sourcing efficiency, increasing product movement visibility, reducing lead time (sourcing, distribution), optimizing transportation, etc. should be on the radar of the Indian retailers for the short- to medium-term time horizon.

On a long-term basis, supply chains would need to be made flexible, in order to respond to changes, drastic or slow, in demand, supply and technology. Further, flexible supply chains would allow retailers to tackle any dramatic events like natural calamities, terrorism, etc. Aligning the supply chain strategy to the business strategy is important in order to make strategic decisions more effectively, like entering new markets, new product introductions, new mode of sales, etc.

Improvement Projects for Indian Retailers

DC design is a very important area for Indian retail today. As much as expansion of store space in the front end, requirements for back-end warehousing space have been increasing. Inefficient DC processes often lead to low availability and higher stock outs or higher-than-required inventories in the retail store.

Steps Required for DC Design

Steps required for DC design and the graphic for the sample of a DC process is shown below:

- The network modeling delivers the basic input and output flows for all the facilities.
- Basic handling steps have to be outlined within a conceptual process design.
- Designing the warehouse processes and selecting the supporting technology: traditional sources of errors have to be eliminated and the principles of zero defect operations have to be adhered to.
- For each functional area in a DC, technical alternatives have to be developed.
- The selection process also has to consider the criteria of "scalability".
- The selected individual solutions to be combined to an overall solution in the next step. Always a minimum investment alternative should be carried forward.

Figure 6 : Illustrative Supply Chain for Shampoos/Detergents
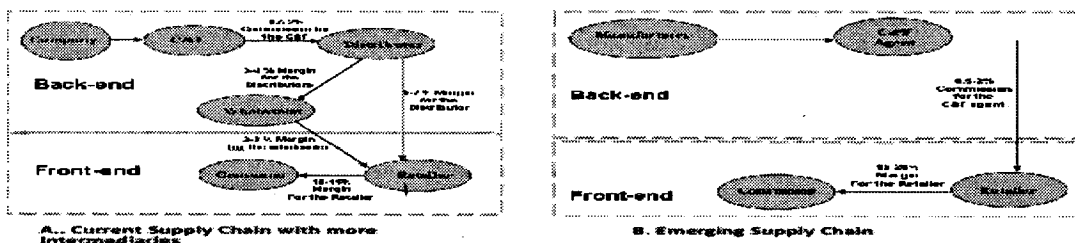
Figure 7 : Illustrative Supply Chain for Apparel
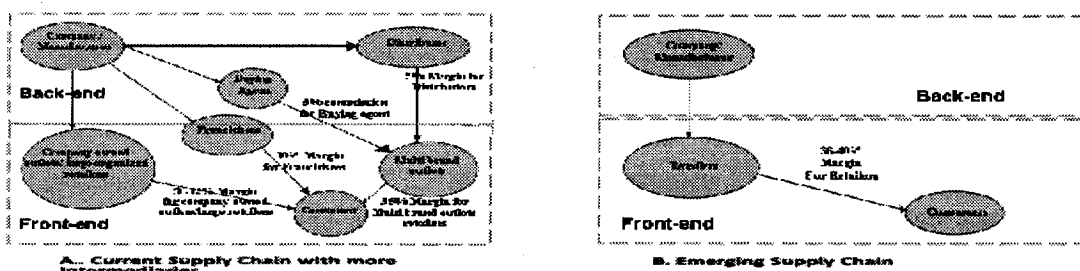
Figure 6 and Figure 7 illustrate the traditional (current) supply chain and the new supply chain that could emerge in the FMCG and apparel categories.

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GREEN FUNDS: AN INNOVATIVE APPROACH TO CSR

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Abstract

How much money should a company spend on corporate social responsibility (CSR)? What are the sources of funds to carry out corporate social responsibility? These questions show the urge to spend money to become socially responsible. Corporate social responsibility includes various activities which exercise positive impact on society. This paper argues that corporate social responsibility should not remain the sole responsibility of the government and big organizations. Investors can also be responsible for this. There should be a platform which provides flow of capital through worldwide investors to fulfil corporate social responsibility which is incorporated within the organization. It provides an opportunity for investors to invest in social projects by creating businesses that are profitable, but at the same time have a positive social impact. It broadens the view of corporate shareholders, management, organizations as well as of the capital market. There can be an investment avenue that would be socially responsible. It contributes not only to economic returns but also to social and economic development. This study makes an effort towards the introduction of a kind of fund which is beneficial in many aspects to investors, environment and the economy as a whole. That means a creative fund having the basic features of 'Good Dividend Funds' along with providing a scope to the company to fulfil its social responsibility towards all 3 P's, i.e. Profit, People and Planet.

Introduction

The International Organization for Standardization, known as ISO, strategic advisory group on CSR describes it as "a balanced approach for organizations to address economic, social and environmental issues in a way that aims to benefit people, communities and society."

CSR includes consideration of such issues as:

- Human rights

- Workplace and employee issues, including occupational health and safety

- Unfair business practices

- Organizational governance

- Environmental aspects

- Marketplace and consumer issues

- Community involvement

- Social development (Denis Leonard and Rodney McAdam)

Funding of CSR

Finance is grease to economy. As such, it can also affect the sustainability and social responsibility of the firm. For this, financial industry is considered as a platform to generate finance for sustainable development and to makes the world a better place to live in.

Socially responsible investment and shareholder advocacy would promote socially and environmentally desirable activities.

CSR evolution is divided into four different phases and funds are arranged according to these. In the first phase, spanning the pre-industrial period (1850-1914), the main drivers of CSR were wealthy merchants. They fulfilled their social responsibility through charity and philanthropy. In the second phase (1914-1960), during the Independence movement, Mahatma Gandhi introduced the idea of "trusteeship." According to this idea, Indian industrialists had to contribute for the benefit of common people. In the third phase (1960-1980), public sector undertakings took the front seat in the progress of the society. In the fourth phase (1980 onwards), Indian companies pursued this goal and incorporated CSR into a sustainable business strategy (Chahoud).

Why is it that funds for CSR are available only out of profits and through donations, charities and government funding, not through investors. This paper emphasizes that there should be a platform which is incorporated within the organization which provides a flow of capital through worldwide investors to fulfil corporate social responsibility.

It is often said that there should be a market just like the capital market which provides an opportunity to invest in the activities of the CSR. That market may be known as Social Capital Market (SCM) and the avenues available in this market may be known as green funds/social investment/socially responsible investment (SRI).

What the Green Funds Mean for Business

What exactly is green or sustainable investing? Different authors give different definitions. For example, Burkenholler defines it in the following way:

Green funding refers to the funding of a project or business that is considered environmentally sustainable. Funding can come from private sources or government sources and can be in the form of loans or other types of debt, equity or grants. Green funding is often focused on goals beyond financial returns, seeking both financial returns and environmental benefits.

The fundamental fact that the market now attaches economic value to social impact, forces companies to rethink many things: marketing, recruiting, innovation, philanthropy, partnerships, business models, etc. The basic features of green funds given by Jason Saul are stated below:

- An economic return for doing good: Corporations are known for seeking profit. Now the time has changed. The dual role of corporations is to earn profits as well as to solve social problems. But the main problem is about funding. This problem can be solved if investors are more inclined to invest in corporations to do good for society. They would be interested only if they get an economic return for solving these problems.

- Social strategies must become business strategies: Traditional approaches like philanthropy, volunteering, and environmental compliance are meant for short-term development only. Our country's need is

sustainable development. For this, it is necessary that companies create new models for social engagement, specifically designed to produce business results.

- Measurement must become a core competence: Green funds link the concept of profit with social impact. For channeling more money to improve social problems, positive results are required. To prove the results, evaluation is necessary. Investors would be interested in green funds only when their investments offer economic as well as social values.

- Greed has turned into good through green funds: It is okay if we are expecting some return in monetary terms for doing good. Green funds would be considered as innovative solutions to social challenges such as hunger, illiteracy, disease, climate change and poverty. As Doyle Jones says "The market that intersects at money and meaning is growing. There is a flood of money that wants to move towards meaning."

In recent decades, India has adopted the policy of privatization and disinvestment. Due to these policies major industrial sectors as well as many fields of social welfare have been transferred to private hands. Private sectors often suffer from lack of financial resources for providing solutions to social challenges or to fulfill corporate social responsibility. This calls for developing a platform through which funds can be raised to fulfill corporate social responsibility. The platform may be known as social capital market.

An Effort towards Innovative Approach for CSR

The concept of green funds can definitely take financial market to new heights along with social good. That could be the most desirable thing for a developing country like India. Some funds can be planned by the experts of finance and of environment in a combined manner.

Some examples of green funds can be:

- Utilizing of capital in the development of organic farms

- Raising money from investors to fund immunizations for children (as done in Japan)

- Investing funds in teak plantation

- Raising money for investing in alternative source of energy

- Initiating educational programs/activities through green funds

Review of Literature

Nowadays, CSR has turned out to be an attractive field of learning for academicians and practitioners. Yet, an absolute definition of CSR is, indeed, hard to set down, and opinions differ.

M. O. Oketch (2005) defined CSR as a function that transcends, but involves making profits, developing job opportunities and manufacturing goods and services. A. B. Carroll considered a four-part conceptualization of CSR that incorporated economic, legal, ethical and philanthropic elements. Carroll's model expresses that all business responsibilities depend upon economic responsibility, which comprises of maximizing profits and maintaining a strong competitive position. Legal responsibilities include the company's fulfillment of laws and regulations while doing business. Ethical responsibilities represent societal standards, expectations and norms that have not been included in the law directly.

In his classic and provocative essay Milton Friedman (1970) argued that the responsibility of corporations is "to conduct the business in accord with shareholders' desires, which generally will be able to make as much money as possible while conforming to the basic rules of society, both those embodied in law and those embodied in ethical custom."[1]

Sirkku Hellsten and Chris Mallin in their work Are 'Ethical' or 'Socially Responsible' Investments Socially Responsible? (2006) studied social responsibility from three points of views, i.e. philosophical, moral and practical. They focused on various UK institutional investors like The Ethical Investment Cooperative, Profit with Principles, Ethical Investment, Barchester Green Investment, and Ethical Partnership Limited. These companies advice financial planning in a way which promotes moral and ethical values, and investors get a return on their investment by supporting companies that provide benefits to society and to the environment. Investors in international capital markets have become more involved and expect screening from corporations. That is why the value of UK Ethical Funds increased substantially and it was considered as a statement of investment principle by pension fund trustees through which the extent of social, environmental and ethical considerations are taken into account in the selection, retention and realization of investments. Despite financial market and corporations, Citizens' action is also entailed bringing change in society. For example, after the introduction of WHO/UNI-CEF, one and a half million babies die every year because of the formula feeding of Nestle Infant Food Industry.

Objectives of Research Work

The objective of this study is to suggest a platform for generating funds through various environment-friendly avenues (may be known as green funds), i.e. to help companies and investors to fulfill their corporate social responsibility, while they get better returns on their investment.

Methodology

The study is based on a comprehensive literature review. Secondary data are collected from organizations, reports, other documents and websites.

Findings

Companies voluntarily contribute a large sum of money to promote a better society and a clean environment, i.e. to fulfill corporate social responsibility. However, what is spent is inadequate; the business sector requires more financial resources for these activities. Funds available for these activities are limited. It will be necessary to develop ways of raising the financial resources as other countries have done. For this even investors should understand the social and economic importance of green funds. Green funds with right incentives can increase the total resources required to meet the financial needs of organizations to fulfil their CSR. These funds would contribute directly to the CSR undertaken by organizations.

Generating green funds for CSR requires creative and innovative thinking. There can be a fund which contributes to both companies as well as investors. An effective approach to CSR can enhance brand and company reputation by improving efficiency and reducing the risk of business.

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1. Friedman concludes the essay by quoting from Capitalism and Freedom (1962, p. 133): "there is one and only one social responsibility of business-to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud."

Suggestions

Social capital market through green funds could make noteworthy contributions in the direction of the sustainable development of our country. Taking into consideration the limitations of the companies in their CSR activities, we can make some recommendations:

- To fulfil corporate social responsibility, organizations usually invest only part of their profits, not their own capital. Therefore, new financial resources must be developed.

- Introduce a kind of fund which is beneficial to investors, environment and the economy as a whole, and encourage private individuals to provide capital for CSR through green funds.

- Investors must receive tax benefits along with the dividend out of profits.

- Public-private partnership should be developed with proper controls and methodology for the optimum utilization of resources.

- CSR activities should be widened specially in backward regions/states.

- Green funds should be such that they satisfy the investors' various preferences.

- A social capital market must be developed with a variety of specialized players using innovative means and financial instruments, such as those used in capital market, to enhance the use of the different funds and tailor them to the needs of organizations as well as of investors.

Conclusion

As per today's scenario, society makes more and more demands on organizations in the direction of defining their social responsibility. On the other hand, organizations are also aware that they have to contribute toward these demands. Funds are important to fulfil these responsibilities. This paper attempted to present an innovative way to arrange funds to fulfil corporate social responsibility. Capital market can play an important role in promoting CSR. This paper has investigated how companies can raise the funds through various investment avenues like green funds, social investment, socially responsible investment (SRI), etc. to fulfil its social responsibility.

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A FRAMEWORK FOR EFFECTIVE IT-BASED SUPPLY CHAIN MANAGEMENT

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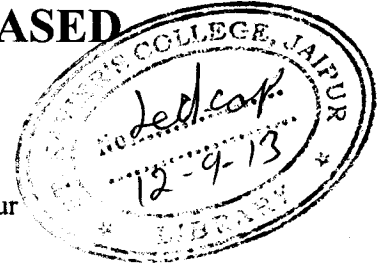
Abstract

Effective configuration management and global resource supply has become the focal point of market competition under the influence of global market and its economy. Though the supply chain management provides a concrete foundation and impacts the demand and supply process to a great extent in terms of operational, financial and statistical aspect; it still has many limitations which restrict the enterprise's ability to gain an edge in a competitive environment. In today's information age, there is a need for an extensive use of information technology and its tools in the process of supply chain management. In an environment of complex and tricky competition and ever-changing market, organizations can offset the limitations of supply chain, improve operating efficiency, reduce operating costs and establish quick response strategies by resorting to a proper blend of information technology and supply chain management. The research paper discusses the role of information technology as an enabler in supply chain management and also highlights the vast benefits a company is likely to derive with the adoption of a comprehensive IT strategy. The paper focuses on the synchronized usage of information technology and its various tools and techniques for supply chain management. It also highlights the contribution of information technology in restructuring the entire distribution setup to achieve higher service levels and lower inventory and supply chain costs. Further, it proposes a framework for analyzing the effect of IT service quality on supply chain performance and a tool for supply chain communication.

1. Introduction

In today's global scenario, business environment demands an increased collaboration between the customer and manufacturers. To succeed in this interaction, supply chain management (SCM) is possibly the most appropriate solution (Gawande 339). SCM provides a network of interconnected businesses involved in the ultimate provision of product and service packages required by end customers (Harland). SCM is a field where innovative technical applications of the principles of SCM are increasing every day.

Information technologies aim at solving the difficulties involved in the process of supply chain management. The utilization of information technology, in turn, is considered an imperious requirement for dealing with supply chain networks, and has been associated with major supply chain efficiency improvements. The past literature on SCM deals with strategies and technologies for effectively managing a supply chain and focuses on showing the inter-organizational information technologies framework and information exchanging. Therefore, the actual role of IT in supply chain management along with the reasons for using IT in a specific way still remains ambiguous. Due to these recognized limitations in the previous literature, the main aim of this paper is to identify those areas of IT which support the supply chain and develop a

framework for applying IT in SCM. Further, it proposes a new emerging IT tool for supply chain communication.

The paper is structured as follows. First, the previous literature discussing the concept of SCM and the use of IT in SCM is reviewed. Second, the framework for applying IT in SCM is presented, followed by the presentation of the findings of the study. The last section focuses on the communication tool for SCM. Finally some conclusions are drawn.

2. Literature Review

Supply chain management is a vast concept where researcher frequently give different definitions based on their personal knowledge. To some, it is an effective way of receiving orders and supplying goods taking into account the distribution and transportation costs. In other researchers' views supply chain management is a concept, managing relationships with the various suppliers and determining what to outsource and to whom, also managing the supplier base. Another set of researchers defined that how the different corporations are incorporated in terms of information sharing systems in the distribution network or value chain (Jayashankar 3-4). IT has a great impact on SCM. There have been an increasing number of studies on IT's effect in supply chain management and interorganizational interactions. In these studies, IT appears to be an important factor for collaborative interactions. While these studies might have focused on different types of E-security in supply chain management, most of them reported the positive effects and advantages of application of IT in supply chain management and in interorganizational collaboration. Bakos and Brynjyoolfsson proposed that application of IT in supply chains points to faster buyer-supplier relationships (301-329). Stump and Sriram delivered empirical evidence to the view that the use of IT contributes to the overall closeness of buyer-supplier relationships (127-136). Subramani brings to our attention a constructive relationship between an IT-based supply chain management and organizational benefits (50-75).

Past literature commonly accepts that SCM and IT are intertwined and that ITs can increase the information sharing in supply chain relationship and provide benefits to companies in terms of increasing the quality of supply chain management. This paper tries to investigate the relevance of IT in SCM.

2.1. Previous Research

Various researchers proposed the study on the use of IT in SCM. Many of them have included over a hundred journal articles in their recent literature survey addressing the use of information systems in supply chain integration and management. In this literature review, the aim is to discuss the logical and conceptual aspects of the research.

2.2. Logical and Conceptual Research

A section of previous research seeks to quantify the effects of information flow and information sharing between supply chain partners and to classify the frameworks that describe how IT is used in supply chain management. This section also highlights the role of IT and interorganizational cooperation in supply chain management. For example, Anderson et al. proposed that it is essential to improve a supply-chain-wide technology which helps in multiple levels of decision making and gives a clear view of the flow of products, services, and information.

For example, Gavirneni et al., Lee et al. and Raghunathan have studied two echelon of supply chains for one product, while the model of Evans et al. consists of four echelons. Previous study described that the clearance

of information sharing has been estimated to depend on the certainty of demand. Later, Cachon and Fisher proposed the theory that information sharing can be of great advantage in situations with unknown demand. On the other hand, as Raghunathan has observed, in a situation of predictable demand, information sharing is likely to be less positive. Reflecting on the reasons for the effectiveness of IT use in SCM, Cachon and Fisher have suggested that the benefits of IT are more due to the positive effects of IT on transaction execution. Bagchi and Skjoett-Larsen studied the role of IT in relation to levels of supply chain integration.

Past literature discussed the use of IT in SCM in relation to transaction execution, information sharing and decision support. Many companies assume that drivers of IT used in transaction execution and information sharing along with decision support differs, and the profits of IT in information sharing and transaction execution are easier to measure.

Previous research shows that in a situation of high transaction capacities and business relationship, companies use transaction execution while in uncertainty demand and regular product introductions use information sharing and further for giving a clear view of products use decision support.

The literature review shows that in previous literature there is a lack of research on how companies actually utilize IT in supply chains to make them more efficient. Also there is limited research on drivers for using IT in SCM. These limitations of previous research necessitate further research, which this study proposes to undertake. It also proposes a framework for classifying the areas of IT use in SCM and examines the IT tools helpful in supply chain communication.

3. Framework Design

Previous studies have focused on the types of IT in SCM and on the drivers for using IT in SCM. Two frameworks have been established based on this study. One of these frameworks highlights in more details the areas of IT in SCM.
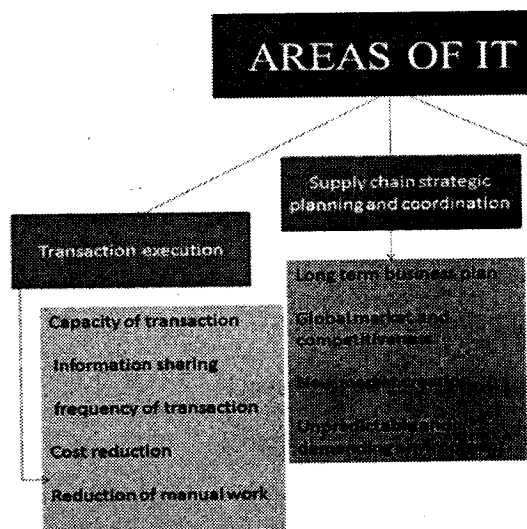
Fig. 4.1: Areas of IT

3.1. Areas of IT in SCM

This framework describes areas of IT use in SCM, and the reasons for which companies use IT in SCM. It also focuses on the three areas of IT application: transaction execution, strategic planning and coordination of supply chain, and decision support.

The first area of IT application, transaction execution, stands for the use of IT for increasing the efficiency of routine information exchanges among supply chain partners. Exchanged information contributes to reduction of cost and manual work, increases information quality, reduces of human error, and produces order (Jaana et al. 5). According to previous survey, companies aimed to reduce manual work associated with sales transactions and thereby to reduce the related costs, and to increase the reliability and speed of information transfer between companies. In most cases, the partners of the IT applications were selected on the basis of the volume of transactions. However, several companies stressed that especially with lean IT solutions, such as extranets, a high volume of transactions is not needed for receiving a positive payback of the integration effort.

The second area of IT application, namely, strategic planning and coordination of supply chain, represents the use of IT for long-term business plan and to deal with globalization. It is also useful for unpredictable and logically demanding business environment. Furthermore, it includes such tasks as maintaining inventory information and production capacity information for increasing the effectiveness and quality of supply chain management (Jaana et al. 3-5).

The third type of IT use in SCM, i.e. decision support system (DSS), is a detailed session of computerized information systems that supports business and inters organizational decision- making events. DSS is a properly collaborating software system. It is designed to provide help for decision makers. DSS uses raw data, and experience for compiling useful information. This is also used to identify and solve problems and make informed decisions. It delivers a record of all current information properties such as relational data, data warehouses, and data marts (Nair and Venkitaswamy).

4. Emerging IT Solutions for Supply Chain Management

4.1. Radio Frequency Identification (RFID)

The barcode was developed to increase efficiency in the trade market, but it cannot uniquely identify some specifics such as the date of production of items, the date of expiry, etc. RFID was able to take care of these issues. Clampitt and Sweeney reported some major advantages of RFID over barcoding:

- No line of sight is required

- Multiple parallel reads are possible

- Individual items instead of class of items can be identified

- Read/write capability.

To illustrate these advantages, consider a purchasing operation in a warehouse where a mixed pallet of goods is bought. If all individual products on the pallet need to be entered into a computer system to produce the receipt, then in the barcoding scenario, a worker needs to break the pallet, open the cases, and scan each product. But in RFID the pallet would simply be pulled through an RFID reader portal, and all products on

the pallet would be identified almost instantaneously. Barcoder, in comparison to RFID, is time consuming.

Another advantage of RFID is that it can give more information than a barcode. Consider, for example, a can of soft drink. The barcode on each can of soft drink is the same and it describes the price of product but in RFID each can of soft drink has its own identifier which provides not only the source of each product, but also such information about product as warranties, authenticity and so on.

The read/write capability of the RFID tags is a benefit when a computer links it to a network database. Even when link to the network to database fails, the read/write tag provides the facility to store and change data about the item on the tag itself, without resorting to the database record that corresponds to the tag's serial number (Gaukler 1-3).

RFID is emerging as a key enabler of Supply Chain Management (SCM) operations (Nair and Venkitaswamy). It is a type of automatic identification system. The aim of an RFID system is to transmit data with the help of a portable device. This is done by reading a tag by an RFID reader. A tag is a microchip which may provide identification or location information or specifics about the tagged product, such as price, color, date of purchase, etc. (EPIC). This tag is connected to a small antenna. The chip can encode a predetermined amount of data. RFID tag and the reader communicate with each other with the help of radio waves.

The RFID applications are wide-ranging and widespread and covers areas such as retail, manufacturing, shipping and distribution, heath care, food and drug, distribution, inventory management and asset tracking, vendor-managed inventory (VMI), and customer relationship management (Nair and Venkitaswamy). RFID offers businesses increased supply chain and inventory visibility for greater operational efficiency, better tracking of transportation and warehouse channels with reduced or zero inventories. It also enables managers to capture and deliver information necessary to make good decisions. It has the potential to cut costs, deliver better asset utilization, reduce shrinkage and counterfeiting, and increase sales by reducing out-of-stocks.

RFID is used for traceability and visibility of products. It also reduces labor costs.

4.2. Software Agents

A software agent is a software system, which has attributes of intelligence, independence, perception or ability to act on behalf of a user. The software agent paradigm is a natural fit to certain classes of dynamic supply chain problems because the paradigm focuses on coordinating the activities of loosely coupled entities, e.g. raw material suppliers, shippers, manufacturers, distribution centers, and retailers. One goal of the paradigm is to enable agents to meet deadlines and resource constraints. To achieve its goals it has to be flexible, robust, responsive and adaptive. With agents these behaviors are obtained without centralization and without assuming complete static knowledge. Agents can perform separately or proactively. The intelligence of an agent refers to its ability to perform tasks or actions using relevant information gathered as part of different problem-solving techniques such as influencing, reasoning and applying specific knowledge (Nair and Venkitaswamy). Java is a good example of a common tool for building such intelligent agents, which are progressively becoming more mobile.

Conclusion

The present century is the century of information technology (IT) and globalization. Information technology is playing a significant role in the betterment of the organizations. Customers' expectations are increasing

and companies are encountering more and more uncertain environments in the face of growing competition. To survive, companies will find that their conventional supply chain integration will have to be expanded so as to integrate all stakeholders. Adoption of IT tools is essential for such efforts. This study focused on the areas of IT use for SCM which are divided into three parts: transaction execution, supply chain strategy planning and coordination, and decision support system. Further, the reasons for using IT in SCM were examined. Moreover, this paper discussed the role of IT as an enabler in SCM and also highlighted the benefits that accrue to companies as they adopt IT in their SCM. This paper also presented an overview of IT which is helpful in making the SCM more efficient. Future studies need to examine how the IT can deal with SCM failures.

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RESURRECTING LITERATURE BY STRATEGIZING AND INNOVATING ITS FORM

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Abstract

This paper tries to posit that literature in its rigid form would have receded into a far corner exclusive only to some elite circles. In order to resurrect literature and make it relevant in the present scenario, it needs the element of reinvention. It explores new avenues such as the graphic novel, films, and literature festivals. This paper establishes the various processes through which literature has been commodified. It investigates the modern phenomenon of literature festivals, which are putting places like Jaipur, Kota and Kashmir on the international map. This joining of hands between the corporate world of publishing houses and writers as it happens in literature festivals is innovative, and the alchemy has proved to be extremely potent. Mainstream literature, unlike its traditional form, has a better reach in its modern avatar of magazines and films. This paper, in order to substantiate the above claim, shall use various instances.

This paper tends to negotiate along the need for resurrecting literature by employing innovative methods. In order to substantiate this claim, it shall work upon the relatively popular formats endorsed in the previous century to determine how mainstream literature has morphed in order to ensure durability. If we were to trace the history of English literature, we identify Sir Geoffrey Chaucer with his *Canterbury Tales* as far back as the 14th Century. Literature peaked in terms of popularity in the 16th Century with writers like William Shakespeare under the patronage of the then monarch, Queen Elizabeth. The 17th and 18th Centuries furthered the cause of literature by giving it the nuance of politics and propaganda. The likes of John Dryden and Alexander Pope were renowned for their satirical works. Literature had become an instrument in these times of both attacking a government and promoting one's interests and had served such a purpose that popular media does today. This was a phase when the Great Britain saw the rise of the Commonwealth and the establishment of the Parliament. The French Revolution and the Russian Revolution paved the way for the 19th Century, where the common man had suddenly been hoisted at the helm of affairs. The king and the monarch were no longer relevant thus making way for the common man, who was all agog with existential ideas and the exploration of tenets such as Liberty, Equality and Fraternity. The 19th Century Victorian England further expanded the cause of literature by bringing into motion the "Victorian compromise" and enunciation of the "Victorian dilemma." These were the features that were in the foreground because in those days of yore, literature was the common mode of entertainment, information, and if one were to take the liberty of a euphemism, a popular way of life. The written word, be it poetry, drama, the much-later Victorian novel, was in currency primarily because of a readership and the lack of any other enchanting mode of entertainment. But with the rapid leaps in technology, the 1880s oversaw the invention of the first movie camera. Motion pictures had a carnival novelty and were being developed as a more important tool of communication and entertainment. In the 20th and 21st Centuries, cinema rose to the status of mass media. Movies became the most popular visual art form of the late Victorian Age. The developing formats in technology thus rendered mainstream literature as an endangered species. Mainstream literature was thus being fast replaced by cinema, television and newspapers. The two World Wars had established the need for

popular media as opposed to literature which was considered elitist. In this paper we shall try to identify the various strategies that have been adopted to further the cause of literature, which has been abandoned both as a serious discipline and a meaningful mode of entertainment. Reading is a dying art and if literature is to resurrect itself from its own ashes, phoenix-like, it shall have to innovate and upgrade its format in order to make itself more relevant. This paper shall navigate itself across the lines of such strategies that have been endorsed in order to make literature relevant in the present day. The paper shall discuss the following as variant manifestations of mainstream literature in order to customize it for the masses. The popular forms adopted for the study are:

- Graphic novel in comparison with traditional forms of a novel

- Adaptations of a novel into cinema

- Organizing literature festivals and tracing the emergence of literary agencies.

The first case in point brings into the picture the idea of a graphic novel. A graphic novel is basically a narrative form in which a story is told by employing sequential art, or in a layperson's terms, the comics' format. Within the Victorian period novels were published in a serialized form. Now, the graphic novels could be compared to the cave paintings of the prehistoric times. Cave paintings also told stories, and so did the tapestries and illuminated manuscripts of the Medieval Ages. The 1920s and 1960s are considered popularly the time when book creators were becoming more adventurous and were experimenting with this form. For instance, in 1968 Marvel Comics published two issues of *The Spectacular Spiderman*. Simultaneously, in continental Europe *The Adventures of Tintin and Asterix* were becoming popular as long-form narratives published in the form of serials. This shift in preference from an extended wordy format to a more visual form of the graphic novel established itself as a genre in the 1970s, which allowed its creators to become marketable in their own right. In 1969, the author John Updike, for the first time, addressed the Bristol Literary Society on "The Death of the Novel" as an idea which spurred the theoretical discussion on the declining importance of the novel as a literary form. In the 20th Century, many writers had begun to rebel against the traditional structures imposed by the written form. This reaction against the novel had raised a pertinent question amongst literary theorists about the relevance of the novel and even predicted its death. As an article in *Wikipedia* "Death of the novel" observes:

> Some of the earliest proponents of this death theory were Jose Ortega, y Gasset, who wrote his *Decline of the Novel* in 1925, and Walter Benjamin, who, in 1930 reviewed *Krisis des Romans (Crisis of the Novel)."*

> In the 1950s and 1960s, contributors to the discussion have included Gore Vidal, Roland Barthes, and John Barth. Ronald Sukenick wrote the story *The Death of the Novel* in 1969.

Tom Wolfe in the 1970s predicted that "New Journalism" would displace the novel.

The various causes that can be traced for such a sudden death would be the rise of "Nihilism" in European culture. According to Saul Bellow, there were no significant people to write about. On the other hand, David Foster Wallace connected the death of the novel with the mortality of the post-war generation of American novelists.

Contemporary scholars such as Kathleen Fitz Patrick argued that claims of the novel's death were highly exaggerated, and that such claims often reflected an anxiety about changes in the 20th Century media landscape. Novelist-critic, Robert Clark Young argues, in his essay "The Death of the Death of the Novel," originally

published in the *Southern Review* in 2008, that "all arguments postulating the death of the novel are fallacious" ("Death of the Novel"). Now, we could surmise out of the entire dialectic that new technologies such as radio, silent movies, talking movies, television, internet, are not aimed at destroying the novel even though they enjoy higher subscription.

This brings us back to the previous idea of the graphic novel being the evolved form of the almost-extinct novel. Just as all other popular media formats, the graphic novel is a marketing term which has at its core the same self-interest as that of a novel, that is, to tell a story and according to Jeff Smith, as a novel, "a graphic novel has a beginning, a middle and an end" (qtd. in "Graphic Novel").

In order to substantiate our claim, we could quote the example of the popular Twilight series which has also been published in the form of a graphic novel by Young Kim. Twilight is a popular contemporary novel series by Stephanie Meyer, and has not only been published in the novel form, but has also been adapted as a film. This goes on to prove the hypothesis that in the present age of divergent tastes, media constantly reinvents itself and so should literature.

This brings us to the second part of our dialogue, that is, the popularity of cinema. Theatre had always been more popular than its written sister, drama. Now, that which makes theatre more popular is the magic ingredient of *spectacle* as coined by Aristotle in *Poetics*. Movies, in an audio-visual format, tell stories, which are not a very different prospect from literature. Viewing, as opposed to reading, is a far more gratifying experience. For all the narrative part of the written word, words can perhaps never achieve a visual clarity as in cinema. As American writer Dennis Lehane says, "Literature and film, movies and books, compare like apples and giraffes" (qtd. in Dean); but John Dean in his essay "Adapting History and Literature into Movies," claims that they do interbreed. The recent internet vernacular for such an adaptation is "litflicks" – literature adapted into flicks. Although literature, history and movies are distant forms of communication, they share a symbiotic relationship. Stories need to evolve in order to adjust themselves to the needs of the generations and the present times. Cinema is a malleable form of literature as opposed to its protean form of the novel. The protean form, however, is not irrelevant, because it is an important link. A movie gets to places and is far more widespread as opposed to literature. Just as print had advanced literature beyond the spoken word and was by far the most popular of entertainment right up to the 19th century, technology has midwifed movies into their very existence. Technological determinism has played a great part in the creation of movies. Novel is a far more formal genre and is a more creative medium than film, but one has to bear in mind that both novel and literature are preindustrial arts and after the Industrial Revolution, we have the movies that are an industrial art. Also, the novel has a lengthy record as a class-oriented medium. Describing the transition from novel to movies John Dean writes:

> For centuries, the novel has relied on the upper and middle class elitism of literacy. Cinema was born as mass and popular cultures bloomed in urban civilizations in modern times. As critics have noted about cinema, since its pre-World War One days of Nickelodeon entertainment, it is the most popular and democratic of art forms....

> Movies feed on the placenta of the popular, the common coin and not on the support of a superior class. Movies were ushered into existence by the common, human hunger for stories.... In its relatively short run compared to literature; the movie business has democratically catered to wider audience needs and market demands.

Thus, one could, to a certain extent, conclude that literature would have more of a mass appeal if it was to be adapted into a film. The relationship, at most times, remains interdependent because it is always a classic or

a popular story that is being adapted, for the cinema. As Dean opines, "It is good, both because it is ready-made and market-tested. The characters and stories are already popular; all they await is mass production." That is why the *Harry Potter movies* or *3 Idiots* are instances of cinema that have raked in more moolah than the novels which they are based upon.

This brings us to the last part of our discussion, that is, literature festivals, which are gaining in huge popularity in the present day. A literature festival is basically a book festival or a writers' festival where writers and readers gather on an annual basis in a particular city. Reading indeed, is an individual activity but in the present day, people are keener on group activities. The shift of preference towards group entertainment modes such as social websites and multiplex cinemas go on to affirm the claim that group entertainment outranks individual leisure. Literature festivals in the same vein are a manifestation of a group activity. These festivals organize presentations and readings by authors which drive home the intention of the authors, their vision, the entire writing process, the major trends in writing and so on. This is an event which brings together authors and readers, and is financially supported by publishing houses. Literature festivals are organized all over Asia Pacific, Europe, Scandinavia, Middle East, North America, and South America. In India, we have the Bangalore Literature Festival and the Jaipur Literature Festival, and it is believed that soon we shall have literature festivals in Kashmir and Kota as well.

The literature festival is a magnum event that engages people in an activity which is otherwise considered high-brow. Let us take for instance, the popular writer Chetan Bhagat. Bhagat's books have remained bestsellers since their release. They have been later adapted into major Bollywood films. *The New York Times* called him "the biggest selling English Language novelist in India's History." *The Time* magazine named him among the "hundred most influential people in the world," and Fast Company, USA, listed him as one of the world's "hundred most creative people in business." Chetan Bhagat is a regular feature at such literature festivals, especially the Jaipur Literature Festival, and can be seen moving all over the world as a motivational speaker. The publisher of his popular novel *Two States* is Rupa & Co. The company had flagged off its humble journey at Kolkata's College Street with two slim volumes of Bengali poems. Today, Rupa is one of the largest publishers, distributors and importers of books in India. Rupa has been a launch pad for writers such as Chetan Bhagat and Anurag Mathur of the bestselling *The Inscrutable Americans*. These literature festivals combine the interests of the publishing houses of the authors and the readers.

We should also integrate at this point the idea of a literary agency, for instance, the Siyahi Foundation. "Siyahi in Urdu means 'ink.'" says their website. For the foundation, the Siyahi is representative of the dye that stains thoughts. Theirs is an endeavour to cherish and nurture the timeless magic of words. This foundation is spearheaded by Mita Kapoor who describes it as a literary consultancy. The organization is dedicated to find meaningful stories so that the voices telling these stories reach far and wide into the world. The very idea of a literary consultancy is new and innovative. The unusual idea of a literary agency setting a firm foothold in an extremely competitive market is noteworthy. The rise of literary agencies in India is a novelty. The literary agency such as the literature festival is an agent. What do these agents catalyze? It is believed that an industry professional writes what is considered 'raw', so that it reaches a publisher's evaluation desk and merits publication. It has to be 'agented' or 'solicited'. Thus, most writers these days contact a literary agency in order to make room for new professionals into the arena. Literary agencies serve a twofold purpose:

- They separate the wheat from the shaft (distinguish good writers from the bad)

- They edit, prune, and polish a selected manuscript so that it is ready for publishing, thus reducing the publisher's work and time investment considerably.

All these go on to establish that literature and writing are an industry in the present day and in order to be viable, literature will have to constantly upgrade its appeal as a commodity. This surely does not translate as a process that is taking away from mainstream literature, rather, the graphic novel, cinema, literature festival, literary agency are all innovative strategies that help diversify literature and help it sustain a larger loyalty in the market. Even cinema, which was pretty monolithic in its approach in the yesteryears, has exerted in order to maintain its relevance. We have both commercial cinema such as *Dabangg 2* and strictly multiplex films such as the *Life of Pi.* Books will have to reincarnate themselves in terms of language such as the everyday quotidians in Chetan Bhagat's best sellers or in the form of cinema such as *3 Idiots.* Literature needs to revitalize itself and be shape-shifting so that it does not fall out of favour. Today, a formal study in literature is not a well-observed phenomenon because it seldom fructifies in a well-paying job, nor is it a very favoured form of entertainment.

Products are modified and packaged differently over the years for better acceptance. Similarly, literature will have to modify and package itself differently for mass appeal.

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CONTEMPORARY LITERATURE: BRIDGING THE CONSCIOUS WITH THE CONSCIENCE

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Introduction

In the times of explorations, experiments and progress like today, it is significant to keep abreast with the latest innovations in the field of management and device strategies to stay afloat in the corporate sector. With the emergence and settlement of multinational companies (popularly known as the MNCs) in India, the employment rate has increased noticeably, which has further added to the literacy ratio. But at the same time, these companies have brought forth a transition in social as well as working culture, here in India. This sudden upsurge of MNCs has introduced a very non-Indian way of working. Almost fifteen years ago when the foreign companies started forays into the Asian market, especially in India, by establishing branches, the most anticipated change was employment opportunities and economic growth. Over the years, both these expectations were met to a remarkable degree to the advantage of the citizens; but this development has brought about a gradual change in mindsets and lifestyle of a certain section of society. This "evolved" way of thinking and living is called corporate culture.

The aspect to be noticed here is that when a certain kind of practice or way of living is given recognition, certain liberties are extended to it, it gains certain acceptability. For instance, if we belong to the corporate world, our social responses will be judged accordingly. Consequently, many things which were previously a taboo in society will be accepted by the same society in a changed context, for example, if it is presented with the tag of "belonging to corporate." This principle has made it possible for the MNCs to introduce a positive change in the thinking of a large part of the Indian society. But the changes they brought in were partial, because there remains a large portion which rejects this liberty of thought. This contributes to the generation gap. Most of the employees in the MNCs are the Indian youth, which is ready to work on any terms and conditions, in order to earn that little extra amount which will fulfill its longing for luxuries, apart from the regular earnings.

When we talk of management strategies, the one approach that the MNCs adopt is to allure the younger generation by providing them attractive incentives (over and above the regular package), training, a taste of working in any other country of the world. To entice the youth to work in other countries, they also provide in their offices here in India the same work culture, ambience and a very liberal environment to work and learn as they get abroad. The MNCs ensure that the work environment is like any other training school but with much more benefits. Initially, it looks alluring, if we look at it from the young employees' perspective, but as they become a part of the organization and experience the working of the system, looking closely into the nitty-gritty of it, they are disillusioned. As time passes, the system brings them closer to the harsh reality of competition and the need to succeed in it. A job that looked very enticing and promising six months earlier when they were "freshers" now begins to be ugly and demanding. Maybe they are not prepared enough to bear the pressure which is unleashed on them as they assume the responsibilities of the offices for which they are recruited. Now this is a common narrative of almost all the companies that have their branches all over India. They do help the nation economically and have contributed to its fiscal development, but they also infuse abrupt change in the social front.

India is originally a culturally rich and socially progressive country. It is a home to people belonging to various ethnicities, religions, beliefs and cultures. Even after such diversity, it has been able to establish one uniform way of running the society, where each religion is acknowledged and every culture is preserved and followed. Indian society is progressive to an extent where certain changes are acceptable only when they do not disrupt the working of it in a very extreme manner, thus making that change least noticeable. But one aspect that it cannot compromise with is its conventions. They are not flexible; their rigidity establishes their stronghold on the Indians. Even though we have welcomed and accepted the reign of MNCs in India, there is a section of Indian society which does not approve of such companies here and further rejects the idea of our youth working for them. Their belief suggests that these foreign companies pollute the minds of our young people, thus corrupting the values and instincts that India and its society is known for.

To a great extent, their concern is valid. To substantiate this point, here is an instance: when individuals become a part of a large office like that of an MNC, they have to sustain there. In order to do that, they to have be constantly learning and presenting their ideas to their seniors, which will also fetch them promotions and job security in the long run. They have to device strategies and invent concepts which will accentuate their individualities in the office, thus providing them with their own unique identity, instead of being a part of a group. Such a need to be identified compels the employees to act in a way which is not their own, but which the seniors would understand. This is where compromise with "originality" begins. The irony of the situation here is that we compromise with our original self, in order to be identified as "individuals" at our work-places (the corporate offices), thus losing our individuality altogether. There is a chain of events that follows and brings a transformation in that individual. The stress to excel and be identified leads to losing the "self" and questioning the existence of it.

So, in a way, the current strategies and innovations of the market are affecting our society in a negative manner, as in this scenario an individual has set out to market oneself, turning oneself into modifiable commodity which can be molded according to the desire and requirement of the employer. This requirement has led to isolation and created social distances.

Objectives of the Research

There are several means of communicating such scenarios to the masses, but the most potential mode is literature. If we read current literature, we realize that it has been alerting us towards the impulsive transformation of our society, given to the influence of the corporate world. Literature has always been the expression of the contemporary society. The kind that we read today, often called popular fiction, presents an alarming picture but in a very frivolous manner. Writers like Chetan Bhagat, Advaita Kalia and Tuhin Sinha write about young people working in various corporate sectors like BPOs, hotel and hospitality management, software development, etc. Their stories can be called factions as they depict the reality of such working sectors with the help of various entertaining stories. The contemporary literature reflects the affect of current marketing scenario. It has made life highly competitive where we are constantly chasing success, but just when we think we have achieved it, we realize that "success" has been redefined. So we begin from the beginning. Such a blind, irrational chase has made us forget our reality. It has distanced us from ourselves, making us question our existence. Over the years, we have become shallow and we chase products of instant gratification. This has been the most defining effects of the current marketing strategies. We seek instant gratification offered by objects/products in favor of more subtle gratification offered by social relationships and virtuous living. The result is that even when we live in society, we are still isolated beings, living in a make-believe world of our convenience.

Main Text and Finding

The adage "Live in the moment" has taken a drastic toll on the contemporary society, especially on the younger generation. Novels of Chetan Bhagat echo this aspect of young thinkers. His novel *One Night @ a Call Center* is a true representation of the inside working of a typical corporate office, a BPO. It traces the lives of six employees working at a call center, coming from various sections of society, the focus being on the challenges they face, their perspectives of them and their struggle to overcome those challenges. The story delves deeper into the workings of each character's mind, wherein the reader can see the way in which that character is strategizing, in order to combat his fears and shortcomings. The novel also reflects the perception of these young people about their values and teachings of the family. It presents the shift that has taken place in the youth regarding their culture, family values and traditions. They do not hesitate in flouting those values if they become a hindrance in their progress. The story is narrated in first person, by Shyam (aka Sam Marcy), who is a team leader of Western Appliances Strategic Group (WASG) at a BPO called Connexions, in Gurgaon. He is amazed at the fact that he is a team leader, as he considers himself to be incapable of leading a team. He has no self-esteem, even though he is a fairly handsome young man. This story also draws our attention to the fact that appearance contributes, to a certain extent, to one's achievements, and that it is not gender limited. Literature is the voice of a society, an expression of people's mind, their thinking and understanding. Chetan Bhagat was told this story by a fellow-passenger on his way from Kanpur to Delhi, and it is considered to be a true story. Except for the proper nouns, the details remain the same. Shyam comes from a middle-class family and the opening scene suggests how a middle-class the family is. He wakes up to a chaotic apartment, full of people, women outnumbering men, in this small two bedroom-hall-kitchen space. He is non-existent in the family, although he is the only earning member, after his father's death—a typical middle-class situation. This fact also suggests that it is very significant to be employed in India and also the fact that these MNCs are a boon to the children of middle-class of Indian society, as they provide opportunities to them at an early age, when they are "fresh-graduates" as their advertisements say.

The other characters in the novel are Priyanka (Shyam's ex-girlfriend), Esha (Eliza Singer), Radhika (Regina Jones), Vroom (Varun Malhotra aka Victor Mell) and Military Uncle (he does not answer calls so he does not have the "other" identity). Then there is Shyam's current girlfriend Shefali and Bakshi who is their boss. Both these characters turn out to be opportunists, using people and their skills to get work done in their ways. So, this is a competitive group of people who sell electronic appliances to people in the US and their organization is under the threat of shutting down, owing to poor sales of the past year. These are testing times for each one of them, especially the major six characters, as their jobs are very vital in their respective lives.

As the plot progresses, we see that each character is dealing with potentially fatal personal problems. But, in order to secure their jobs, they have kept that quandary aside, for a while. This is one of the portions of the story which resonate the realistic aspect of life much emphatically. As we look around, not only outside our social structure, but also within our personal premise, we realize that we have become accustomed to such practice. We keep our professional lives on the forefront, thus compromising with the urgencies of our personal lives. The result is that we are ready to negotiate our values and flout the social norms so as to accomplish our professional targets or to fulfill our dreams and desires. Shyam is with Shefali, even though he dislikes her and is still in love with Priyanka, because she has access to Bakshi and can help him in his promotion. Self-interest is not a vice anymore, but has become a virtue instead. If we are capable of excelling professionally by means of other people, we are artful enough to sustain in any organization or working environment. Similarly, Esha is an aspiring model, but is working at this BPO for the time being, taking up modeling assignments off and on. It is later revealed that she had to please a fashion designer for a night in

order to get one such assignment, but he betrays her and sends some money for the "favor" that she had done to him.

The story is that of disillusionment, thwarted dreams, shattered ambitions and pessimism, until one night all the six characters face a life-threatening situation in which they look at their respective lives in retrospect. This exercise reveals to them a very pensive aspect of life's realities and makes them realize that they have achieved nothing, even after disgracing themselves physically and morally. The events that take place in their lives are a reflection of degeneration of traditions and values in the current youth, who do not think twice before acting on their decisions, which are purely impulsive. It is only when it is too late that they understand that they have lost their identities and individualism. Their rebellious thinking has worked against them. It made them lustful, irrational, self-centered, shallow and finally, confused. They lose their original "self" in order to "fit in" and become other people's definition of them. There's no purity left in their core being. That's when they face the colossal identity crisis, and when that happens the reality hits so hard that they are baffled by it and intensely hurt. All this while this generation has looked for instant gratification but has been blinded to achieve their dreams by any which means possible, so much so that they have forgotten how transitory their bliss is. Their myopic view of life places them in a situation where there is a dead-end and less scope for retreat. The six characters in Bhagat's this piece of work faces exactly the same situation. Heartbreaks, deceit, sense of isolation, loss of identity, painful reality check and the fatal accident when their vehicle crashes into a construction site at midnight and there is nobody to seek help from. The accident site is such a desolate area that there are no mobile networks and they fail to reach out for help. It is during these last moments of life that they look back and confess their fears to each other, seek forgiveness and look at life with a much broadened perspective, but alas, they don't have much time left. Radhika confesses that though she had a love marriage, it is on rocks as her husband has an extra-marital affair and that she is extremely hurt and disillusioned with the entire idea of love and the institution of marriage. Priyanka too confides that she does not like the boy she is getting married to and is still in love with Shyam. It is then that Shyam gets a call, from God. As ridiculous as it may seem, this is what happens. It is God speaking to Shyam, in the language that he understands. He speaks Shyam out of his despair and urges him to think about the goodness in his life. He orients his attention to the mistakes he did not make, instead of reprimanding him of the ones he did. God speaks to everybody one by one and guides them to looking at the brighter aspect of their respective lives. He also explains how they could learn from their mistakes and redeem their morality and values.

Who is God? Who was the one speaking on the other side of the phone? Does God have a face, an identity, a shape? Or is it just a figment of our imagination? Chetan Bhagat's *One Night @the Call Center* seeks answers to few such questions. The call from God is the inner voice of each individual stuck in that fatal circumstance. It is only when each one realizes that perhaps they do not have much to live for, that they regret their actions and impulsive decisions, this regret is actually their desire for a second chance. God's call is the confirmation of that chance. It was not God who called, it was their conscience which questioned them and answered their misgivings. It was that guiding power that each one of us possesses but we are too weak within to acknowledge it, especially when we are reveling in the glory of success, materialistic success.

Literature becomes the mirror to such dilemmas and presents it, communicates it to a much larger section of the society. Popular fiction, to be precise, plays a vital role and makes us aware of our environment, both outside and within. The writers are potential "life gurus" who direct us to the right path, thus taking us back to our roots. Their achievement lies in the fact they communicate such profound thoughts in the language that is understood by the reader of every social section, especially the youth. The youth is the most disoriented group, and writers like Bhagat and Kala, steer them to their dreams by suggesting to them to take the right

way and not get lost by deceptive "signposts". If we look at today's novels critically, we will realize that they are highly philosophic in their theme but the presentation is very contemporary, so as to convey the ideology effectively. Contemporary literature has the potential to maneuver the bewildered youth to the acceptable path, without compromising with their values and social norms. The convenient society that they have conformed to is short-lived. Furthermore, it is a part of a much larger society which governs our conduct. Contemporary fiction presents the advantages and disadvantages of such behavior, in the long run. Literature is an alert to the inner conscience. It is entertaining, while having a much higher function of reforming the society by expressing the thought-provoking and equally alarming circumstances.

Conclusion

The new marketing strategies and emerging innovations have increased the pressure on working professionals. The stress they experience has made the mental and spiritual situation of these individuals volatile. They are unstoppable and can go to any extent to survive in this rat race. The new marketing innovations are unintentionally isolating individuals, thus providing a virtual society like social networking sites. Here they have innumerable friends, but would still find themselves sipping coffee all alone. Mobile phones, Facebook, internet, magazines, etc., are means of swift social gratification; none of these has essence in it. Quick money, loose living, intoxicants, shifting loyalties–these are all causes and effects of the stress that our youths, who are eager to achieve much more than what they can handle, face today. Contemporary literature is thought-provoking. It is a sort of moral policing which helps the lost young generation to retreat to its originality by depicting a very crude picture of the consequences of its actions. It addresses the immediate concern of social disruption, and it can further be a watch-guard to a better state of life. It conveys that human life is not about possessing but about being and belonging. Self-gratification is not what brings fulfillment; our happiness lies, as Aristotle says, in virtuous living in the bliss of people around us.

SMALL MODULATION, BIG REVOLUTION: WOMEN AND MICROFINANCE

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Abstract

"Are women a better prospect for banking?" A big question whether empowerment of women is good for MFIs has cropped up in the minds of many academicians and policy makers. This paper intends to indicate both the rewards of the MFIs and the challenges faced by them while empowering women. As there are various negative impacts of lending credit to women, institutions can feel tempted to change their client base. In this context, they introduce innovative strategies for avoiding the undesired consequences by focusing on gender issues also. This includes paying attention to various determinants – economic, organizational, political, and cultural, to name a few.

Microfinance is one of the significant tools in alleviating poverty. It provides various financial services to poor people who are most credit constrained due to their financial exclusion by commercial banks and other sources. Since women are the worst sufferers of the current economic system, provision of financial assistance to them is necessary to empower them economically. Experience has shown that microfinance results in increased self-reliance, self-confidence and social status, and thus plays an appreciable role in elevating the status of women and in increasing their role in social life. As women are an intrinsic part of society, their empowerment, i.e., involvement in decision-making as well as economic activities, is vital to the welfare of society. This study looks at microfinance as one of the significant tools in women's empowerment.

Introduction

Growth of any economy is only possible if poverty is eliminated from every section of society. An essential element of the strategy for poverty alleviation should be equality in opportunity. Women constitute the major part of the poorest population and they are deprived of access to credit and other financial services (Mayoux "Not Only Reaching"). According to the State of the Microcredit Summit Campaign 2001 Report, 14.2 million of the world's poorest women have no access to financial services (Cheston). For reducing poverty it is essential that women be given access to financial services and human rights should be promoted. Most of the countries have signed an international agreement to this effect. The issue of women's access to credit was given particular emphasis at the First International Women's Conference in Mexico in 1975, leading to the setting up of the Women's World Banking Network. In the wake of the second International Women's Conference in Nairobi in 1985, there was a mushrooming of government and NGO-sponsored income-generation programs for women, many of which included savings and credit. A number of international workshops at the end of the 1980s attempted to bring together the experience of government and NGO programs (Mayoux "Not Only Reaching").

Women have been targeted for many reasons:

- Women have proven to be more efficient in saving and even in timely repayment of loans.

- As poverty reduction is the goal of a Microcredit Summit Campaign, women are specifically targeted because they are more poor than men.

- To achieve gender equality and empowerment (Mayoux and Hartl).

Latest statistics show that 1.2 billion people are living on less than a dollar a day. Women are often responsible for the upbringing of the world's children and the poverty of the women generally results in the physical underdevelopment of their children. Experience shows that women are a good credit risk, and that they invest their income in ways that promote the wellbeing of their families. At the same time, women themselves benefit from the higher social status they achieve within the home when they are able to earn (Mayoux "Not Only Reaching").

Virtuous Spirals: Empowerment Potential of Microfinance

Microfinance has proved to be a great boon to women, since they are now able to have access to finance services, which help them take prudent decisions regarding savings. Now they are able to invest on their own so that they can have a more controlling role in household activities. All this increases their productivity and income. Secondly, women's access to micro-finance services improves household welfare. Women, spend their money in areas like nutrition and education of their children. Thirdly, it increases women's economic activity and decision-making power, thus contributing to their social and political empowerment. All this helps in increasing women's confidence and skills, in expanding knowledge and support networks, and finally in poverty reduction.

Many policy makers had questioned whether microfinance empowers women. The possibility of microfinance empowering women is well acknowledged. It empowers women to the extent it helps women in becoming independent.

Although the potential of microfinance programs for women empowerment remains convincing, there are certain limitations, which are undeniable. Certain studies suggest that its potential for empowerment of women and its objectives is contradictory. It is argued that women's empowerment leads to a lessening of the importance of MFIs. The more empowered women are, the less they will depend on microfinance. This contradiction affects the way MFIs design programs for women (Mayoux. "Gender and Rural Microfinance").

Tiyas Biswas highlights the challenges before MFIs. According to him, much evidence suggests that women are mostly averse to take risks and investing in existing ventures, which may have low profits, or they like to invest in their husband's activities. The reason for all these may be that mostly women's ability is curtailed due to the gender bias in financial sector. Other reasons may be that women do not have enough time to concentrate on business activities as most of the time they are busy with household activities, and that they lack mobility. Such reasons are hindering their economic empowerment.

Women have gained self-confidence by participating in economic activities, which help them in building the assets for the household. This helps in strengthening of their negotiating power. But it can have its negative effects, because it can intensify the domestic tensions. Moreover, mothers may withdraw their daughters from the school to engage in business activities, jeopardizing their human development.

It is seen that in some cases microfinance has been positively disempowering rather than empowering. Tiyas Biswas cites some reasons for this:

- Debt may lead to bankruptcy and create pressure on women.

- Women who become dependent on loans get burdened with heavier workloads.

- Women forego their own consumption as they have a pressure to save.

Strategies for Mainstreaming Gender

Microfinance is one way of empowering women and other weaker sections of society. Other steps are to be taken to complement mainstreaming of gender. Mayoux and Hartl propose some strategies for mainstreaming gender:

- Removing all gender discrimination in loans, e.g. collateral and guarantor requirements which disadvantage women.

- Integrating women's needs and concerns into product design so that they have equality of access to all products.

- Application and promotion procedures to equally target women's information networks, locations, and times accessible by women.

- Repayment schedules and interest rates to reflect the reality of women's economic activities and life cycle.

- Improving savings facilities including higher interest and deposits helpful to increase women's assets.

- Taking measures and adopting tactics that promote gender equality.

- Customizing institutes that advocate empowering of women such as Products and Polices of Microfinance Institutes.

- Registering property and assets in the names of women.

- Introducing tools which can help in risk management.

- Adult literacy and training poor women in business management and marketing in order to help women gain skills.

- Promoting women groups by MFIs to strengthen their network.

Conclusion

This paper concludes that women are better managers as well as better prospects for banking. They can take better decisions about financial sustainability. Increasing women's access to financial services will enable them to make a greater contribution to household income. It can aid women to improve skills, mobility, and access support networks. For this, it is necessary to focus on mainstreaming gender as well as sustainability of institutions. In mainstreaming gender MFIs have a great role; but they also face many challenges in the current scenario. If they aim at contributing to economic growth and empowerment of poor rural women, they need to focus on gender issues and design products and services, which cater to women's needs and concerns.

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EFFECTS OF CORPORATE SOCIAL RESPONSIBILITY ON EDUCATION

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Abstract

In the present age of globalization, the corporate gets involved in education for a number of strategic reasons like earning reputation; gaining goodwill among employees, investors, consumers, and other stakeholders; establishing of brand; responding to changing social expectation; increasing affluence; increasing consumer commitment; training focussed and educated workforce, arousing consumer awareness; accomplishing company mission, etc. The role of the government bodies in our education system cannot be ruled out, due to the fact that corporates are governed by government bodies. This paper investigates how Corporate Social Responsibility embraces both business enterprise and education and the role of government bodies is to ensure that corporates fulfil their responsibility. It will emphasize the features of corporate policy and the interrelationship among education, corporates and government bodies. In this paper with reference to the case study of Intel and Infosys which have partnership with cooperative education, the focus would be towards conducting academic research, more valuable study, investments in research, new management strategies, and spread of information and communication technology from school level onwards. The research paper would be beneficial for education systems, corporate, and government bodies as well as to the society at large. Special emphasis would be on the CSR synchronized approach and interrelationship between education system, corporate, and government bodies.

Introduction: Renaissance in Education through CSR

"CSR" stands for three words: 'corporate,' 'social,' and 'responsibility', and collectively they mean responsibility of the corporations towards the society.

Lord Holme and Richard Watts give us the following definition, "Corporate Social Responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large" (qtd. in Baker).

An increase in corporate social responsibility (CSR) has made companies realize the need for promoting social welfare along with profit making, thereby enhancing their status.

Emphasizing the importance of education Maimunah writes that the very idea of the Global Compact by the United Nations encourages a socially responsible attitude of companies towards human rights, labour and the environment. Education proactively educates current and future leaders about responsible management and inspires champions for responsible management of education, research and leadership globally, thereby developing leaders whose global mindset motivates creative sustainability (200-203).

The aim of this study was to examine attitudes and perceptions towards responsible management education among students in various nations and cultures, to measure their attitudes and perceptions on CSR and to understand what can be done to enhance positive attitudes.

Mathur shows how Indian companies like Tata and Birla have been practicing the CSR for decades before it became a popular practice playing a predominant role in addressing issues of education, health, environment and livelihood across the country. Recently notable efforts have also come from Infosys, Intel, Bharti Enterprises, ITC Welcome Group, Indian Oil Corporation and others. Their contribution towards empowering the lesser privileged of the social fabric in education, health, livelihood creation and skill development is exemplary. Furthering the cause, organizations like Bharat Petroleum Corporation Limited, Maruti Suzuki India Limited, and Hindustan Unilever Limited have adopted villages, focusing on holistic development, which emphasises providing sanitation facilities, building schools and residential communities providing better medical care, and helping the villagers become self-reliant in vocational and business skills (147). GlaxoSmithKline Pharmaceuticals' CSR programs focus on tribal villages, providing them medical check-up and treatment and organises health camps and health awareness programs. (Corporate Social Responsibility Rural Projects).

Many CSR initiatives are executed in partnership with nongovernmental organizations (NGOs) utilizing their expertise in tackling specific social problems of the local communities. For example, SAP India, in partnership with Hope Foundation, has been working on short- and long-term rebuilding initiatives for the tsunami victims and has also started The SAP Labs Centre of HOPE in Bangalore, a home for street children (Ramya).

Irina Bokova, Director General of UNESCO, emphasizes the importance of such initiatives aimed at the welfare of children. She writes, "We cannot afford to create a lost generation of children deprived of their chance for an education that might lift them out of poverty"(qtd. in Gao).

Definition of CSR

Though CSR has become a widely-accepted concept, scholars have not come up with a commonly-agreed definition of the word. Different scholars have defined it differently. For example, Matten and Crane define it in the following way: "Corporate Social Responsibility (CSR) is not an easy term to define, as it is an umbrella term overlapping with some, and being synonymous with other conceptions of business-society relations, such as sustainability, corporate citizenship and others (Matten 3)

CSR has clearly been a dynamic phenomenon (Carroll) and therefore its definition is constantly evolving as well (Haski 5). In Jamshedji Tata's words, "The clear definition of Corporate Social Responsibility is that the community is not just another stakeholder in our business but the very purpose of our existence" (Nadkarni).

None of the definitions of CSR is popularly accepted; for example, on the one hand MNCs assert sustainable development or sustainable business, and on the other hand several Indian companies talk about responsible business or Triple P (People, Planet, and Profit).

The following case study justifies the above-given definitions and their stand:

Intel Education as Corporate Social Responsibility

A report on Intel Education as Corporate Social Responsibility we find the following details about the company's mission:

- Intel strives to be a trusted partner to educators and governments worldwide.

- Their mission focuses on "success for all" including women, underrepresented minorities and those with little or no access to technology.

- In collaboration with The World Bank; the United Nations Educational, Scientific and Cultural Organisation (UNESCO) and the World Economic Forum Intel promotes economic development through 21st-century education. (Advancing the Education For All Agenda: A Report by the Broadband Commission Working Group on Education)

- Intel's two guiding principles are: strengthening communities and improving lives through technology by inspiring creativity and innovation in classroom teaching.

- Its World Ahead Program focuses on accessibility, connectivity and education of uncompromised technology for everyone, anywhere in the world.

- Its creation of 'Discover the PC Initiative' provides customised technology solutions to meet specific needs. Intel is partnering with public and private organisations to increase the availability of high-speed wireless Internet connectivity in communities, through WiMAX broadband deployments.

Infosys Foundation and Corporate Social Responsibility

The Sustainability Report of Infosys titled "Sustainability Report 2011-12: Infosys 3.0 – Growing Responsibly" gives the following description of their mission and activities:

- The Infosys Foundation established in 1996 highlights distribution of wealth as important as its legal and ethical creation as a nonprofit trust to support social initiatives to the cause of the destitute, rural poor, mentally challenged, and the economically disadvantaged sections of the society.

- It also helps preserve cultural forms and dying arts of India.

- Through its computers@Classrooms initiative, January 1999, it donated 2,567 computers to institutions across India in collaboration with Microsoft Corporation, which has donated relevant software.

- Infosys' Education & Research group takes pride in anchoring the Infosys Extension Program (IEP), the Infosys Fellowship Program, Rural Reach program, Catch Them Young and Train the Trainer.

- Its Development Centres (DCs), through several Corporate Social Responsibility (CSR) initiatives, are contributing for the welfare of underprivileged children through NGOs dedicated to community welfare.

Literature Review

The recent global financial crisis was the consequence of the unethical behaviour of governments and firms together with globalisation, and growth of technology. It lead to an ongoing discussion, spearheaded by social media and rising consumers' awareness, on the role of consumers, governments and firms. Some of the influential participants of this debates are Gardiner, Lacy, Porter, Kramer, Matten and Moon. Gardiner and Lacy (2005) argued that business interest in social and environmental responsibility has been triggered by successive corporate scandals combined with enormous pressure from NGOs, policy-makers, consumers, and the media (Haski 5). On the other hand, Porter and Kramer (2011) agreed that "capitalism is under siege" and that the business sector must undergo some fundamental changes (Haski 5).

The business sector is presently shifting from the micro view of business purpose (maximising value for shareholders) to a macro view, which is more socially responsible. Justifying this shift is the number of companies signing the UN Global Compact, which addresses the social responsibility of firms towards human rights, labour rights, the environment and anti-corruption (D'Amato).

Education plays an important role in CSR. In CSR for Indian companies education is the priority followed by health (67.5%) and rural development and livelihoods (57.5%). (Linking Corporate Social Responsibility 10). In CSR for UK, of the 105 institutions surveyed by (Cowton and Cummins in 2003), 58% of business schools taught business ethics, but it was only a core subject at 18 schools (Analysis of Corporate Social Responsibility).

In CSR for Europe, Matten and Moon in 2004 found 47% respondents offered subjects in CSR, or related fields as citizenship, governance and business ethics as optional subjects and 38% embedded concepts in existing subjects. The authors concluded a "disappointingly low level of CSR scholarships," hinting at the need for more institutionalised future drivers, in the form of support from business stakeholders and inclusion in program accreditation and ranking systems (Karve 302).

Methodology

Greater awareness should be generated among corporations towards social responsibilities, to rise above mere philanthropy. Despite the worthwhile support an enormous amount still needs to be done through investments in health, education and knowledge management, thereby easing many social woes, particularly, poverty. Emphasizing the importance of eliminating poverty as a CSR, Saswati Chanda argues in a background paper "Corporate Social Responsibility, Education and Technology," published on the Web, "Operational environment of the companies should be thoroughly understood. For corporations in the developing and underdeveloped countries, bridging the divide (digital, economic, social or environmental) in order to eliminate poverty should be the essence of the social agenda."

Sunyoung Lee pays attention to the way industries have adapted to India's education system. Several industries, Lee claims, including IT, have overcome another major deficiency: India's education system. Indian companies have learnt to adapt to the country's poor public education and the limited skills integrating education (16)

Elements of CSR

Mohawkspike lists four elements of CSR:

- Cohesive self-interest – creating a synergy of ethics, a cohesive society and a sustainable global economy where markets, labour and communities are able to function well together.

- Social investment – contributing to physical infrastructure and social capital is a necessary part of doing business.

- Mutual reliability – business has low ratings of trust in public perception. There is increasing expectation that companies will be more open, more accountable and be prepared to report publicly on their performance in social and environmental arenas.

- Business anticipations – globally companies are expected to do more than merely provide jobs and contribute to the economy through taxes and employment.

Rising Demands of Society on Corporations

Reinhard et al. observe that the role of companies towards society has dramatically changed over the years. Traditional sharing of tasks between public and private sector has evolved new forms of cooperation. Three main trends are said to be responsible for the shift of paradigms: (Introducing Corporate Social Responsibility)

1. Reduced budgets have resulted in inability of governments to guarantee adequate education, health or insurance against poverty. As a result, countries lose a significant part of their capability to shape the social agenda (Habisch, 2003; Hansen & Schrader, 2005; Schrader, 2003). Hence funding higher education needs nongovernmental resources. Therefore, more and more universities (in the U.S.) have their own fundraising teams in place.

2. Increased profits of companies have enabled them to assume financial backbone responsibility in the globalized world, thereby increasing their capability to shape and influence national agendas (Schrader, 2003). Various multinational companies now post revenues that surpass the GDP of small or medium sized countries.

3. Rapid technological development makes stakeholders better informed, making corporate decisions and processes more public. This transparency leads to increased public sanctions risks following corporate misbehaviour, as well as possibilities to publish corporate good behaviour (Habisch, Wildner & Wenzel, 2008).

CSR in Building Tomorrow's Education Enterprise

Ask what technology can do for education, and a 'never-before-possible' future unfolds: pervasive classrooms, faster learning, systemized result and performance tracking for students, educators, and management, e-learning for regulation and prevention of disruption.

Challenges and Opportunities

- Realizing the promise of virtual colleges: New technologies, changing attitudes and student profiles, have broken barriers integrating everyone, that is, parents and faculty, to third-party information providers and regulators.

- Staying ahead: Social media, instructional design, and collaborative platforms are ways to stay ahead in this learning revolution.

- Student mobility: Globalization of higher education has mobilized learning internationally, creating new business models, increased acquisitions from private institutions, international partnerships, and the opening of overseas 'branch campuses'.

- Satisfying the new 'avatar' of students: The new generation of students come with endless expectations, demands of digital learning and corporate-savvy mind sets. Institutions providing this edge, and more, will keep their classrooms full.

- Increased regulation: The call for more accountability in terms of student success and employability has changed core institutional processes in student management, administration, and marketing. New metrics and tracking mechanisms can help demonstrate proof of 'value addition'.

Business Value Deliverance to Educational Enterprises

Internal learning and experience in business and technology of education gives clients differentiated solutions and services to support business as well as mitigate the risks of a changing learning environment.

CSR is aligned to strategic thrust areas in education, caters to a new breed of students, and works with institutions to understand IT funding, retaining talent, and leveraging the latest in consumer and enterprise technology.

Measurable Business Value Addition: (Infosys)

1. Business Transformation: Cross-leverage of experience with Fortune 500 clients, to enable institutions in building learning enterprises. Leading educational institutions around the globe find technology priorities mirrored in our digital content management, enterprise mobility, security, and disaster recovery. Infosys partnering with educational institutions has set up joint innovation labs with key clients to help evaluate, prototype, test, and deploy leading-edge business and technology models impacting education.

2. Efficient Operations: Through Global Delivery Model release of resources and funding from existing operations for clients to redeploy in core strategic areas. Also improvement of service delivery to clients focusing on performance management and continuous improvement–providing scalability in resource planning and improving planning and estimation, at lower cost and faster time-to-market.

3. Maintenance and support services: Best practices and technology strengths to ensure applications stability and flexibility for future needs.

Conclusion & Practical Implications

Bearing in mind the above mentioned data, a seemingly strong argument can be made that schools should maintain and increase CSR coverage. Haski gives four such arguments:

1. Colleges should not only react to the growing awareness and demand of students, but also have a proactive role in responsible management education, in both teaching and research.

2. CSR and ethics can not only be embedded in core units/subjects, but also be taught as a separate core subject. Wide research on CSR and business ethics is to be included in the curricula. Business schools

should have an important role in enhancing research on CSR and CSR education, through various actions such as research centres, recruiting faculty who focus on CSR issues and offer PhD programs in the subject.

3. The business sector can be a great supporter of colleges worldwide, providing managers with tools and education, supporting partners and sponsoring schools. They can help prepare graduates with wide ethical knowledge and work with business schools on common research projects and internship.

4. Students with positive attitudes towards CSR will motivate the educators to include social and ethical management issues and courses in the curriculum (Haski 24-25).

The concept of CSR is now firmly rooted on the global business agenda. In order to move from theory to concrete action, many obstacles need to be overcome. A key challenge facing business is the need for more reliable indicators of progress in the field of CSR, along with the dissemination of CSR strategies.

Transparency and dialogue can help make a business appear more trustworthy, and push up standards of other organizations at the same time.

International Institute for Sustainable Development in its Website titled "Corporate Social Responsibility" lists some of the positive outcomes that can arise when businesses adopt a policy of social responsibility. They are classified into three categories:

1. **Company benefits**

    *   Improved financial performance

    *   Lower operating costs

    *   Enhanced brand image and reputation

    *   Increased sales and customer loyalty

    *   Greater productivity and quality

    *   More ability to attract and retain employees

    *   Reduced regulatory oversight

    *   Access to capital

    *   Workforce diversity

    *   Product safety and decreased liability

2. **Benefits to the community and the general public**

    *   Charitable contributions

    *   Employee volunteer programs

    *   Corporate involvement in community education, employment and homelessness programs

    *   Product safety and quality

3. Environmental benefits

- Greater material recyclability

- Better product durability and functionality

- Greater use of renewable resources

- Integration of environmental management tools into business plans, including life-cycle

- Assessment and costing, environmental management standards, and eco-labelling

"Nevertheless," the International Institute for Sustainable Development laments, "many companies continue to overlook CSR in the supply chain..." To resolve this, the institute suggests, "While governments can impose embargoes and penalties on offending companies, the organizations themselves can make a commitment to sustainability by being more discerning in their choice of suppliers." This will constitute a positive action in the direction of a transition from theory to concrete action.

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DIRECT BENEFIT TRANSFERS TO BPL HOUSEHOLD: PROBLEMS AND PROSPECTS

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Abstract

The present system of subsidy disbursement to BPL households in India is not in consonance with the proper targeting of the BPL population, access to basic goods and market forces. Hence, one of the priorities that have emerged in recent years is the need to strengthen India's social safety net and improve the efficiency of delivery mechanisms of poverty alleviation programs. This will ensure that vulnerable groups can withstand unforeseen shocks to income and continue to access basic goods and services at affordable prices. With this objective, the government is ready with a nationwide cash transfer scheme through Aadhar-enabled payments, which will replace existing subsidies for PDS, fuel, fertilizers, wage schemes, etc. and will reduce the burden on the exchequer, pegged at Rs 1.8 lakh crore and still climbing for the fiscal year 2012-13. Under direct cash transfer, the difference between the market price and subsidized prize is directly transferred to the beneficiary in the form of cash in proportion to the quantity uplifted from the market. Through this scheme, the government aims to revamp the current system and strengthen the livelihood of the population at the bottom of the pyramid.

The Direct Cash Transfer Scheme will certainly be a game changer in the long run for the Indian economy, but are we prepared for its implementation? There are certain fundamental issues like definition of poverty line, basis of targeting, identification of intended beneficiaries, expansion of banking services, unconditionality of cash transfers, and the supervision at the point of transfer, which require urgent contemplation. This paper aims to analyze the relevance of the Direct Benefit Transfer Scheme while considering the problems in its implementation and its prospects for the Indian economy.

1. Introduction

The present system of subsidy disbursement to BPL households in India is not in consonance with the proper targeting of BPL population, access to basic goods and market forces. Hence, one of the priorities that have emerged in recent years is the need to strengthen India's social safety net and improve the delivery mechanisms of poverty alleviation programs. This is to ensure that vulnerable groups can withstand unforeseen shocks to income and continue to access basic goods and services at affordable prices. A subsidy, by its very nature, introduces two or more prices for the same good, and creates incentives for pilferage and diversion. As a result, the underprivileged suffer the most. The stark truth in India is that roughly Rs 3 trillion is spent every year in subsidies and it is anybody's conjecture what proportion of this goes to undeserving pockets (Kumar).

Today, India is self-sufficient in food. We are exporting a substantial quantity of rice, wheat and other agricultural produce. But subsidy continues to be given to all. Anyone, rich or poor, who holds a ration card can access food at a subsidized price. The Expenditure Reforms Commission (ERC) laid out a subsidy-phase-out road map in 2000, which emphasized that the government had intended to 'retain subsidy only to

poor farmers' from 2005-06 onwards. That has not happened. In the 1990s, Ashok Gulati estimated that 50% of fertilizer subsidy accrues to manufacturers. Suppliers of raw materials or intermediates such as rock phosphate, sulphur, phosphoric acid (mostly global) get away with a good slice of this subsidy (Gupta). Oil subsidies benefit all consumers. Use of subsidized diesel for running cars 'demeans' concept of subsidy. In the case of LPG, the government has made a half-hearted move by merely capping number of subsidized cylinders. The subsidy on kerosene continues to be brazenly cornered by dubious operators and traders through leakages and diversion. A psyche that this is a poor man's fuel has been exploited to the hilt by persistently keeping its price at an 'artificially' low level, despite the steep increase in cost of crude. Hence, an astronomical subsidy level of close to Rs 300,000 crore threatens to derail the fiscal deficit target. Much of this is going to those who do not deserve it (Gupta).

The social programs of India are complex systems with millions of participants that have evolved over the last few decades. Hundreds of millions of beneficiaries depend upon these programs for basic sustenance. In India misuse of the public distribution of food, fuel, fertilizer and other welfare-in-kind is legendary–two-fifths or more is stolen in some states. Therefore, switching to electronic cash transfers can eliminate that. Also, if India's middle classes have benefited from the greater choices available to them as the result of liberalization, why should poor households be deprived of greater choice in alternative forms of social protection?

2. Direct Benefit Transfer Scheme

The Direct Benefit Transfer (DBT) programme aims to transfer entitlements and benefits to people directly through biometric-based, Aadhaar-linked bank accounts, thus reducing several layers of intermediaries and delays in the system (Ramesh). Under direct cash transfer, the difference between the market price and subsidized prize is directly transferred to the beneficiary in the form of cash in proportion to the quantity uplifted from the market. Through this scheme, the government aims to revamp the current system and strengthen the livelihood of the population at the bottom of the pyramid. With this objective, Government of India has initiated the direct transfer of cash from 1 January 2013 to the bank accounts of the beneficiaries. The DBT scheme will be rolled out in 43 districts of 16 different states under 26 different schemes, which have been identified for the first phase of cash transfer. All these districts were selected on the basis of its coverage of bank accounts and Aadhaar across the country. Also, in the programmes earmarked for stage I, worth about Rs 20,000 crore in which transfers to bank accounts are already happening will change only to such an extent where they will now be linked to the Aadhaar number to reduce, if not eliminate, duplication.

The rest of the India will be covered in the other two stages. In Stage II all the districts of the 16 states will be covered by April 2013, and in Stage III the remaining districts will be covered by April 2014. The DBT scheme will also increase as more programmes are added, especially food, oil, fertilizer and employment. Under the scheme the Central Government will deposit Rs 3.2 lakh crore per year in the bank accounts of 10 crore poor families by 2014. Initially, the beneficiaries will be able to withdraw from their own bank branches or ATMs or business correspondents (BCs) using biometric micro ATM machines, wherever they exist. The system of micro-ATMs and multiple BCs will roll out subsequently with full inter-operability gradually and will have facility for biometric scanning and Aadhaar authentication.

The programme proposes only a modest beginning in Phase I, covering 26 schemes – largely scholarships, pensions, Janani Suraksha Yojana, ASHA and other benefit payments – in only 43 (of the over 600) districts. It will be ensured that at least 80% residents in each district have an Aadhaar number and an Aadhaar-linked bank account before any payments are started. Only based on the learning from this phase, would the

programme be expanded. Also, subsidies on food and fertilizer have not been included in the first phase, recognizing that these are highly complex and require considerable thought. The post office network (a key payment channel, especially for pensions and Mahatma Gandhi National Rural Employment Guarantee Act payments) is also being reformed with the postal department committing to an upgrading to a core banking solution (CBS) system across all its post offices within the next 18 months, so that it can be used, apart from banks, as a platform for cash transfers.

3. Relevance for the BPL Households

According to Ramesh, the DBT scheme will be a paradigm shift due to the following reasons. Firstly, the link to Aadhaar and the use of biometrics ensures that the problems of "duplicates," i.e., the same person getting the benefit more than once, and "ghosts," i.e., a nonexistent person getting the benefit, are addressed. Secondly, it makes it possible for money to reach the intended beneficiaries directly and on time–so, for example, pensions, which reach the beneficiary once every four to six months in many parts of India, can now reach his/her bank account on the first of every month. Thirdly, it will give the poor people power to choose, as they'll not be bound to get the benefit from a predefined place. Fourthly, the potential benefit to internal migrants who send remittances to their homes is huge. It is estimated that Rs 75,000 crore worth of within-country remittances are made in India every year–many of these are lifelines for their families. Seventy percent of these remittances are today channeled through informal channels which impose high costs on them. The Aadhaar-based micro-ATM network can ensure that remittances take place instantly and at much lower cost to migrants. Lastly, this will lead to the financial and inclusive development of the under privileged on a large scale, as they are in a better position to choose for themselves.

The study by National Institute of Public Finance and Policy on the benefits of direct cash transfers concedes that while all forms of leakages cannot be plugged, those pertaining to non-existent or duplicate beneficiaries can be weeded out through Aadhaar. Even if these leakages are conservatively estimated at less than 10% of the total subsidy bill, as the study intends, it amounts to a substantial annual sum, given the subsidy bill of about Rs 300,000 crore. Thus Rs 30,000 crore or so saved can, in fact, be used to raise welfare spending, as it would rob fiscal diehards of the argument that such expenditure is wasteful because it does not reach the final beneficiary. The benefits will be perceptible in areas where fake identities are the norm, such as in MGNREGA, pension and scholarship payouts.

However, as Jean Dreze of the Delhi School of Economics points out, cash transfers should not be used as a pretext for the state to abdicate its social responsibilities, in other words, where the state decides that health services and education can be provided by the private sector and all that it has to do is to channel the subsidy into bank accounts. Dreze cites the example of Brazil where cash transfers coexist with much higher levels of public spending on health than in India.

4. Problems in Implementation

4.1 Identification of Beneficiaries

A major problem in the implementation of direct cash transfer scheme is to identify the beneficiaries. Poverty is debatable in India. The cash scheme targets 10 crore poor families or 45-50 crore people. The Sengupta, Saxena and Tendulkar committees, respectively, estimated 77%, 50% and 37% of our population as poor. That roughly works out to be 90, 60 and 45 crore Indians. The Multidimensional Poverty Index (MPI) developed by the Oxford Poverty and Human Development Initiative with UNDP support put 65 crore as poor and another 20 crore as vulnerable to poverty ("Why the UPA's Cash?").

A large chunk of India's welfare programmes–like old-age and widow pensions, Indira Awaas Yojana–are targeted at BPL households. To identify the poor for welfare programmes, the government relies on periodic surveys of poor households. The last BPL census was done in 2002. Its next iteration, which had to be completed by 2006, was converted into the socio-economic caste census (to capture caste information about these households as well) which is still underway. According to Rural Development Minister Jairam Ramesh, the new BPL list will not be ready before July 2013. This raises a question mark over the targeting of the scheme. Improper targeting has been a peculiar feature of our social uplift programmes since Independence and if the government doesn't come up with an updated BPL list, this scheme will also become another addition in the list of failed programmes.

4.2 Aadhaar Enrollment

In the new system, every beneficiary needs an Aadhaar card and a bank account. In three years, the government has issued about 280 million Aadhaar cards. That still leaves another 800 million cards to be issued before April 2014. The National Population Register (NPR) and the Unique Identification Authority of India (UIDAI) are the two government agencies in charge for the enrolments and they have a daunting task of enrolling the remaining 800 million in 15 months. So far, enrolments have focused on urban and population-dense areas. 40% (of the 22 crore) Aadhaar numbers are in Andhra Pradesh and Maharashtra, whereas 2.35 crore is the Aadhaar cards in the neediest BIMARU (Bihar, Madhya Pradesh, Rajasthan, and Uttar Pradesh) states. Also, 55% of Aadhaar numbers have been issued to the voter-catchment-friendly age band of 16-45 years. Those above 66 years, who are needier, account for just 4.3% of numbers issued. As the authorities go further into rural areas–where most beneficiaries of welfare programmes reside–the pace of enrolments might be slower. Another issue with the Aadhaar card is that it doesn't identify who is poor and who is not. But for now the government is continuing with the cash transfers to the bank account of those beneficiaries also who are not yet enrolled under Aadhaar. But in days to come their accounts will need to be linked to the Aadhaar platform.

4.3 Unbanked Population

An essential prerequisite for effective rollout of DBT is the assumption that all of the BPL population has bank accounts, which is, unfortunately, not true. With over half the Indian population still excluded from the nation's formal financial system, the need for several strategic steps is imperative. According to the Reserve Bank of India, there's much ground to be covered on bank accounts. As of now only 40% of Indians have bank accounts and the majority of the unbanked population resides in villages which have a greater imperative for cash transfers. India has about 700,000 villages and only 188,000 villages had banking connectivity till June 2012. Yet another issue is the bank account for all the family members in a BPL household. Suppose, in a family there are old age pension recipients, children getting scholarships, and father and mother enrolled for wages under MGNERGA, then for cash transfers each of them should have a bank account. This is again a daunting task for the banking sector in the present scenario. So, despite being among the top priorities for the government, true financial inclusion is still a distant dream in India.

4.4 Banking Infrastructure

Money coming into the bank accounts of beneficiaries–verified by Aadhaar–is one half of the cash-transfer architecture. The other half is how beneficiaries withdraw that money. The question acquires greater relevance for those who don't have access to bank branches or ATMs, and rely on roving agents, called 'Banking Correspondents' (BCs). The last mile banking channel will be based on an alternative model proposed by the

Nandan Nilekani panel on micro–payments–a network of 1 million micro-ATMs (portable handheld machines, like credit card readers) managed by the BCs, while Aadhaar will be the basis of authentication. So, when a person in a village wants to withdraw money from his account, he will approach a BC in his area and give his fingerprint on a micro-ATM. The fingerprint is verified instantly and the BC pays the person. BCs currently cover only 70,000 villages–a 10-fold expansion is needed. The main issue for BC companies, who are facing a "crisis of confidence", is the "invisibility of revenues"–it cannot be ascertained how much money will flow through cash transfers and when. Also, there are only a few BC companies and even if they have the capacity, they still have to find people and train them.

5. Conditional Cash Transfers: Brazilian Case Study

Several countries including Brazil, Jamaica, Philippines, Turkey, Chile, Mexico, Indonesia, South Africa, Morocco and the United States have adopted cash transfers in the form of Conditional Cash Transfer (CCT) programmmes ("Direct Cash Subsidy"). Under such programmmes, direct cash is provided to the poor families on condition that it is used for verifiable investments in human capital, such as regular school attendance or used in attaining basic nutrition and health care.

The largest and the most successful "conditional" cash transfer programme is the Bolsa Família Programme(BFP) in Brazil that covered close to 100% of Brazil's poor in 2007 ("Direct Cash Subsidy"). Under the programme, conditional cash transfers are linked to several human development issues. The government transfers cash straight to a family, subject to conditions such as school attendance, nutritional monitoring, pre-natal and post-natal tests. The entire system is managed through efficient targeting, disbursement and regular monitoring of the disbursed funds. They must make sure that their children have a high 85% attendance in school and that their nutrition and growth charts are climbing up the right slope. In addition, all children under five must have the full complement of vaccines and no excuses. Mothers too must submit to pre- and post-natal checks. Failure on any of these counts, and the cheque will not be there in their account. Also, it's the woman who gets the cash and that's why 85% of cash subsidies are spent on food in Brazil. Even the World Bank has certified it as an ace instrument for poverty alleviation.

For these "conditions" to be met, it is imperative that adequate medical and school facilities exist. Brazil has moved swiftly in that direction as it devotes above 4% of its GDP to health and another 4% to education. By contrast, India spends just 1.5% of its GDP on health. Our existing educational and health infrastructures are too weak to bear the additional pressure of "conditional" cash transfers. So what if only about 15% of Brazilians live in villages while nearly 70% do in India? So what if only 6.1% of Brazil's population earns less than $1.25 a day compared to a crushing 32.6% in India? These complications should not come in the way of a programme which might prove to be a game changer if implemented in the best possible manner and with all the good intentions (Gupta).

6. Conclusion

The DBT initiative is not the silver bullet for the malaise that plagues our delivery system. It is, more realistically, a first step in re-engineering its very foundations. In the Union Budget 2012-13, the target is to keep subsidies under 2% of GDP and under 1.75% of GDP in the next 3 years (Government of India). Thus, bringing all subsidies – including food, fuel, fertilizers – under DBT's ambit which can be the major fiscal game changer the economy needs. Once the DBT is able to cover all these subsidies, the manufacturers and retailers would be selling the commodities at market determined price universally; which would not only put a check on dual pricing, market distortions and leakages but would also remove the burden of under recoveries

on OMCs. However, the real success of the policy lies in the accuracy and efficiency in identification of worthy beneficiaries, i.e., BPL households ("Direct Cash Subsidy").

With DBT, mammoth gains can be made in terms of systemic efficiency and transparency. It will help cut flab in the middle–predatory intermediaries and inept public distribution agents who divert, waste or sit on resources. This implies hugely pruned government spending. It is estimated that public coffers can be richer by Rs. 15,000 crore yearly just by switching to cash transfers for LPG and kerosene.

To achieve these goals, Direct Benefit Transfer will start with focusing on schemes like scholarship grants, pensions, Janani Suraksha Yojana and the like. Gradually, the three Fs (Food, Fuel and Fertilizer) will be in its ambit. For the success of the DBT, Aadhaar penetration and banking infrastructure should be taken care off. Besides, the biggest hurdle on the way of successfully implementing this ambitious project is the accurate identification of the beneficiary. Once these hurdles are crossed, the government should focus on Conditional Cash Transfer. Ultimately, it is all about the holistic development of the underprivileged and not just about providing them with the cash. It is a long journey, but not an impossible one.

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STRATEGIC INTEGRATION OF HUMAN RESOURCE MANAGEMENT PRACTICES: EVIDENCE FROM THE KINGDOM OF SAUDI ARABIA

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Abstract

The role and contribution of human resource management is constantly evolving and now with the epoch of globalization it calls for the integration of HRM practices with business strategy. This paper examines the strategic human resource management practices in the telecom industry of the Kingdom of Saudi Arabia (KSA). First, the study understands and examines the meaning of SHRM and then the strategic HR practices are reviewed and analyzed as adopted by the telecom sector of KSA. The study also investigates how differences in HRM practices in telecom industry vary with their ownership forms. The data was obtained from a sample of 121 senior HR managers by means of survey and interviews. The data analysis is based on statistical tools of descriptive statistics and paired sample t-test applying SPSS. The findings suggest that although a few steps have been taken by a handful of companies to improve the human resource practices the role of SHRM still remains secondary in the KSA. Results indicate a moderate adoption of strategic HRM practices in the telecom industry. There is indeed a significant difference between the level of strategic HRM alignment, training and development, career planning system and employee participation in the domestic and the multinational telecom companies. The major constraints faced by a multinational company to operate in the KSA are also discussed. To survive and succeed in the global net, companies are recommended to improve integration of HRM practices into their overall operations and strategies that lead to organizational effectiveness. They should be encouraged to adequately plan for the career development of their employees as well as give them adequate opportunities to participate in taking strategic as well as tactical decisions affecting their work environment.

Introduction

In this era of globalization and expansion of economic integration among companies around the world, the importance of human resource gets magnified. The HR department needs to support the business goals. The need of the hour is to achieve strategic integration and alignment of HRM with business strategies. Integration of HRM refers to the involvement of HRM in the formulation and implementation of organizational strategies and the alignment of HRM with the strategic needs of an organization (Schuler and Jackson, 1999). Integrating the use of HR practices into the strategic planning process would enable the companies to better achieve their goals and objectives. Strategic Human Resource Management requires the HR function to broaden its remit from purely operational matters towards a more strategic approach. HR managers must participate in strategic discussions within the business and, importantly, add value to these discussions as a business partner. Strategic Human Resource Management also implies a managerial orientation that ensures that human

resources are employed in a manner conducive to the attainment of organizational goals and mission (Gomez-Mejia, Balking and Cardy, 2005).

Kingdom of Saudi Arabia and Its Telecom Sector

KSA is the world's leading exporter of oil, and this position will remain so in the future, given its unparalleled oil reserves. KSA "holds more than 20 percent of the world's proven oil reserves" and oil accounts for "roughly 80 percent of budget revenues, 45 percent of GDP, and 90 percent of export earnings" (CIA, 2011). Many economic conditions and government policies in the KSA today favor foreign investment. The total capital investment injected into the joint venture factories under the Foreign Capital Investment Law reached SR. 86.4 billion by the end of 1994. Large state corporations, generally monopolies, dominate the Saudi economy. These firms include the oil firm Saudi ARAMCO, the Saudi Basic Industries Corporation (SABIC), The Saudi Telephone Company (STC), and several other large firms.

The Saudi Telecommunication sector is regulated by a state entity known as the Communications and Information Technology Commission (CITC). The telecommunication sector of the KSA witnessed privatization in the year 2002 and since then a large number of international telecom companies have shown interest in this sector. The telecom service provider has only four players, namely, Saudi Telecom company (STC) which is a public owned company, Mobily (Etisalat group), Zain (Kuwait based company) and Integrated Telecommunication Company (ITC). Out of these STC and ITC are Saudi-based companies and have presence in Saudi Arabia and Bahrain. The other two players, Mobily and Zain have presence in all different countries in the Middle East and Africa region. Therefore, the total telecom companies operating in the KSA are four out which two are domestic and the other two are multinational.

Literature Review

Strategic HRM basically deals with long-term issues and macro-concerns about structure, quality, culture, values, commitment and matching resources to future needs. In order to justify their own existence, HR functions had to be seen as more intimately connected with strategy and day-to-day running of the business side of the enterprise. According to Walker (1992), strategic HRM is defined as "the means of aligning the management of human resource with the strategic content of the business and human resource strategy so that the latter supports the accomplishment of the former and, indeed, helps to define it." Strategic HRM involves designing and implementing a set of proactive HR policies/practices that ensures that an organization's human capital contributes to the achievements of its corporate objectives (David, Chin and Victor, 2002). SHRM highlights the growing proactive nature of the human resource (HR) function, its potential importance to the success of organizations and the possibility of change in the HR function from being reactive, prescriptive, and administrative to being proactive, descriptive and executive (Boxall, 1994).

It is important that the strategic HRM focuses on the integration of business strategy with HR strategy. This shift in managerial thought, calling for the HR function to be 'strategically integrated', is depicted in Beer et al.'s (1984) model of HRM. The authors espoused the need to establish a close two-way relationship or 'fit' between the external business strategy and the elements of the internal HR strategy. The concept of integration has three aspects:

- The linking of HR policies and practices with the strategic management process of the organization

- The internalization of the importance of HR on the part of line managers

- The integration of the workforce into the organization to foster commitment or 'identity of interest' with the strategic goals.

Huang (1998), in his comparative study of strategic HRM practices among American-owned, Taiwan-owned and Japanese-owned firms, examined the strategic level of HRM among 315 Taiwanese business firms. Using the General Linear Model (GLM) and Scheffe multi-range test as methods of statistical analysis, the findings indicated that American-owned businesses were discovered to engage in strategic human resource management (SHRM) more frequently than Japanese- or Taiwan-owned enterprises. A positive relationship was also found between the amount of capital resources available to firms and the extent to which they practiced SHRM. Huang also reported that firms engaging in SHRM received a higher rating than other firms on the indices of organizational morale, financial performance, and overall performance. Richard and Johnson (2001) examined the impact of strategic HRM effectiveness (ratings of how effective a variety of HR practices were performed) on a number of performance variables. With the aid of multiple regression analysis, they found that strategic HRM effectiveness was directly related to employee turnover and the relationship between these measures and return on equity was stronger among banks with higher capital intensity (greater investments in branches).

Strategic HRM has been conceptualized by the high commitment work practices (HCWP), configurationally and contingency fit approaches (Takeuchi et al., 2003). The HCWP perspective emphasizes employee empowerment and progressive practices in selection, training, rewards, recognition, information sharing, team building, and socialization (Geisler, 2005; Sullivan, 2004).

Empirical research has demonstrated the effectiveness of strategically aligned HRM practices, such as selection, training, and development (Hatch and Dyer, 2004), participation and development (Karami et al., 2004), rewards and recognition in TQM programs (Chang, 2005), and social networks as a mediator (Collins and Clark, 2003). Applying a stratified random sampling by industry, Kai (2007) surveyed 231 firms listed on the Australian Stock Exchange (ASE). Results obtained through the use of descriptive statistics and correlation analysis indicate that strategic integration and devolvement of HRM were practiced to a moderate extent in the firms sampled, and that the degree of alignment of HRM with business objectives and strategies had a positive relationship with perceived firm financial performance.

Robina Yasmin (2008) examined the relationship between HRM (Human Resource Management) systems and performance using data from 192 manufacturing companies operating in Pakistan. The study examines this relationship in two ways: direct impact of HRM systems on performance and indirect impact or effect of HRM systems on performance through HR outcomes. The study emphasizes the systematic and integrated use of behavior-oriented HRM practices in order to achieve competitive advantage. More recently, Noor (2010) examined the effects of HRM practices on personnel performance of some selected Jordan Public Academic Libraries. Al-Hussein bin Talal Library was used as a case study. Findings revealed that there is a strong relationship between practicing personnel administration functions effectively and improving their performance leading to a higher level of productivity and creativity. Abdalelah S. Saaty and M. Qureshi (2011), examine the human resource practices in the retail sector of the KSA. Based on 355 respondents, the activities of recruitment, selection, training, performance appraisal, compensation and benefits and grievance handling were analyzed on its level of practice. The importance of strategic HRM is widely acknowledged in the relevant literature.

Objectives of the Research

This study is an attempt to analyze the different strategic HR practices adopted by the telecom sector of the KSA. In addition, it is also important to see if there is any difference in SHRM practices adopted by domestic telecom companies and MNC. Operating in different cultural and economic environment is always challenging. What constraints and challenges do the KSA entail for MNCs is also one of the areas of the present study. Adding to the SHRM practices, the innovative practices are also being assessed. This work endeavors to achieve the following objectives:

- To understand and evaluate the extent to which Strategic People Management is practiced by the telecom sector in the KSA

- To understand and examine whether there is any significant difference between the levels of Strategic HRM Practices of an MNC and a domestic company

- To analyze the key constraints attributed to the multinational companies operating in the KSA

- To assess the innovative practices adopted by telecom sector of the KSA.

Research Methodology

The key research issues are threefold: (1) strategic HRM practices adopted by Saudi Arabian telecom companies, (2) difference between practices of an MNC and domestic companies operating in the KSA and (3) examining the constraints that MNCs face operating in the KSA. The research involved an extensive literature review on the area of concern to provide an overview of the KSA and the viable HR practices experienced in this sector.

Sample and Sources of Data

A large questionnaire survey in four telecom companies was carried out between May 2012 and September 2012. The Saudi telecom market is ruled by four major players as per the data of Communications and Information Technology Commission (CITC). Out of 250 questionnaires sent, 121 usable questionnaires were received, representing a response rate of approximately 48 percent. The questions for the survey were drawn from existing literature such as international HRM surveys, and Price Waterhouse Cranfield Project Survey (Brewster and Hegewisch, 1994). The questionnaire consisted of 36 questions related to six SHRM practices. To complement the survey questionnaire, semi-structured interviews were conducted in order to obtain valuable insights into SHRM perspectives and innovation as a part of HR department of telecom companies.

An analysis of the demographic features of the sample suggests that about 53 percent of the respondents are at least 35 years old, while only 10 percent of the respondents were above the age of 40 years. The service tenure depicts that approximately 85 percent of the respondent employees have put in at least two years of service and the remaining 15 percent had just started their career with the respective telecom companies. It is surprising and strange to note that there are no female employees. KSA strictly enforces gender segregation throughout the kingdom, including work places, impeding women's full participation in public life. The segregation is maintained by the law of separate office for male and female employees. As the separate office would add to the cost, none of the telecom companies have employed any female employee. Women's unemployment rate is four times that of men.

Measures

The dependent variables in this study are the strategic HRM practices. It is measured by the following six practices: Integration of HRM with corporate strategies and management, Recruitment and selection system. Training and development system, Performance appraisal system, Compensation and reward system, motivation and employee participation.

For the purpose of estimating the impact of ownership type on the adoption of strategic HRM practices by telecom companies, the scores on strategic HRM practices of each company are aggregated and converted to a single score with maximum score being 100 percent. The respondents were asked to indicate their agreement on SHR practices followed by their company on a scale of 1 'strongly disagree' to 5 'strongly agree'. A sample item is 'employees in this company are provided opportunity to suggest improvements in the ways things are done'.

The independent variable in this study is ownership type, i.e., multinational or domestic. Ownership type is measured by a set of dummy variables (Domestic companies are coded 1, while MNCs are coded 0). This is consistent with the measurement of ownership type in prior studies (see, for example, David et al. 2002; Law et al. 2003; Wei and Lau, 2008; Ngo et al. 2008).

Statistical Procedure

To address issues of reliability, Cronbach's Alpha test is conducted for all the sub scales. Reliabilities are checked and they fall between 0.60 and 0.85, which is satisfactory for the study that is exploratory in nature (Nunnally, 1978). The overall Cronbach's alpha of the six scales used in this study is 0.871. The data collected through questionnaire from the respondents were analyzed with the help of SPSS software. In order to gain perspectives into the socio-demographic characteristics of respondents, frequency distribution of responses is calculated while descriptive statistics is employed in determining the extent of strategic HRM practices. A paired sample t-test is another analytical procedure used to compare and find out if any significant difference exists between the levels of strategic HRM practices of domestic companies and multinational telecom companies.

Findings

Integration of HRM with Corporate Strategies and Management

In an organization SHRM means accepting and involving the HR function as a strategic partner in the formulation and implementation of the company's strategies through HR activities such as recruiting, selecting, training and rewarding personnel. Table 2 presents the descriptive statistics of the variables. The mean score of the strategic HRM alignment with the overall company's goals and objective is 21.64 out of a possible maximum score of 35, suggesting a moderate extent (61.8 percent) of strategic HRM alignment with the overall objectives. Some empirical evidence from previous research indicates that the full impact of HR practices on organizational performance occurs when HR practices are strategically congruent and consistent with each other (Khatri, 1999).

Table 1: Descriptive Statistics of SHRM Variables

SHRM Variables	No. of Items	Mean	Standard Deviation
Strategic HRM Alignment	7	21.64	2.88
Recruitment and Selection System	3	11.42	2.97
Training and Development	4	13.01	2.02
Performance Appraisal System	8	26.03	3.35
Compensation System	7	24.54	3.52
Employee Participation	7	20.17	2.52

Source: Author's computations using SPSS 17.0

Overall, only 49 percent of the respondents agreed that human resource department is an integral part of their company's strategic planning process. However, 70 percent of the respondents agreed that employees were viewed as a strategic resource, while 45 percent agreed that their organization's mission statement was well communicated and understood at every level of the organization. It was also seen from the study that in some of the telecom companies SHRM takes a back seat. According to one of the HR quality assurance manager: "HR is involved only at the time of policy formulation and other then this it does administrative task like punching the names of new employee in the tool, getting entry exit visas, getting insurance claims etc. I think it is just a 'dummy' if we talk about strategic planning."

Recruitment and Selection System

Recruitment and selection system lays down the foundation of other HR activities. A rigorous, valid and sophisticated selection system helps in identifying a right candidate with potential to perform. It generates a sense of elitism, creates high expectations of performance, and signals a message of importance of the people to the organization (Pfeffer, 1994). Employee selection system records a mean score of 11.42 (76.13 percent) out of possible maximum score of 15. The result indicates a high fit between the prospective employee's abilities and qualifications and the organization's requirements, while 70 percent used validated employment tests before being hired. However, 60 percent of the respondents agreed that there is a structured interview process for everybody.

Training and Development System

The training and development has a mean score of 13.01 (67.5 percent) out of a possible maximum score of 20 depicting a moderate level of training and development programs adopted by telecom companies. The findings indicate a broadly high use of practices such as induction programs in almost all the telecom companies in the study. It is disappointing to note that only 32 percent of the employees agreed that the training programs are linked to the requirement and match company's objectives and only 45 percent said that their manager evaluates the effectiveness of the training.

Performance Appraisal System

Performance management, if implemented properly, should link together individual goals, departmental purpose and organizational objectives. The mean score of performance appraisal system is 26.03 (65 percent) out of a possible maximum score of 40. Although the overall result of performance appraisal is moderate but

if individual variable is observed, some deep findings come out. For example, only 21 percent of employees agreed that the superior discusses the performance with subordinates. From the study the researcher finds out that 46 (38 percent) of the respondents were of the opinion that performance appraisal is not measured on the objective quantifiable results. It is thus clear that the telecom industry of the KSA really needs to look at the performance appraisal aspect as the key factor of employee retention, which, if ignored, can create a heavy attrition rate.

Compensation System

Firms can affect the motivation of employees in several ways. They can use performance-based compensation to provide rewards to employees for achieving the specific goals and objectives of the firm. The findings suggest a moderate fit between perceived compensation system in the telecom companies and the overall industry policy on the compensation of workers. It depicts a good picture because most of the employees are expatriates and are paid higher than in their home country. Also most of the employees are satisfied with the compensation, as the cost of living in the KSA is comparatively low. Most of the expat professionals working here remit money to their respective countries.

Employee Participation and Motivation

Telecom companies in the KSA have adopted numerous practices meant to aid the handling of grievances among the stakeholders. Various companies have enacted procedures, which they perceive as viable and effective. One universal approach employed by most human resource managers incorporate a fair hearing to the claiming parties and derivation of amicable solutions.

The mean scores of employee participation and motivation are found to be 20.17 (57.6 percent) out of possible maximum scores of 35, which is least among the scales. The result indicates a low level of effective employee participation within the telecom industry, as only 56 percent agreed that employees are given an opportunity to suggest any improvements. The findings reveal that 70 percent of the respondent experience that there is a practice of discrimination based on nationality, depicting a terrible picture of discrimination at work place.

The Strategic Integration of HRM Practices across Different Ownership Forms

According to Law et al. (2003), ownership types not only encompass the influences of variables external and internal to the firm, but they also represent interacting systems of factors that are relevant to the way management practices operate. Multinational firms tend to transfer their management system from their home country to the local subsidiaries (Lau & Ngo, 2001). In testing whether a significant difference exists between the strategic HRM practices adopted by domestic and multinational companies, paired t-test is adopted.

Table 2: Paired sample t-test results

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Deviation	Std. Error Mean	95 percent Confidence. Interval of the Difference				
				Lower	Upper			
MNC – Domestic	.64686	.56009	.09467	.4544	.8392	6.833	34	.000

Source: Author's Computations using SPSS 17.0

As shown in Table 3, there exists a significant difference between strategic human resource management alignment with company's goals and objectives of domestic company and multinational telecom companies. Similar results hold for recruitment and selection system, training and development system, performance appraisal, and compensation system and employee participation among different type of ownership. As compared to domestic companies the multinational telecom companies adopted more SHRM activities. Since human resource practices are a long-term investment, companies can enjoy the benefits of a well-developed HR system in the long run.

Figure 1: SHRM activities in domestic and multinational telecom companies
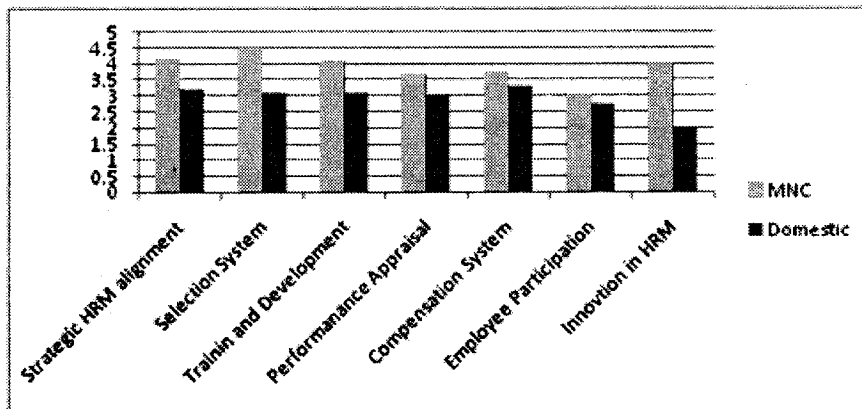
The results in Figure 1 reflect to some degree the strong SHRM alignment at the MNC average score is 4.04 (80 percent), whereas the domestic telecom company scores only 3.18 (63 percent). This strategic integration was developed to measure the degree to which HRM polices are integrated into a more broadly based strategic approach to management (Roche, 1999). Looking at other HR practices in figure clearly depicts that MNCs score higher points on all variables. This provides some evidence to show that an organization with a high strategic HR focus was also more inclined to adopt an objective selection system as well as training and development practice and be more innovative than the domestic company with a low strategic HR focus.

HR policies and practices in the KSA vary according to ownership (private or public), and type of employees (Saudi or foreign). The preferred characteristics of a Saudi employee are: lifetime employment; seniority wages; and social cohesiveness rather than competence. The dualistic nature of the labor market implies that the Saudi private sector applies two sets of HRM practices: one for Saudis and another for foreign workers.

To sum up, there is a certain amount of disparity and significant difference in SHRM practices among domestic and multinational telecom companies operating in the KSA.

Constraints on the Multinational Companies Operating in the KSA

As the consequence of opening of the Saudi telecommunication market to both local and international private sector operators, the number of foreign-invested enterprises has increased substantially in the KSA over the past two decades. Now, foreign investors can own up to 70 percent stake in a locally established fixed-line joint stock company and up to 60 percent in a mobile phone company. In the KSA, five key factors have shaped and continue to shape SHRM policies and practices. These are: the structure of the Saudi economy, the political environment, and structure of the labor market, national HRD strategy and national culture (Budhwar and Debrah, 2001). To improve their market competitiveness and to attract and retain talent, the telecom companies have started to invest more in HR and to develop their HR systems.

The labor market in the KSA has depended heavily on expatriates or foreign workers. The challenges faced by foreign firms are included but are limited to the competitive threats from other multinationals, fast development of local industries, strong local subsidy/support to the local industries, gradual Saudization/ nationalization of work force, scarcity of qualified local manpower, language barrier/communication problem, and local resistance to change, for they extend to cultural barriers. The study brought to light the following major constraints faced by multinational companies which are to operate in the KSA:

- Cultural barrier: The Islamic emphasis on working for the actualization of Islamic ideals at workplace provides a challenge for MNCs to modify their human resource policies to bring them in line with the general norms in the kingdom.

- Return of expatriates: Premature return of expatriates due to cultural shock and the poor retention of returned expatriates due to failed assignment.

- Bureaucratic constraints: Bureaucratic constraints to business operations are rampant in the Middle East. Constraints caused by local bureaucracy result in unnecessary delays and costs to multinational business operations in the host country.

- Saudization of workforce: The Saudi government has promoted employment of Saudi nationals, as part of its strategic goal; Saudization (Saudi for Saudians) is the replacement of the expatriate workforce with a locally qualified and skilled workforce (job localization).

- Job expectations of locals: The native Arabians are more inclined to work in public sector and look for jobs that pay higher salaries.

- Language barriers: Language barriers cause common communication problem among diverse workforce.

In terms of the diffusion of strategic HR practices, the findings indicate a high usage of practices such as employee induction program and specific company training, wheres less than one-third of firms surveyed used validated employment tests, had a skill or knowledge-based pay system, paid a premium wage or administered employee attitude surveys on a regular basis. Excluding a few corporations, most of the telecom companies in the KSA, including many large organizations, often treat HR management akin to a logistic function. Typically, HR departments in the organizations are assigned the functions of hiring and firing of employees, maintaining their database, handling periodic renewal of personal documents (passports, residence permits, work permits, driving license, medical insurance, etc.); preparation of payrolls, calculation and

disbursement of allowances; maintenance of personal files; issuing notices to employees, filing of regulatory returns and in some cases, ensuring their safety and security.

The results of the study show that the telecom sector of the KSA needs more qualified and experienced employees. The current Saudization policy is that every company has to employ a minimum of 27 percent to a maximum of 37 percent employees from the KSA. This requires a huge number of highly-qualified Saudi employees.

Innovation in Practice

Finally, and interesting in this area, the findings indicate few innovative practices, of particular significance. These were practices which fostered employee communication and involvement such as the provision of daily emails about the plans and day-to-day information about strategic leadership which are to send to each employee across the company.

Conclusion

Despite its unique challenges, the KSA remains an exciting opportunity for the MNCs. The researcher confidently concludes that this study has practical and policy implications for the companies in the telecom sector. The finding present that companies can improve their performance by integrating human resource practices with business goals. The present condition reflects that most of the companies club the HR management function both with general administration or public relations and in some cases even with the accounts and finance function, which reflect nothing but a total misunderstanding and misgivings about the importance of human capital. The perception that any senior executive in the organization can handle this role, further demonstrates this lack of understanding vis-à-vis human resources. It was also seen that the dualistic nature of HR practices in the Saudi leads to employee dissatisfaction adding to his frustration. The study, therefore, recommends multinational firms to sustain or enhance their competitive position and cross-border profitability; their managers and employees need intensive cross-cultural training that includes learning the host-country's culture in its totality, and most important be transparent in implementing its HR practices and policies. In the KSA, Islamic call and guidance centers exist in all major cities like Riyadh, Jeddah, Al-Khobar, Dammam and Jubail, whose services are available free of charge to any individual, institution or company. As human resource forms the most important intangible asset, it must be developed, integrated and linked with the overall business strategy in order to be in the race and get an edge in industry.

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EVALUATING THE ORGANISATIONAL APPLICATION OF HUMAN RESOURCE INFORMATION SYSTEM AS AN EMERGING E-HR PRACTICE

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Abstract

Human resource management is a field that has been inundated with bureaucracy and paperwork but with the recent research, human resource management is gaining popularity among other functions like production, marketing, purchases, etc. as it is the "man" who makes all the difference in the organisation. The role of human resource managers is given due consideration as it transforms from HR specialist to strategic contributor to the business which closely matches with the changing needs of HR Managers and allows them to "remove routine administration work and makes them professional consultants to the rest of the organisation". E-HR is the transformation of HR service delivery using web-based technology by enabling the HR professionals to not only master traditional HR skills and knowledge but also an ability to apply the skills, knowledge through technology that reduces the cost, increasing the business efficiency of various managerial operations.

So, in this context, this paper focuses upon the use of human resource information system (HRIS), i.e., integration of hardware, software and business approaches like Applicant Tracking System, Employee Surveillance Programme, E-recruiting, Online Consultation, etc., to implement E-HR that streamlines the process of HR activities in the current scenario. An old Chinese saying in the context goes like this: "If you wish to plan for a year, sow seeds. If you wish to plan for ten yrs, plant trees. But if you wish to plan for a lifetime, develop people. – Kwan Chung Tzu, 7th C. BC.

Introduction

Today every human resource department is in the midst of achieving transformation. It not only performs the functions of HR (human resource) department but also plays its role within the business. An organisation which is genuinely concerned about its manpower can improve both its company's performance and their own status within the company by enhancing knowledge and make a remarkable success in the growth and expansion of a business. According to the Chartered Institute of Personnel and Development (2005) when HR managers were asked whether they would choose a career in HR if they had the opportunity to start all over again, the vast majority (81%) said "YES" because HR is the heart of a business and can make a major difference in the current scenario. This is possible only with the help of integration of "Information Technology" in HR. (CIPD) is the professional body that represents over 1,35,000 people engaged in the management and development of people (Annual Report, CIPD).

E-HRM (electronic human resource management) is the technical unlocking of HRIS for all the employees of an organisation. So, in order to make drastic improvement in HR operations, information technology has

been merged with HR parictices. E-HR has changed the concept of manual HR operations and offers service that shows convenience, delivery, interface, accuracy and security and increases the satisfaction of human resource in an organization. Any E-HRM installation, if taken up in the right perspective keeping all the challenges in mind, can make a huge difference and manage the company's vital resource i.e.people. HRIS (Human Resource Information System) is basically concerned with making employees comfortable while focusing upon the human relation aspects. According to Hendrickson, "HRIS is a social technical (integrated system) whose purpose is to gather, store and analyse information regarding an organisation human resource department comprising of computer hardware and application as well as the people, policies, procedures and data required to manage the human resource function" (2003). It helps HR evolve from unsophisticated use of technology like administrative work (e.g. payroll administration) to strategic use like selection, training, development, etc. HRIS revolutionises the E-HR function. Companies in IT, BPO and retail banking sectors are also adopting this system to a large extent. HRIS can lower administrative burdens, increase efficiency, drive productivity gains, track the job applicants.

Generations of HRIS: Classification of HRIS is based on the advancement of tools and techniques it uses:

1. First Generation of HRIS: It is a stage where IT is used in HR just to speed up service delivery or to reduce costs.

2. Second Generation of HRIS: It is a stage where qualitative changes and improvement in the way services are offered like E-recruitment, E-learning, etc.

3. Third Generation of HRIS: It is a stage which makes use of technology that does the things never done before.

Review of Literature

According to Kavanag, Gueutal and Tannenbaum, "A Human Resource Information System (HRIS) is the system used to acquire, store, manipulate, analyze, retrieve and distribute pertinent information regarding an organisation's human resources. The purpose of HRIS is to provide service in the form of information to the clients or users of the system (Tannenbaum) According John W Jones, Virtual HR 1998, Crisp Publications, "The use of computer system, interactive electronic media and telecommunications networks used to carry out the functions of human resources departments. An HRIS is not simply computer hardware and associated HR related software; it also includes people, forms, policies and procedures and data. The purpose of HRIS is to provide service, in the form of information, to the clients or users of the system.

C. S. Venkata Ratnam and B. K. Shrivastava have stated that the basic purpose of HRIS is to store information and data of each individual employee, to provide basis for decision making, planning, budgeting and implementing HR functions, to supply data to government.

As asserted by Ketlley P, and Reilly P [2003], technology has only recently developed in a way that enables e-HRM to make its mark, especially the introduction of corporate intranets and web-enabled HRIS. Before embarking on e-HRM, organizations should review and optimize their business processes. The development of e-HRM systems is growing, allowing the HR function to become more strategic. This can most easily be observed by the fact that today employees tend to ask for advice rather than administrative assistance. This is the reverse of the situation in the late 90s. Furthermore, the nature of HR departments has changed because of the development of e-HRM.

Objectives of Research Work

Through this research an endeavour has been made to identify the approaches applied by companies towards performance excellence. The application of these approaches reduces the cost of transactions , increases efficiency, condenses time value and enhances the role of HR managers from an employee to a strategic contributor. The objectives of this research are:

1. To identify the HRIS approaches implemented and initiated by companies

2. To identify the impact of implementing these approaches

3. To identify the suitable suggestions and recommendations for implementing efficient HRIS practices.

Research Methodology

Secondary sources have been used to make an empirical study on the companies using HRIS to understand how effectively and efficiently the use of HRIS enhances the HR manager's role, making them an important part in an organisation. Several Online databases that cover all leading journals in the field of HRIS (ABI/INFODATA/BUSINESS SOURCE PREMIERE) have been analysed.

Approaches of HRIS

1. **E-Resume Management System:** Companies making immense use of information technology in managing the resume received from large number of candidates at the time of recruitment.

2. **E-Recruitment:** Companies using social networking sites for recruitment and branding. In America, Internet is the ordinary recruiting source and the applicant's response towards the electronic recruitment is very positive. A recent survey found that nearly 75 percent of organizations are using technology to support recruitment, and the number is expected to grow to nearly 85 percent within the next year.

3. **E-Learning and Talent Development:** Companies in South Asia (India, Malaysia, Philippines, Singapore, and Thailand) are making use of this practice for succession planning. If an employee is interested in a designated career path but lacks certain skills, the employee can start appropriate training and the system tracks what courses have been completed. Ongoing training is often linked to higher wages; thus motivation to learn and morale is higher in these companies. If a corporation values employees for their knowledge and skills, greater commitment is a natural outcome. In addition, many training opportunities are offered Online to employees as well as suppliers. Training schedules, handouts, and course descriptions are posted on the company Intranet. The advantage of Online training is its 24-hour availability, which is especially crucial for global enterprises. Online training is also cost effective, saving travel expenses and time spent away from the office. Moreover, the fear of the classroom setting makes Online learning attractive to some employees; it allows them to remain semi-anonymous while asking questions and allows the opportunity to learn at their own pace. Organizations implementing e-learning can realize dramatic savings, ranging from 40 to 50 percent within a couple of years. For example, IBM reported that it was able to save more than $400 million annually through e-learning. Realizing these advantages, Capital One provided employees with iPods as part of its e-learning initiative.

4. **E-Talent Management:** Companies in China, Honkong and Taiwan are making use of this service for tasks like training enrolment, learning management and competency management.

5. **Teleconferencing and Tele-Working:** Companies are using this facility to enable people interact from a distant place without actually being present at the same place and in the same room. In New York City, Online publishing companies allow employees to telework two days a week, which saves their dollars as well as commuting stress.

6. **Training Needs Analysis (TNA):** It means identification of training requirement and the most effective means of meeting them. It is generally required for: (1) new hirings (2) veteran employees (3) trainees in pipeline.

7. **Applicant Tracking System:** It is also called candidate management system which is created to help an employer to recruit employees more efficiently by posting job openings on a corporate Web site, screening resumes and generating interview requests to suitable candidates. Yahoo is adding new recruiting and hiring software to conduct its search for prospective employees in an efficient manner.

8. **Online Training And Consultation:** Creating and offering multiple courses by the private companies through the web including interconnectivity and the ability to publish real time, up to the minute information.

9. **E-retirement Schemes and Benefits:** To calculate today's value of pensions benefits and to inform the employees about their future benefits, E-reports or E-statements can be generated. Managers responsible for compliance with legal mandates (such as COBRA or the Family and Medical Leave Act) use systems to monitor employee status, payment and eligibility for health care benefits.

10. **Electronic Surveillance of Employees:** According to the Annual Monitoring and Surveillance Survey done by the American Management Association (AMA) and the E-policy Institute annually since 2001, this practice is increasing to remove the pros and cons of electronic surveillance of employees at work which helps the employers to find out the employees engaged in visiting job board sites, reading personal mails, and doing online shopping within working hours in the work place. Various instances of employees watching pornographic movies have been reported. Indeed employees spend an average of 3.7 hours a week on the Web for personal activities and 5.9 hours a week online for work purposes, according to a study by the University of Maryland's Smith School of Business and Rock Bridge Associates, a market research firm based in Great Falls, Virginia.

11. **E-Rewarding Schemes:** Various rewarding benefits like gratuity, pension, bonus, compensatory allowances, etc. can be paid with the help of an electronic database system that keeps a track record of employee performance.

12. **Payroll Management System:** Despite the ever-increasing sophistication of HR technology, payroll remains the one component above all others that must work correctly. The main functions of payroll software are as follows:

- Permitting the entry of all payments and deductions

- Calculating gross and net pay

- Generating payments via electronic processing of financial transactions, by cheque or manual methods

- Generating payslips

- Payroll reporting

- Payroll accounting and integration with the finance system

- Processing of weekly and monthly staff payrolls

- Allowing supplementary payments, after the main payroll run

- Year-end procedures, reporting, data transfer and so on

- Processing pensioners' payrolls

- Processing payrolls

- Processing expatriate payments

- Interfacing with internal and external benefits providers, including pensions.

13. **Compensation Administration:** Compensation management programs were among the earliest HR applications of ERP. As IT advances, compensation software has evolved rapidly in the past decade. Recently, major ERP vendors brought in Internet technology in their latest products. This Web solution is revolutionizing how compensation systems are managed in organizations now and in the foreseeable future. Here are some key features and benefits of such a program within an ERP system. A recent survey shows that 61 percent of organizations use e-compensation systems or plan to implement them in the next year.

14. **24/7 accessibility:** A Web solution means users can access the program using a standard Web browser wherever and whenever they wish to. Compensation professionals no longer need to sit in front of their desktops at central offices in order to process information. Organizations use video and computer-based monitoring of employee behaviour, such as keystrokes made, e-mails sent, websites visited, time to complete a customer service call and service.

15. **E-Selection:** E-selection uses technology identifying the best job candidates–those who have the right knowledge, skills and abilities for each job and who may best fit the organization. Applicants can now take web-based versions of tests in either proctored or unproctored environments. For example, many retail organizations, such as Lowes, Home Depot and Target, use kiosks near the customer service area to administer selection tests to applicants.

Various other approaches of HRIS are:

- Knowledge management

- Talent management

- Stress management

- Add-in value to employees performance

- Pre employment checks using Facebook or other social sites

- Dealing with grievances

- Employee-wellbeing

- Dealing with change management

- Employee counselling

- Performance appraisal

- Career planning

- Succession planning

- Human resource planning

- Smart search engines on the internet

- Travel management

- Exit management

- Attendance management

- Leave management

These are the various applications of HRIS which is implemented with the help of web-based technology.

Impact of Human Resource Information System on Working of Companies

After evaluating the approaches of HRIS, there is a need to analyse the impact of these practices on companies applying and using them. These are:

1. HRIS is very user friendly

2. It eliminates the middlemen

3. It provides the ability to produce comprehensive and consistent management

4. Speeds up the transaction processing

5. Improves the tracking

6. Shifts the focus from processing of transactions to strategic HRIS

7. Offers services that fit the new world of work and is attractive to the current and future companies.

8. Knowledge gets updated

9. Quickelas ability to deliver and procure the information

10. Changes the role of HR managers from administrator to consultant

11. More transparency is brought in the system

12. Higher speed of retrieval and processing of data

Balance-Scorecard Approach

Balance-Scorecard Approach is used by USA and UK Companies where the focus is not mainly on the financial results but on the employee contribution toward the success of an organisation in the current scenario.

Many companies like IBM, HP are adopting this approach and their sales get doubled within a few months. The adoption of the balanced scorecard personnel managers in Tesco stores are also expected to be fully involved in the day-to-day running of the stores, thus enhancing their business awareness and their credibility. IRS 2000 Tesco also served to strengthen and redefine the role of the stores' personnel managers.

Suggestions for Effective Installation of HRIS

The design of an HRIS system should take into account the needs of a varied workforce, their access to, and familiarity with technology. In this chaotic and turbulent business environment, firms need to continuously use innovative means and be "ahead of curve" in terms of business strategies and practices. Because of this, there is a need of HRIS in an organisation to promote speedy transactions and make it a valuable tool to ensure success for management. So, in this context, there is a need of for applying conventional, Web and voice technologies to improve HR administration, transactions and process performance.

Conclusion

India with its intrinsic position geographically is becoming a viable destination for HR outsourcing companies. HRIS seems to play an important role for human resource management and improves the scope of HR managers, both, in terms of administrative and analytical purposes. It supports the decision-making process of HR managers from lower-level planning to top-most, crucial planning. HRIS solves a variety of issues connected with people. The practice of HRIS needs to be integrated with the overall strategy to ensure an effective use of people and provide better return to the organisation in terms of ROI (return of investment) for every rupee or dollar spent on them.

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A STUDY OF CUSTOMER SATISFACTION REGARDING THE QUALITY OF BRANDED DURABLE PRODUCTS

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Abstract

Marketing means "identification and satisfaction of customer needs." Customer orientation is thus the core of marketing. This study was conducted to find out the level of customer satisfaction regarding quality of five branded durable products. The products selected were: Television, Ceiling Fan, Air Cooler, Refrigerator and Washing Machine. A structured questionnaire, finalized after pilot testing among 25 (10% of the sample size), was distributed among 250 selected consumers drawn from five cities of Rajasthan (Jaipur, Ajmer, Jodhpur, Bikaner and Udaipur). The level of satisfaction was measured on a three point scale and weights were assigned to the three levels of satisfaction (High – 3, Moderate – 2 and Low – 1). Average Weighted Value and Total Weighted Value were calculated. The hypothesis was that there is no significant difference in the level of satisfaction regarding the quality of the five selected branded products.

The hypothesis was tested by using the chi square test. The responses were also classified on the basis of age, gender, income and occupation of the respondents. The research revealed that the consumers of selected durable products are highly satisfied with the quality of branded products and that customer satisfaction differs in the five selected durable products. The study also revealed that differences exist in the level of satisfaction of customers regarding quality of branded durable products on the basis of age, gender, income and occupation of the customers.

Introduction

One of the desired associations a firm seeks for its brand is the customer's perception of high quality. For, if the brand is perceived to be of premium quality, the customer will be willing to pay a higher price for the product. "Perceived quality" refers to how customers evaluate different brands on the basis of quality. In the final analysis, high perceived quality means higher returns on investment.

In this study an effort has been made to examine the relationship between the brand image and the buyer's perception of quality and the customer satisfaction regarding the quality of branded durable products. Studies have revealed that price, brand image, store reputation and promotion are indicators of quality. Among these factors, brand is the strongest indicator of quality. Buyers visualise a significant difference in the quality of different brands. The main factors considered while buying a product are:

- Brand Image

- Price

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- Product Features

- Promotion

- Brand Loyalty

- Store Reputation

- Store Quality

In this study, the following products were selected for the study:

(1) Television

(2) Refrigerator

(3) Ceiling Fan

(4) Air Cooler

(5) Washing Machine

250 selected consumers were asked to give their opinion about their perception of the quality of products. The following companies along with the products manufactured by them were selected in this study:

S. No.	Name of the Companies	Type of Products
A	BPL	Television, Refrigerator
B	LG	Television, Refrigerator, Washing Machine
C	Onida	Television, Washing Machine
D	Philips	Television
E	Samsung	Television, Refrigerator, Washing Machine
F	Sony	Television
G	Videocon	Television, Refrigerator, Washing Machine
H	Electrolux	Refrigerator, Washing Machine
I	Godrej	Refrigerator, Washing Machine
J	Whirlpool	Refrigerator, Washing Machine
K	Bajaj	Ceiling Fan, Air Cooler
L	Kenstar	Ceiling Fan, Air Cooler
M	Khaitan	Ceiling Fan, Air Cooler
N	Omega	Ceiling Fan, Air Cooler
O	Orient	Ceiling Fan, Air Cooler
P	Usha	Ceiling Fan, Air Cooler
Q	Symphony	Air Cooler

Review of Literature

After conducting exploratory work a review of literature on the subject was made.

Gardner's (1971) study on toothpaste, men's shirt and men's suit showed that the brand's name greatly influenced the perception of product quality, the willingness to buy and the attitude towards the product. There was a notable difference between the presence and the absence of brand name for the three dependent variables for all the three products. The study revealed that a brand name always resulted in a higher perceived level of product quality.

An experimental study by Mehta (1972) on the "Impact of Price and Brand on Consumer's Choice" showed that:

(a) The name of a well-known brand does induce the consumer to be favourably disposed towards that brand in terms of quality and price perception.

(b) The consumers also seem to be willing to pay a higher price for the well-known brand, and

(c) A marketer does have considerable flexibility in pricing his product, provided, he can create a psychological image about quality. This perhaps explains why many foreign-controlled companies have been able to buy the output of Indian companies in products like car batteries, tonics and menthol lozenges, razor blades, cables, etc., and market them at a much higher price as their own products, making huge profits thereby. Not only foreign companies, even major Indian companies are engaged in similar practices. They are purchasing products manufactured by small-scale industries and are marketing their products under their own brand names. This has given a boost to many small industries. An example is NELCO, a Tata company, which purchases its calculators from small units, and then advertises, markets and distributes them under its own brand name, charging the consumer a much higher price (Business India, May 12-25, 1980).

Rao (1972) conducted an exploratory study to determine the influence of brand name on consumer's preference and their perception of the characteristics of the users, of a product with a certain brand name. The study revealed that products with meaningful, fitting, non-Indian names were considered to be of good quality.

Brand name serves as "shorthand" for quality by providing consumers with a bundle of information about the product (Jacoby et al., 1978).

Della Bitta et al. (1981) proposed that a strong brand name helped to control or stabilise the quality perception of a branded product even when its price was discounted.

According to several authors, as consumers with positive images of a brand are more likely to purchase it, a major purpose of advertising strategy is to develop a positive brand image. Advertising does play an important role in establishing a favourable brand image. In the absence of other information about a new brand, people may use the amount of advertising as a signal of quality.

In forming an impression about the quality of merchandise, a respondent, in a study by Maxursky and Jocoby (1986), selected brand name more frequently than any other information.

In the presence of brand name information, price becomes less important as the quality indicator (Zeithami, 1988).

Many people tend to associate a positive attribute with larger brand than to associate it with smaller brands (Barnard and Ehrenberg, 1990).

In the study conducted by Dawar and Parker (1994) on a sample representing 38 nationalities, it was found that brand name was universally used more than price, physical appearance and the retailer's reputation as signals of product quality. Moreover, brand name as a signal, had a greater predictive value, and the consumers believed that brand image was predictive of the product characteristics such as product quality.

Tulin Endem (1998) noted that brands can signal a certain level of quality, so that satisfied buyers can easily choose the product again. The multi-cue studies indicated that the brand name is used more than the price and store reputation as signal of product quality (Gardner, 1971; Dawar and Parker, 1994; Dodds et al., 1992). In fact, the value of the brand or the brand equity is strongly related to the perceived brand quality (Aaker, 2000). Studies on branding, brand image and perceived product quality lead to the conclusion that brand is the integrating factor around which all marketing and communication should be built (Schultz, 1998).

According to Schiffman and Kanuk (2004), the manufacturers whose products enjoy a favorable image generally find that their new products are accepted more readily than those of the manufactures who have a less favourable or a neutral image. Obviously, consumers have greater confidence that they will not be disappointed after buying a well-known brand. Moreover, in the absence of actual experience with a product, consumers often evaluate quality on the basis of cues that are external to the product itself, such a price, brand image, retail store image, or even the country image.

One study (quoted by Kotler and Armstrong, 2004) found that 72 percent of the customers would pay a 20 percent premium for their brand of choice rather than opting for the closest competing brand and 40 percent of them said they would pay a 50 percent premium.

Objectives of the Study

The objective is to find out the customer satisfaction regarding quality of branded durable products and whether the impact of brand on consumers differs according to age, gender, income and occupation of consumers.

Quality Consciousness in Selected Companies

That many companies are conscious of quality is evident from the following claims of various companies:

Philips

"We empower people to benefit from innovation by delivering on our brand promise of sense and simplicity." This brand promise encapsulates our commitment to deliver solutions that are advanced, easy to use, and designed around the needs of all our users.

The Mission statement is "improve the quality of people's lives through timely introduction of meaningful innovations."

Videocon

"The Videocon Groups is a company dedicated to maintaining the highest international standards of excellence through quality, technology and innovation. For over a decade now, Videocon has been bringing the latest

and the very best in consumer electronics and home appliances. Successfully adapting to the best of international technology to suit Indian needs, and crafting it to improve the quality of life-as million of satisfied customers will agree."

The Mission statement is "To delight and deliver beyond expectations through ingenious strategy, intrepid entrepreneurship, improved technology, innovative products, insightful marketing and inspired thinking about the future."

Electrolux

"Axel Wenner-Gren, the founding father of Electrolux, established the principles by which the company still thrives. His dream to improve quality of life has had fundamental impact on homes around the world. "Thinking of you" expresses the Electrolux offering: To maintain continuous focus on the consumer, whether it's a question of product development, design, production, marketing, logistics or service."

Whirlpool

"The company's brand and image speaks of its commitment to the homemaker from every aspect of its functioning. The products are engineered to suit the requirements of 'smart, confident and in-control' homemaker who knows what she wants. The product range is designed in a way that it employs unique technology and offers consumer relevant solutions."

Bajaj Electricals

Bajaj Electricals perpetually strive to improve the quality and make no compromise on this issue. People at all levels-whether they are employees or vendors, or dealers- should be made to consider quality as a way of life. The emphasis on quality is not restricted to company's products and services only, but to all spheres of its activities.

Khaitan

"Our products are testaments to our belief in excellence and are duly subject to the most stringent quality standards in the world. And as proof of our mettle and faith in our own quality, we took what may be regarded as the boldest-ever step in the fan industry: the introduction of the Replacement Bond. It ensures that the customer always comes first. This confidence in our fans is a result of dedicated service commitment to quality and careful attention to detail."

Orient

"Their manufacturing capabilities are enhanced by a strong process-driven environment. Their Quality Management System at the Faridabad and Kolkata facilities, are certified by Det Norske Veritas (DNV) as per ISO 9001: 2000. Six Sigma practices at both manufacturing units ensure defects are kept to the minimum. Consumer-led insight has always been at the core of Orient Fans design philosophy."

Symphony

The company emphasizes maximum customer satisfaction through optimum product performance and a high degree of reliability. Building quality into the design of the product and ensure a degree of reliability which will obviate the need for further servicing or repairing by any outside agency, so that the customer enjoys trouble-free performance from the product. The mission of Symphony is design, quality and service.

Hypothesis of the Study

The hypothesis is that there is no significant difference in the level of satisfaction regarding the quality of the branded products.

Research Methodology

The research is based on primary data collected through a structured questionnaire finalized after pilot testing. The 250 selected respondents belonged to five cities of Rajasthan (Jaipur, Ajmer, Jodhpur, Bikaner and Udaipur). A cross section of the population has been taken to ensure that consumers of the two sex groups and of all age groups, income groups and occupation groups are in the sample. Secondary data was also collected through the companies manufacturing the five selected durable products. The data collected through the questionnaire was edited, tabulated, analysed and interpreted. The hypotheses have been tested by using the Chi-square test. Thereafter, conclusions have been drawn and suggestions have been offered to make brand management strategies more effective.

The satisfaction level was classified as high, moderate and low. To calculate the satisfaction level weights were assigned as under:

Level	Weight
High	3
Moderate	2
Low	1

The weighted value was calculated by multiplying the weights with the number of respondents.

Profile of the Respondents

A brief profile of sample respondents is given below:

Table 1: Classification of Respondents

Age	No. of Respondents
up to 25 years	117
26 to 40 years	79
41 to 60 years	52
61 or above	2
Total	**250**
Gender	**No. of Respondents**
Males	146
Females	104
Total	**250**
Income	**No. of Respondents**
Up to 15000	76
15001 to 25000	78

25001 to 35000	47
35001 or above	49
Total	**250**
Occupation	**No. of Respondents**
Business	57
Salaried Employee	153
Housewife	25
Other	**15**
Total	**250**

Findings of the Study

1. Consumer Perception of Brand and Quality

Table 2: Consumers Perception of Brand and Quality

Perception	Yes		No		Total	
	No.	%	No.	%	No.	%
Higher the reputation of the brand, the superior will be its quality.	206	82	44	18	250	100
The upcoming brands are of better quality.	150	60	100	40	250	100
The older established brands are more reliable and are generally of better quality.	205	82	45	18	250	100
Country of origin of the brand gives quality indication.	150	60	100	40	250	100
The quality of multinational brands are superior to the quality of Indian brands.	114	46	136	54	250	100
It is risky to buy a little-known brand.	188	75	62	25	250	100
Brand which are enjoying greater market share are of superior quality.	171	68	79	32	250	100
The larger the size of the manufacturing company, the better will be the product quality.	151	60	99	40	250	100

The respondents were asked to indicate their perception of brand and quality i.e., the higher the reputation of the brand, the superior will be its quality; the upcoming brands are of better quality; the older established brand are more reliable and are generally of better quality; the country of origin of the brand gives quality indication; the quality of multinational brands are superior to the quality of Indian brands; it is risky to buy a little-known brand; brands which are enjoying greater market share are of superior quality, and the larger the size of the manufacturing company, the better will be the product quality. The research revealed that 82% (206/250) consumers agreed with the statement – Higher the reputation of the brand, the superior will be its quality, whereas 18% (44/250) did not agree. 60% (150/250) consumers agreed with the statement that upcoming brands are of better quality, whereas 40% (100/250) did not agree. 82% (205/250) consumers

agreed with the statement - The older established brands are more reliable and are generally of better quality, whereas 18% (45/250) did not agree. 60% (150/250) consumers agreed with the statement – Country of origin of the brand gives quality indication whereas 40% (100/250) consumers did not agree. 54% (136/250) consumers agreed with the statement – The quality of Indian brand is superior to the quality of multinational brands, whereas only 46% (112/250) consumers did not agree. 75% (188/250) of consumers agreed with the statement – It is risky to buy a little-known brand, whereas 25% (62/250) did not agree. 68% (171/250) of consumers agreed with the statement – Brand which are enjoying greater market share are of superior quality, whereas 32% (79/250) consumers did not agree. 60% (151/250) of consumers agreed with the statement – The larger the size of the manufacturing company, the better will be the product quality, whereas 40% (99/250) consumers did not agree.

It is concluded that the majority of consumers are fully satisfied by all these statements – The higher the reputation of the brand, the superior will be its quality; the upcoming brands are of better quality; the older established brands are more reliable and are generally of better quality; the country of origin of the brand gives quality indication; the quality of Indian brands is superior to quality of multinational brands, it is risky to buy a little-known brand; brands which are enjoying greater market share are of superior quality and the larger the size of the manufacturing company, the better will be the product quality.

2. Satisfaction Regarding Quality of Branded Product

Table 3: Satisfaction Regarding Quality of Branded Product

Level of Satisfaction

Products	Highly		Moderately		Lowly		Total		Weighted Value
	No.	%	No.	%	No.	%	No.	%	
Air Color	16	32	26	52	8	16	50	100	108
Washing									
Machine	33	66	15	30	2	4	50	100	131
Ceiling Fan	22	44	26	52	2	4	50	100	120
TV	32	64	16	32	2	4	50	100	130
Refrigerator	30	60	18	36	2	4	50	100	128
Total	133	53	101	40	16	6	250	100	617

In this research an attempt was made to find out the satisfaction level regarding quality of branded products. The level of satisfaction was classified as high, moderate and low. Table 3 shows that level of satisfaction regarding quality of air cooler, washing machine, ceiling fan, television and refrigerator. It was found that 16 (32%) of consumers were highly satisfied with quality of branded air cooler, 26 (52%) moderately and 8 (16%) lowly. In case of washing machine 33 (66%) of consumers were highly satisfied, 15 (30%) moderately and 2 (4%) lowly. In case of ceiling fan 22 (44%) of consumers were highly satisfied, 26 (52%) moderately and 2 (4%) lowly. In case of television 32 (64%) of consumers were highly satisfied, 16 (32%) moderately and 2 (4%) lowly. In case of refrigerator 30 (60%) of consumers were highly satisfied 18 (36%) moderately and 2(4%) lowly. On the whole out of 250 consumers 133 (53%) were highly satisfied regarding quality of branded products. The weighted value of satisfaction for air cooler is 108, for washing machine it is 131, for ceiling fan it is 120, for television 130 and for refrigerator 128. A comparative analysis of the 5 selected durable products shows that satisfaction regarding branded washing machine and television is more than the satisfaction regarding air cooler, ceiling fan and refrigerator.

It is concluded that the consumers of 5 selected durable products are highly satisfied with the quality of branded products. However, satisfaction level is relatively higher in case of washing machine and television as compared to air cooler, ceiling fan and refrigerator.

3. Satisfaction Regarding Quality of Branded Products – Socio Demographic Analysis

Table 4: Average Weighted Values

Socio Demographic Factors	Group I	Group II	Group III	Group IV	Total Average Weighted Values
Age	248.6	239.2	255.7	200	944.60
Gender	248.6	244.2			492.8
Income	235.5	248.7	253.1	255.1	992.4
Occupation	259.6	241.2	276.0	206.7	983.5

Table 4 reveals that satisfaction regarding quality of branded products varies among different socio-demographic factors (age, gender, income and occupation).

Hypothesis Testing

The hypothesis (H0) and alternate hypothesis (Ha) of this study are noted below:

H_0–There is no significant difference in the level of satisfaction regarding the quality of the branded products.

H_a– There is significant difference in the level of satisfaction regarding the quality of the branded products.

Table 5: Satisfaction Regarding Quality of Branded Products

	Level of Satisfaction						
Products	**Highly**		**Moderately**		**Lowly**		**Weighted Value**
	No	**%**	**No**	**%**	**No**	**%**	
Air Cooler	16 (16.66)	32	26 (16.67)	52	8 (16.67)	16	108
Washing Machine	33 (16.66)	66	15 (16.67)	30	2 (16.67)	4	131
Ceiling Fan	22 (16.66)	44	26 (16.67)	52	2 (16.67)	4	120
Television	32 (16.66)	64	16 (16.67)	32	2 (16.67)	4	130
Refrigerator	30 (16.66)	60	18 (16.67)	36	2 (16.67)	4	128

Note: Expected frequency is given in brackets.

$$\text{Degree of Freedom} = (\text{Row-1}) \times (\text{Column} \times 1)$$
$$= (5\text{-}1) \times (3\text{-}1)$$
$$= 4 \times 2$$
$$= 8$$

Table value at 5% level of significance = 15.5

Calculated chi-square value $\quad$ = 109.454

$$= 109.454 > 15.5$$

Thus, Ho (null hypothesis) is rejected and Ha (alternative hypothesis) is accepted.

Conclusion and Suggestion

The study aimed at finding out the level of satisfaction with regard to quality of branded products. Consumers of five selected durable products are highly satisfied with the quality of branded products. However, satisfaction level is relatively higher in case of washing machine and television as compared to air cooler, ceiling fan and refrigerator. The level of satisfaction differs according to the gender, income, age and occupation of consumers.

The manufacturers of refrigerators, air coolers and ceiling fans should pay attention to the satisfaction of the customers. Although the satisfaction level of all the five selected durable products is high, yet, relatively satisfaction level is lower in case of air coolers, ceilings fan and refrigerators. Thus, the manufacturers of these three products should try to increase the satisfaction level of their customers through better quality products and services.

In case of durable products, price is not very important. Consumers are willing to pay more for the high quality of the products. Even promotion schemes are relatively not very important. Thus, in case of durable products emphasis should be on quality and technology rather than on price and promotion.

The study has revealed that the preferred features of the branded products differ in the different age groups. For instance, 16% to 19% of the respondents in the first three age groups considered price as the most preferred feature, while for 15% to 33% of respondents brand name was most preferred feature in the first three age groups. In the formulation of advertising and marketing strategies this fact may be taken into account while trying to influence a particular segment based on age. Similarly, the opinion of respondents in respect of factors influencing purchase decisions, quality of products, ranking of branded products differs in the different income groups, occupation groups and among males and females. In devising marketing strategies in respect of television, refrigerator, washing machine, ceiling fan and air cooler, these differences based on age, income, occupation and gender must also be considered.

The manufacturer of durable products must give top priority to the brand value as the consumers generally considered branded products excellent or good. Quality of products must be given top-most importance. The company must seek for its brand, customer's perception of high quality. If the customers perceive that the durable products are of high quality, they will pay a premium for it. The firm will have greater trade leverage and channel members would have greater interest in dealing with such brands. A high quality brand also provides an adequate reason for the customer to buy it.

Scope for Further Research

There is no end to research. Every research opens new areas and raises new questions to be answered. This research was confined to only five durable products, namely, Television, Refrigerator, Washing Machine, Air Cooler and Ceiling Fan. In the future, researches may be conducted to find out the impact of brand image on consumer perception of product quality in relation to other durable products and non-durable products including FMCG products. Secondly, this research was confined to Rajasthan. In the future such researches can be conducted at other places also. Thirdly, the consumer's perception regarding quality of industrial products can also be studied. The impact of brand image on the psychology of teenagers can be another area of research.

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BEHAVIOURAL OBSTACLES TO SOUND INVESTING – WITH SPECIAL REFERENCE TO HERDING BEHAVIOUR

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Abstract

Recent studies in the field of investment theory have indicated that individual investors are not always rational in their economic choices related to investments. In some part of investment decision-making process, they may even be emotional or irrational. The study of such investor behaviour and its causes is the basic premise of a newly developing body of knowledge in the field of finance known as Behavioural Finance. It combines the understanding of cognitive psychology and financial theory in order to explain the not so rational choice of investors. Behavioural finance asserts that behavioural biases and heuristics play an important part in influencing the investment decision making processes. A bias is a departure from normative, optimal or rational behaviour and heuristics are rules of thumbs that help individuals to take the most optimum decisions in situations which are cognitively complex. In either case, heuristics and biases, if consistently practiced, lead to various abnormalities and anomalies. One such action of investors is herding behaviour. We can say that it is a behavioural obstacle to sound investing because when people are following a herd mentality, they stop taking rational decisions and are in a rush to follow a crowd rather than pursue their investment objectives. This paper aims to elucidate how herding poses a challenge to proper economic functioning of the financial markets. This is a conceptual paper wherein we not only explore the existence of herding behaviour among equity investors but also deliberate upon the determinants of herding behaviour so as to lay a learning ground for studying it objectively and using this understanding in developing better investment strategies.

Introduction

In the real world of investments, investors make use of heuristics and biases in their investment decisions. These heuristics are useful as they make cognitively difficult tasks easier. However, they can lead to systematic biases. When a behavioural bias is consistently practiced, it gives a foundation for prediction of behaviour. The study of this field will be particularly useful where it can influence returns from investment. Such behavioural biases and heuristics form the subject matter of Behavioural Finance. Behavioural Finance focuses on how investors interpret and act on information to make investment decisions. One such bias which causes faulty decisions in investment-decision process is herd behaviour. Investors show a tendency to mimic the actions of a larger group though, individually, they would have not made the same choice. The

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cause behind this may be the social pressure of conformity and another may be a common rationale that a large group is unlikely to be wrong.

Herding is generally considered to be of two types: Sentiment-driven, intentional herding and unintentional herding driven by widespread identical reaction to public information and signals (Bikhchandani and Sharma, 2001). According to available literature by Scharfstein and Stein (1990), Hirshleifer and Teoh (2003) and Hwang and Salmon (2004), whatever may be the type of herding, it impairs and destabilizes stock prices and disrupts proper functioning of financial markets. Also, following the pervasive financial crises in the last two decades, the issue of herding has become a topic of great interest. Thus with an intention to delve deeper into the causes, evidence and measures of herding behaviour, this paper will be making an attempt to bring to light the need and importance of considering herding behaviour as one of the major obstacles in sound investment decision making.

Review of Literature

Although in its nascent stage, herding behaviour has been a topic of research and interest for behavioural theorists, psychologists, biologists, economists and investment advisors. An attempt has been made here to delve deep into the present body of knowledge on this topic to understand the meaning of herding behaviour and examine the evidence of its existence. Prechter (2001) explains herding behaviour from a biological perspective. He explains that when individuals are faced with situations cognitively difficult to comprehend, unconscious impulses from the brain's limbic system impel a desire in the individual to seek consolation from a group. According to Valence (2001), when such investors group together, they inadvertently create a consensus and create an impact to cause markets/stocks/sectors to fall in or out of favour. According to behavioural theorists, herding is a product of emotions like greed and fear (Landberg, 2003); or in other words, remorse and pride (Chen et al.). It has been empirically found that human beings perceive pain more strongly than pleasure. This intrinsic overpowering of fear over greed results in the human tendency of "following a herd". Thus even if the move is wrong, the feeling of remorse is less if it is felt by the entire herd. And when fear is in abundance, investors use herding as a shortcut to a decision and give no time to reflection. This explains why there is en masse panic selling in case of downturn.

Further, a large number of definitions distinguish between irrational and rational herding. From an irrational perspective, herding is a type of behaviour caused by collective actions taken by individuals under uncertain conditions. (Devenowand Welch, 1996). From a rational perspective, herding is said to be a result of such action of investors wherein they ignore their own analyses and depend on so-called experts who possess more reliable information (Bikchandani and Sharma, 2001). These theorists classify rational herding into three types: herding based on information, herding based on reputation and herding based on compensation. Herding based on information results when investors deduce useful information by observing the trades of previous investors to the extent that they ignore their own private information (Banerjee, 1992). Herding by reputation hits those investors who have a reputation of acting differently from the crowd and hence they ignore their information. Herding based on compensation arises due to blind conformity behaviour. When investors include specific clauses regarding performances of their portfolio managers, they give them an additional incentive to fall prey to herding behaviour (Visser and Swank, 2008).

Measures/Determinants of Herding Behaviour

Since herding is a non-quantifiable behaviour, it cannot be measured directly. Instead we can infer it from related measurable parameters.

One such measure is the LSV measure introduced by Lakanishok et al. (1992). According to LSV measure, herding is defined as the tendency of traders to accumulate on the same side of the market in a specific stock and at the same time compared to what would be expected if they traded independently. The LSV herding statistic is given by

$$HMit = (brit - brt) - Et\ [(brit - brt)]$$

Here the first term, (brit - brt) calculates the deviation of the buyer ratio in stock I at t from the overall buy probability at time t. The second term, Et [(brit - brt)], is the expected value of the difference between the buyer ratio and period average buyer ratio. Subtracting this term accounts for the possibility of observing more variation in the buyer ratio in stocks and only a few trades. This is like an adjustment factor which helps in inferring that the herding measure HMit will be zero if trades are independent; a positive and significant value of HMit indicates that the average tendency of the group to herd their investing decisions.

Another such measure is a measure used by Wermers (1999) which distinguishes between "buy herding", BHMit and "sell herding", SHMit to discover whether investors buy or sell a stock I in herds, where

$$BHMit\ =HMit\ \ if\ brit> brt$$
$$SHMit = HMit\ \ if\ brit< brt$$

These equations do not consist of brit = brt   because that is a situation where no herding occurs. Moreover, with this measure, one can also calculate BHMit-SHMit to find out asymmetries in investors' behaviour when buying or selling stocks.

Other measures contributed by Christie and Huang (1995), Chang et al. (2000) and Hwang and Salmon (2001) are also of great significance. These studies view herding behaviour as collective buying and selling actions of investors in order to try to follow the performance of the market or any other economic factor or phenomenon. Christie and Huang (1995) rationalise that when stock prices are very volatile, herding of stocks towards the market is likely to be present. They are of the opinion that when market conditions are extreme, investors may not have the conviction in their own belief and may choose to follow market consensus. Christie and Huang use cross-sectional standard deviation (CSSD) of returns to imply whether herding behaviour is prevalent or not.

In another study, Chang et al. (2000) used cross-sectional absolute deviation of returns instead of cross-sectional standard deviation. They ran two separate regression models and examined the non-linearity in up and down markets to accommodate the possibility that the degree of herding may be asymmetric.

Hwang and Salmon (2001, 2004 and 2009) on the other hand instead of returns, examined cross-sectional movements of factor sensitivities. Their measures capture market-wide herding as well as herding towards fundamental factors. They conclude that changes in investor sentiment can be inferred from time-variation in betas.

Evidence of Existence of Herding

In this section we try to bring out with the help of studies conducted in various countries whether researchers have found some evidence of herding. Christie and Huang by using their empirical measure tried to test herding behaviour in US equity market and concluded that there was no significant evidence of herding in the period of study. Even Changet al. (2000) in their studies found no evidence of herding in the US and in

the Hong Kong markets. However, in times of extreme price movements, they could come across partial herding in Japanese markets. Also, they could document dramatic decrease of return dispersion in case of Taiwanese and South Korean markets. There is significant evidence of herding in these emerging markets. The study of Hwang and Salmon (2001, 2004, and 2009) in the U.S., U.K. and South Korean market revealed that regardless of whether markets are bullish or bearish, when the direction of market is obvious, there is existence of herding. In a study conducted by Zhao (2012) on Herding evidence in Chinese stock market, on studying the contribution of price in the prediction of volume, he concluded that change in price causes or influences the change in the trading volume. Zhao points out that investors are not rational and their investment decisions are influenced by psychological and emotional factors and they tend to depict herding behaviour. In another study conducted in Malaysia, Chen, Hin and Lian found patterns of herding existing more prominently in both rising and falling markets that are preceded by sharp reversals. When markets are clearly bullish or bearish, herding could not be identified clearly. Again Chen, Hin and Lian conclude that herding exists when atmosphere of uncertainty is prevalent.

How Herding Affects Rational Investment Decision Making

The stock markets of any country face a lot of information overload. In their inability to handle this extreme volume of information, investors want to follow an easy way out by following a herd and not utilising the entire information rationally. Investors opt to be a part of a herd rather than be left alone. This herd mentality does not let them see reason even when they know that such companies popular among the investors in the herd have stretched valuations. They have a tendency to blindly follow the crowd and even start doubting their own rationality thinking how so many people can go wrong. As a result, in the past in many sectors like real estate, information technology, infrastructure and power, herd mentality has been evident and they have witnessed crazy and irrational valuations. For example, a turnaround is perceived as good news by investors. Once a sector's or company's turnaround is identified and trends start showing upward movements, investors start chasing that company's share. This further leads to a surge in the share prices and more investors join in. When such crowd behaviour is at work, there is no rationality. And this in turn will have a direct influence on the profitability and efficiency of financial markets(Parikh,2009). It will not be an exaggeration to point out that herding is a challenge for proper economic functioning of financial markets and the root cause of financial bubbles and crashes.

How to Overcome the Herding Behaviour Heuristic

First and foremost, to reduce herding activities, investor awareness and investor education is a must. Secondly, as in case of all psychological biases, following certain guidelines and disciplining one's investment regimen may prevent the investor from falling prey to herd mentality. As suggested by Baker and Nofsinger (2002), one must first understand that we do get influenced by psychological habits. Then we must develop a plan wherein we write down the objectives and constraints of investments in quantitative as well as qualitative terms. Last but not the least; investors must always diversify among asset classes as proper asset allocation is even more important than market timing and security selection. If investors will follow these guidelines they will not feel the need to follow a herd.

Conclusion and Areas of Further Research

To conclude, we can say that although latent, if researched in depth, herding is an observable process. Although it may be imperative given the psychological, behavioural and emotional aspects of investor behaviour, it would be beneficial to judge in what degree it is present at any given point in time compared to another. There is indeed evidence that herding behaviour is prevalent whether in a different degree in developed

and emerging markets or whether in intentional or unintentional form or whether by individuals or institutions or whether in small capitalization stocks or large capitalization stocks. We can say that if we delve deeper into causes and effects of herding behaviour, our regulators will be able to form much better policies which will increase the efficiency of our financial markets. We may even be able to contain financial bubbles. Empirical literature on institutional as well as individual herding especially in India seems to be conspicuous by absence and thus can be taken up by researchers for further research. Future studies could also be conducted with large sample size to cover the entire country; or it may cover different regions separately as each region with its own diverse ethnicity and culture may influence the perception of investors on financial and investment decision making. Such studies could be useful for investors, individual as well as institutional,and the regulators to monitor the stock market behaviour in India.

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NOVEL TRENDS OF INTERNAL AUDIT IN VARIOUS FINANCIAL SECTORS

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Abstract

Internal audit is the independent appraisal activity which should be done continuously by an organization's employees appointed for this purpose. Internal audit of financial sectors is primarily intended to provide the management with clear and comprehensive analysis, which is unbiased, of the adequacy and effectiveness of internal controls and risk management framework of the entity. Financial sectors such as banking and other financial services sectors are set to grow exponentially in India. As the demands of traditional audits responsibilities and the growing burden of information security evolve, the sector is beginning to see emerging trends in internal auditing departments across many organizations. As technology has evolved in recent years, erasing global barriers, companies worldwide have dramatically transformed their operations. The transaction-based traditional audit approach that evolved during the last decade is not suited to the present scenario of financial sector, when inventory arrives fast in time, processes have value, and property is many times intellectual. Novel Audit Process Knowledge category such as Computer-Assisted Audit Techniques or CAATs is being increasingly prevalent as financial sectors work to automate and streamline internal audit processes. The overall findings will suggest a clear trend within many organizations to rebalance their internal audit departments and allow state-of-the-art technology to assist with continuous monitoring of controls and fraud detection. Therefore, now is the time for internal auditing to respond to these new challenges and opportunities. The present paper will review the functional efficiency of the organizations in the context of Internal Audit, with a view to suggest areas for possible improvements by the use of modern innovative auditing techniques.

1. Introduction

1.1 Introduction of Financial Sector

The economic reform process that began in 1991 took place amidst two acute crises involving the financial sector: (i) The balance of payments crisis that threatened the international credibility of the country and pushed it to the brink of default; and (ii) The grave threat of insolvency confronting the banking system which had for years concealed its problems with the help of defective accounting policies.

The present Rs 64 trillion (US$ 1.17 trillion) Indian banking industry is governed by the Banking Regulation Act of India, (1949) and is closely monitored by the Reserve Bank of India (RBI). RBI manages the country's money supply and foreign exchange and also serves as a bank for the Government of India and for the country's commercial banks. As of now, public sector banks account for 70 per cent of the Indian banking assets.

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Liberal policies, Government support and huge development in other economic segments have made the Indian banking industry more progressive and inclusive with regard to global banking standards. (Barua et al 3-22)

The banking industry is challenged by competitive pressures, changes in customer loyalty, stringent regulatory environment and entry of new players, all of which are pressuring the organizations to adopt new business models, streamline operations, sound internal audit control system and improve processes.

This paper begins with a critical review of financial sector reforms with respect to internal audit system. Finally, the paper outlines the unfinished agenda of reforms in the financial sector with respect to internal audit system.

1.2 Introduction of Auditing and Need of Internal Audit

The word audit is derived from the Latin word audire which means "to hear." In older times whenever the owners of a business suspected fraud they appointed some impartial and experienced persons who used to hear these accounts and express their opinion about their correctness or otherwise. Such persons are known as "auditors". Audit is not only conducted in business but it is widely used in other sectors like banks, corporate, companies, etc.

Internal auditing is an independent appraisal function established within an organization to examine and evaluate which is done by a staff of auditors functioning as full time salaried employees.

A sound internal audit function plays an important role in contributing to the effectiveness of the internal control system. It should provide the management with accurate information on the effectiveness of risk management and internal controls including regulatory compliance by the bank. As Sharma points out:

> At present, there are various types of internal audit, which basically adopt the methodology of transaction testing, testing of accuracy and reliability of accounting records and financial reports, integrity, reliability and timeliness of control reports, and adherence to legal and regulatory requirements. However, all these do not provide any opinion on the qualitative dimension of business management. As such, there is a need for redefining and redirecting the scope of audit so as to take care of adoption of modern tools of risk management, adequacy and effectiveness of such tools, as well as to assist the business units to mitigate the risks.

The internal audit function is not to monitor and detect but also to investigate fraud incidences when they arise. The role of internal audit in fraud risk management by way of preventing, detecting and investigating fraud has amplified as a result of economic uncertainty and increased focus of certain organization's management on fraud risks (KPMG LLP 2002).

2. Objectives of Research Work

The main objective of present paper is to review the functional efficiency of the financial organizations in the context of internal audit, with a view to suggest areas for possible improvements by the use of modern innovative auditing techniques which will lead to maximize the profits and to detect the frauds and errors in time.

3. Review of Literature

3.1 Role and Functions of Internal Audit in Banks

According to Literature cited by V Venugopal, the role and functions of the Internal Audit in Banks, whether Listed or Unlisted Public Sector or the Private Sector, as laid down by the RBI, are as under:

1) Provide directions and also oversee the operation of the total audit function in the Bank

2) Ensure proper organization, operationalization and quality control of the internal audit and inspection

3) Follow up of the statutory external audit and inspection of RBI

4) Review of internal inspection/audit function, its system, its quality and effectiveness in terms of follow up

5) Review the Inspection Report of specialized and extra large branches and branches with unsatisfactory rating

6) Focus specially on:
   a. Inter-branch adjustment account
   b. Arrears in balancing of books at various branches
   c. Frauds
   d. Other major areas of book-keeping

7) Review the half-yearly report obtained from the Compliance Officer appointed in the Bank

8) Follow up all issues raised in the Long Form Audit report (LFAR) of the Statutory Auditors

9) Interact with External Auditors before the finalization of the Annual/Half Yearly Financial Accounts and Reports

10) Follow up all issues/concerns raised in the RBI Inspection Reports

11) Reviewing with the Management, the Annual Financial Statements before submission to the Board

12) To look into reasons for default, if any, in payment to the Depositors, Debenture holders, Shareholders, Creditors, etc. (1079-82)

3.2 Internal Audit – The Traditional Role

According to Chartered Institute of Internal Auditors, "The role of internal audit is to provide independent assurance that an organization's risk management, governance and internal control processes are operating effectively. Unlike external auditors, they look beyond financial risks and statements to consider wider issues such as the organization's reputation, growth, its impact on the environment and the way it treats its employees" (Sharma).

3.3 The Changing Role of Internal Audit (Nishkam Ojha et al)

The ever increasing regulations and expansion of organizations across the globe into new markets exposed the organizations to greater regulatory and compliance risks. Regulators expect thorough due diligence, oversight and background checks to be performed on partners, vendors, suppliers and others. As fraud has a

number of negative impacts on organizations – financial and reputational – it is important for the organizations to have a strong fraud prevention programme and that could be possible only if sound internal audit system is present over there.

As organizations work towards reducing the losses due to fraud, their anti-fraud programmes are increasingly looking towards the internal audit function for support in light of the fact that over time as internal auditors review systems in the organization, they develop an overall knowledge of the organization's processes, risks, control systems and personnel which can contribute to an effective fraud risk management.

3.4 Internal Audit Guidance (Meigs and Meigs et al)

According to Financial Accounting a Handbook by Meigs and Meigs the Internal Audit can give maximum results if followed with proper guidance as mentioned.

The internal audits should be performed by personnel from within the organization or by external persons selected by the organization, working on its behalf. It should be ensured that persons conducting audit are competent and in position to do so impartially and objectively. The internal audits should identify opportunities for improvement in environmental system and establish an audit program to direct the planning and conduct of audits and identify the audits needed to meet the program's objectives.

Each internal audit need not cover entire system, so long as audit program ensures all organizational units and functions, system elements, and full scope of the EMS are audited periodically

1. Plan and conduct of audits by objective and impartial auditors, aided by technical experts, as appropriate, selected from within organization or from external sources

2. Collective competence of auditors should be sufficient to meet objectives and scope of the particular audit and provide confidence as to the degree of reliability that can be placed on results

3. Results of an internal EMS audit can be provided in the form of a report and used to:

    (a) Correct or prevent specific nonconformities

    (b) Fulfill one or more objectives of the audit program

    (c) Provide input to the management review

3.5 Satyam Audit Fraud – A Case Study (Madan and Winkler)

Satyam Computer Services Limited was a 'rising-star' in the Indian 'outsourced' IT-services industry. The company was formed in 1987 in Hyderabad (India) by Mr. Ramalinga Raju. Satyam won numerous awards for innovation, governance, and corporate accountability. "In 2007, Ernst and Young awarded Mr. Raju with the 'Entrepreneur of the Year' award. On April 14, 2008, Satyam won awards from MZ Consult's for being a 'leader in India in CG and accountability'. In September 2008, the World Council for Corporate Governance awarded Satyam with the 'Global Peacock Award' for global excellence in corporate accountability." Unfortunately, less than five months after winning the Global Peacock Award, Satyam became the centerpiece of a 'massive' accounting fraud.

4. The Auditors Role and Factors Contributing to Fraud

Global auditing firm, Price waterhouse Coopers (PwC) {External Auditors}, according to Bhasin,

audited Satyam's books from June 2000 until the discovery of the fraud in 2009. Several commentators criticized PwC harshly for failing to detect the fraud (Winkler, 2010). Indeed, PwC signed Satyam's financial statements and was responsible for the numbers under the Indian law.

The large amount of cash thus should have been a 'red-flag' for the auditors that further verification and testing was necessary. Furthermore, it appears that the auditors did not independently verify with the banks in which Satyam claimed to have deposits.

Numerous factored contributed to the Satyam fraud. Actually the main reason for the fraud was the absence of internal auditors in the whole scene.

5. Methodology

The study of "Novel Trends of Internal Audit in Various Financial Sectors" is the secondary data. The data have been collected from reliable sources such as RBI Audit guidelines and case study is supported by Satyam Audit Reports. The novel audit techniques are studied from various possible resources such as books of high repute, journal and periodicals.

6. Findings and Suggestions

6.1 Novel Techniques of Internal Auditing System

Various Novel Audit techniques that can be possibly used for sound internal audit are CAATs. These are computer programs and data that the auditor can use as part of the audit procedures to process data of audit significance contained in a client computer information system (CIS). These can be used by the auditor to examine the entity computer files and may be used during both test of control and substantive testing of transactions and balances as the program can scrutinize large volume of data and extract information, leaving skilled manual resources to concentrate upon the investigation of the results.

An article on the web titled "Computer Assisted Audit Techniques (CAAT)" lists the following audit programs:

- Generalized packaged programs: however they need to be tailored to each specific case by defining the format of the files to be interrogated by specifying the parameters required and the form of that output.

- Purpose written programs: these are specially written programs where it is not possible to adapt a package program because of the type of machine, processing or file organization used.

- Utility programs used by the client: used by the entity to perform data processing functions such as sorting and printing of files e.g. excel.

The article mentioned above, namely, "Computer Assisted Audit Techniques (CAAT)" specifies the following uses of audit software:

- Calculation checks

- Detecting system violation rule

- Detecting unreasonable items

- New calculation and analysis

- Selecting items for audit testing

- Completeness checks

Advantages of CAAT to the Auditor

The same article mentioned above lists the advantages of CAAT:

- Test programmed controls: In a computer based accounting system, there are large volume of transactions which the auditor will have to audit. The auditor will have to check if the programmed controls are functioning correctly. The only effective way of testing programmed controls is through CAAT.

- Test on large volume of data: CAAT enables auditors to test large amount of data quickly and accurately and therefore increases the confidence they have in their opinion.

- Cost effective: once set up CAAT is likely to be a cost effective way of obtaining audit evidence year after year provided that the client does not change the accounting system regularly.

- Comparison: Allows results from using CAAT to be compared to traditional testing. Where the two results agree will increase the overall internal auditor's confidence.

6.2 Novel Trends in Audit Guidance for Other Financial Services

An article on the Web "Regulation on Internal Audit Requirements for Commercial Banks" lists the following as the novel trends in audit guidance:

1. The activities of the Internal Audit at a commercial bank must be based on the principles of independence and impartiality, which must be ensured by non-interference from the bank's Supervisory Council and Board of Directors, structural independence, independent staffing policy and remuneration system.

2. For the purpose of ensuring structural independence of the internal audit, the Department must be accountable to the bank's Audit Commission.

3. For the purpose of pursuing an independent staffing policy in the bank's internal audit:

   a) Staffing schedule of the Department must be approved by the Supervisory Council, only when presented and agreed to, by the Audit Committee;

   b) The Director of the Department and his/her Deputy must be appointed to, or dismissed from their position only when presented and agreed to, by the Audit Committee;

   c) Other employees of the Department must be appointed to, or dismissed from their positions by the bank's Board of Directors, only when presented and agreed to, by the Internal Audit Director, which may require the consent of the Audit Committee according to the bank's internal procedures.

6.3 Responsibility of the Internal Audit Department

The same article mentioned above, namely, "Regulation on Internal Audit Requirements for Commercial Banks" further specifies the guidelines for information systems audit:

6.4 Guidelines for Information Systems Audit

To monitor the protection of the safety of the bank's assets, the Internal Audit Department should be charged

with the following responsibilities:

a. To review the bank's internal controls system, assess adequacy and efficiency of this system, and to prepare recommendations for improving this system and to provide its monitoring

b. To verify the compliance of the bank's management system, policies and strategies with the current normative acts and requirements of the National Bank;

c. To periodically inspect the bank's transactions, the programs and activities of each structural unit, and to define their compliance with the bank's business plans, objectives and tasks;

d. To inspect the compliance of the bank's employees' performance with the bank's internal instructions, policies and procedures as well as with current legislation and requirements of the National Bank;

e. To assess the efficiency of usage of the bank's own resources and to report the findings to the Audit Committee;

f. To coordinate the bank's programs in concert with the external auditors in order to verify that they are in compliance with the requirements of internal and external audit;

g. To prepare and present to the Audit Commission for its review and approval, the internal audit program for each fiscal year, by quarters;

h. To plan each internal audit inspection and report its findings, when completed, to the Audit Committee;

i. For the purpose of conducting an audit in an impartial manner, to review the results and recommendations of the audit inspection, both during that inspection, or upon completing it, in concert with the persons, whose activities have been audited;

j. To verify that the bank's Board of Directors have taken timely and adequate actions, consistent with the results and recommendations of the internal audits;

k. To assist the bank's security service in investigating and determining wrongful actions;

l. To maintain confidentiality of the information obtained while conducting the audit, not to reveal information containing commercial secrets; not to use it for his/her own interests or those of a third person; and to strictly adhere to banking secrecy.

6.5 Suggestive Measures for Companies Like Satyam

One of the key objective of this research study was "to examine and analyze in-depth the Satyam Computers Limited's accounting scandal by portraying the role of internal auditors. The fraud committed by the founders of Satyam is a testament to the fact that "the science of conduct is swayed in large by human greed, ambition, and hunger for power, money, fame and glory." All kind of scandals/frauds have proven that there is a need for good conduct based on strong ethics. The Indian government, in Satyam case, took very quick actions to protect the interest of the investors, safeguard the credibility of India, and the nation's image across the world. Moreover, Satyam fraud has forced the government to rewrite CG rules and tightened the norms for auditors and accountants.

It is universally accepted that "lasting solutions can be found by transforming human consciousness through an inner discipline and higher moral reasoning."

A transformed organizational culture, which pays highest attention to ethical conduct and moral values, will strengthen sustainable roots of the company. Transparency and effective auditing and regulatory checks, through internal and external auditors and monitoring agencies, will also help to establish long-lasting credibility for a company. The novel Audit software such as CAAT's should be employed at internal level for early detection of errors and fraud. Transparency in financial reporting, as a moral duty and ethical code of conduct, are also very important for companies to adhere to in order to uphold ethical standards.

7. Conclusion

Fraud is a deception. Whatever industry the fraud is situated in, or whatever kind of fraud we visualize, "deception is always the core of fraud." Furthermore, frauds and scandals have significantly increased uncertainty and volatility in the financial sector, thereby shaking investor confidence worldwide.

Thus, it is found that the banks and other financial sectors in India would like to incorporate the role of internal audit along with traditional external audit at earliest at all possible levels.

The internal audit is of great help to the statutory auditor but it is not a substitute of statutory audit. The extent to which an external auditor chooses to rely on internal audit will be a matter of his individual judgment and responsibility. The recommendations of the internal audit committee on any matter relating to the financial management including the audit report shall be binding on the board.

There are a few lessons learned and noted by stories like Satyam and they highlight the importance of internal audit.

Novel audit process knowledge category such as Computer-Assisted Audit Techniques or CAATs should be used in all financial sectors to automate and streamline internal audit processes. Therefore, now is the time for internal auditing to respond to these new challenges and opportunities.

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FACTORS THAT INFLUENCE INVESTMENT DECISION IN INDIAN MUTUAL FUND INDUSTRY

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Abstract

The Mutual Fund industry appears to be on a losing streak. Ever since the Securities and Exchange Board of India (SEBI) banned entry loads-charges collected by fund houses from investors at the time of investment, the number of retail investors in Mutual Funds has been falling consistently. The number of investors dropped by 10 lakh between September 2011 and September 2012. Equity funds have seen the closure of around 19 lakh over a year since September 2011.

Industry players, financial planners and investors' representatives have been trying hard to find a solution to stop the mass migration. However, the industry doesn't seem to have a definite plan to get out of the unstable situation.

The present analysis focuses on the Mutual Fund investment decision function to establish the relevant causal relationship amongst the factors influencing one's decision to invest in the Mutual Funds. The investors were asked to rate fourteen reasons on a five-point scale from highly agree to highly disagree. The assigned marks on these scales are from 5 to 1 respectively. The paper is based upon the results drawn from a survey of 524 respondents. The Mutual Fund investment functions (IF) can be expressed as: IF = F (BE, FS, TP, RI, RFM, PP, LF, CM)

Introduction

Mutual Fund in itself is deemed to be an institutional entity that encompasses the commonly derived and/or schematically accumulated financial goals of the community of investors. The money collected from a plethora of sources is invested by the fund manager in various types of securities depending on their duly specified objectives. A Mutual Fund, therefore, in its rudimentary conceptualization, is a collection of stocks and/or bonds, wherein an investor holds a share, which represents a part of the fund holding thereof.

Review of Literature

Selecting a Mutual Fund which is able to offer high returns with acceptable risks is a complex task. Literature shows that there are a number of factors that determine the performance of Mutual Funds. The purpose of this literature survey is to identify those factors that previous research has found to be important in the purchase of Mutual Funds.

1. Bodla and Garg (2011) evaluated the performance of 24 growth schemes of Mutual Funds. They reveal that most of the schemes have outperformed the market during the study period in terms of return. However,

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the difference in market return and funds return is found insignificant. There exists a moderate positive correlation between risk and return of the sample schemes. A large majority of the schemes have succeeded in earning a risk premium irrespective of the performance measurement model concerned. Most of the schemes have performed better than the market on the basis of risk adjusted return also.

2. Ravindran and Rao (2010) made the performance analysis of 269 open ended Indian Mutual Funds in a beer market. This evaluation was carried out through Treynor ratio, Sharpe's ratio, Jensen measure and Fama measure, the study period being September 1998 to April 2002. The study showed that 58 schemes were able to satisfy investor's expectations based on both premium for systematic risk and total risk.

3. Sarkar and Majundar (2009) made an attempt to make an operational analysis of various Mutual Funds over a period of three years (1996-1999). The results revealed that the income oriented products offered by the public as well as private Mutual Funds organizations were less expensive than the others as these incurred comparatively low cost per rupee of income generated. The results also indicated that the cost effectiveness is favourable towards private-sector Mutual Funds as against their rivals operating in the public sector.

4. Burnett (2007) explained that investors tend to choose funds based on previous performance but stick to these funds despite their poor return. They also reveal that there is only a slight positive relationship, if there is any relationship at all, between previous performance and current returns.

5. Elton and Gruber (1991) suggested that past risk adjusted Mutual Funds performance helps to predict future risk adjusted performance. The Mutual Funds investors make purchase decisions on the basis of past performance.

6. Grinlast and Tilman (1989) found that the investors are influenced by factors other than just return and risk. These are past performance and level of risk associated with the fund, amount of sales change, management fees, fund manager reputation, clarity of accounting statements, recommendations from a financial magazines or newsletter, etc.

Objective of the Study

The present analysis focuses on the Mutual Fund investment decision function to establish the relevant causal relationship amongst the factors influencing one's decision to invest in the Mutual Funds. It confines its objectives to:

1. Examine the Mutual Fund investors decision among the investors.

2. Determine the steps taken by the Mutual Fund industry to encourage the retail investors

Methodology

The study is primarily based upon primary data collected from a structured survey through a questionnaire. The survey was conducted on 524 respondents, in person. The questionnaire comprised of 32 questions. All the variables were measured by response on five point Likert scales, which rated 1 as least important and 5 as most important. The investors' attitude on the nine variables have been analyzed with the help of its mean scores and standard deviation among the retail investors in order to exhibit the importance of the variables involved in decision function. The significant difference of investors regarding their perception on nine variables, the 't' test have been executed.

Analysis of the Survey

The present analysis focuses on the Mutual Fund investment decision function to establish the causal relationship amongst the factors influencing one's decision to invest in the Mutual Funds. The Mutual Fund investment functions (IF) can be expressed as:

$$IF = F (BE, FS, TP, RI, RFM, PP, LF, CM)$$

Where

IF	- Mutual Fund invested so far
BE	- Brand equity
FS	- Fund size
TF	- Type of fund
TP	- Type of portfolio and schemes
RI	- Risk involved in the Mutual Fund
RFM	- Reputation of fund manager
PP	- Past performance of the fund
LF	- Liquidity factors
C	- Current market conditions

Brand Equity

Fund families like UTI, SBI, Reliance, Birla Sunlife, etc. have high brand equity and the funds of such families were most likely to have greater investors' confidence. In the present study, the investors were asked to rate on a five-point scale the brand equity of the fund family as the discriminate of their investment on Mutual Funds.

Fund Size

Fund size may be small, medium or large. It must be ascertained that a larger fund size would mean a higher amount of fund being invested and therefore a higher degree of involvement by the fund family. It would therefore mean one of the most profitable investment decisions that could be undertaken. In the present study, the investors were asked to rate the fund size as the discriminate of their investment on Mutual Funds on five point scale.

Type of Fund

A Mutual Fund may be a growth of fund, dividend fund, tax saving fund, etc. and therefore, their impact on the Mutual Funds investment decision is largely related to their respective functional intents. In the present study, the investors were asked to rate the type of fund as the discriminate of their investment on Mutual Funds at five point scale.

Type of Portfolio and Schemes

The type of portfolio could be mixed, equity, debt, etc. which makes a sizeable impact on investment decision on Mutual Fund. It helps the investors to assess their utmost need to invest in either the mixed fund or equity fund or likewise. In the present study, the importance of the type of portfolio and the schemes in the investment on Mutual Fund have been measured on a five-point scale.

Risk Involved in Mutual Funds

A high risk involved in a particular Mutual Fund would generally mean a low investment in it, though with same quick mathematical calculations, even the major and minor limits of the risk may be ascertained. In the present study, the investors were asked to rate the importance of risk involved in Mutual Funds in the investment on Mutual Funds on a five-point scale.

Reputation of Fund Managers

A fund manager is a high authority in ascertaining an investor's financial roadmap. The reputation of the fund manager also plays a key role in determining the level and extent of profitable investment one could make in Mutual Funds. Fund managers with a high market reputation who are likely to make profitable investment decisions and upon whom an investor can rely for undertaking a high-risk investment initiative can attract more funds. The importance of the fund manager in the investment on Mutual Funds among the investors is also rated on a five-point scale.

Past Performance of the Funds

Good past performance of the fund is a reflection of its ingenuity and a high investor's confidence in it. Past performance is generally undertaken through ascertaining the annualized returns for the previous five years and comparing it to benchmarks like NSE, BSE, etc. In the present study, the importance of past performance of funds in the investment on Mutual Funds among the investors is rated on a five-point scale.

Liquidity Factors

Liquidity factors have their own relevance especially when the investor wishes to rotate the profits for various investments for maintaining one's financial obligations. A liquidity factor simply denotes their pace of convertibility into cash which therefore serves as a major discriminant of the Mutual Fund investment. In the present study, the importance of liquidity factor in investment in Mutual Funds is measured on a five-point scale.

Current Market Conditions

An eagle's eye in the current market conditions also helps investors to make a better investment decision. The knowledge as to how the share market, the real estate market, etc. was performing also helps investors in making their relative decisions. The investors were asked to rate the importance of current market conditions in investing on Mutual Funds on a five-point scale.

After collecting these data, the investors attitude on the nine variables have been analyzed with the help of its mean scores and standard deviation among the retail investors in order to exhibit the importance of the variables involved in decision function. The significant difference among the two group of investors regarding their perception on nine variables, the 't' test have been executed. The results are given in Table 1.

Table 1
Investors' Attitude on Decision Variables
One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Brand equity	524	2.14	.906	.040
Fund size	524	2.67	.889	.039
Type of fund	524	2.75	.904	.039
Type of portfolio/scheme	524	2.92	1.117	.049
Risk involved in Mutual Funds	524	2.74	.982	.043
Reputation of fund managers	524	2.91	.805	.035
Past performance of the fund	524	2.83	1.108	.048
Liquidity factors	524	3.03	1.028	.045
Current market conditions	524	2.02	.917	.040

One-Sample Test

Test Value = 0

	t	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval	
					Lower	Upper
Brand equity	54.084	523	.000	2.141	2.06	2.22
Fund size	68.857	523	.000	2.674	2.60	2.75
Type of fund	69.745	523	.000	2.754	2.68	2.83
Type of portfolio/scheme	59.770	523	.000	2.916	2.82	3.01
Risk involved in Mutual Funds	63.859	523	.000	2.740	2.66	2.82
Reputation of fund managers	82.840	523	.000	2.914	2.85	2.98
Past performance of the fund	58.409	523	.000	2.828	2.73	2.92
Liquidity factors	67.448	523	.000	3.029	2.94	3.12
Current market conditions	50.501	523	.000	2.023	1.94	2.10

*Significant at five percent level.

The important decision variables among the retail investors were liquidity factors, type of portfolio/scheme and reputation of fund managers, since their respective mean scores were 3.029, 2.916 and 2.9144 respectively. Regarding the importance given on the decision variables, the investors have been identified in the case of brand equity, family size, type of portfolio/scheme, risk involved in Mutual Fund, reputation of fund manager and liquidity factors since their respective 't' statistics was significant at five per cent level.

Various steps have been taken by the Mutual Fund industry to encourage the retail investors in their investment decision

1. Improving Awareness

In a country, where 55 per cent of domestic savings go into bank fixed deposits, the Mutual Fund industry sees a huge scope for growth. The Association of Mutual Funds in India (Amfi) has initiated a programme under which each fund house needs to organise at least five investor awareness programmes every month.

2. Focus on SIPs

After the ban on entry loads, fund houses have shifted their focus to systematic investment plans.

3. Goal-based Products

Goal-based savings products – be it pension plans, child plans or retirement plans – the insurance industry has succeeded in selling such schemes more aggressively than Mutual Funds. Mutual funds have been selling more return-based plans and there is a need for more goal-based plans to ensure long-term investments. There is certainly a shift towards such products.

4. Battle with FDs

Fund houses have realized that they need to have more products in the fixed-income category to attract risk-averse investors who have so far preferred bank fixed deposits. They are now launching more capital-protection-oriented funds, monthly income plans and fixed maturity plans.

5. Caveat Emptor

Notwithstanding all the efforts by Mutual Fund players, the industry needs to address the issue of incentivising financial planners in order to push the sales of Mutual Funds.
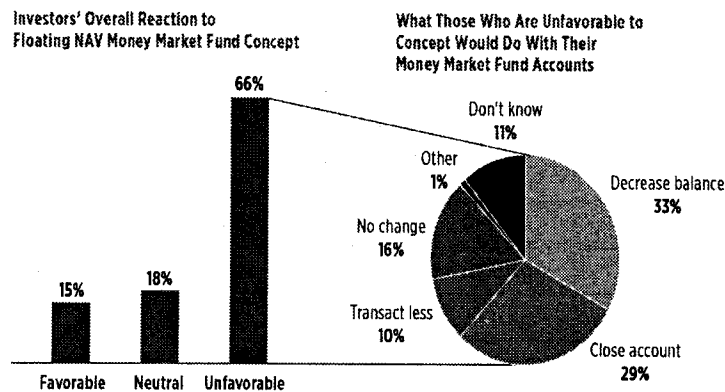
Source: Harris Interactive / T Rowe Price

Conclusion

Two-thirds of retail investors surveyed found the idea of a floating NAV money market fund unfavorable. Among those who found the concept unfavorable, 72 percent indicated that they would use the product less, and that their most likely response would be to close their money market fund accounts (29 percent), decrease their money market fund balances (33 percent), or execute fewer money market fund transactions (10 percent). A third survey, conducted among both retail and institutional shareholders by Fidelity Investments, found much the same result. This survey found that institutional investors overwhelmingly (78 percent) disliked

the idea of a floating NAV product and would use money market funds less or not at all (69 percent of 78 percent) if faced with the prospect of a floating NAV. Retail investors also disliked the floating NAV concept. Forty percent of the retail investors surveyed disfavored the floating NAV concept; however, when informed of the adverse tax consequences, the percent disfavoring jumped to over sixty percent. In short, there is good reason, backed by data, to believe that investors do not want and will likely reject a floating NAV money market fund.

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ALIGNING E-HRM PRACTICES WITH TALENT RETENTION – CREATING A TECHNICAL EDGE

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Abstract

The newer breed of employees, better known as Generation Y, are definitely more technology-driven, more flexible and more mobile. Thus, this is the generation which requires more supple and open approach while dealing with its career paths. It is already proven that strong HR policies support in retaining talent in the organization, but with the introduction of E-HRM, the traditional HRM practices have taken a leap ahead. E-HRM in fundamental nature is the delegation of HR functions to management and employees. Empowering the employees to work upon certain functions relieves the HR department of those errands thus helping them to concentrate more on the strategic areas of HR rather than the mundane operational elements.

In this vein, the paper aims to explore the possible relationship between the implementation of E-HRM and talent retention strategies. The study also compares the difference between the Engineering and Management Faculties in adoption of E-HRM system in the institute. Specifically, we focus on the relationship between E-HRM systems and Engineering and Management Faculties towards adoption and efficacy, upgradation to additional IT skills, easy access to information, increasing the effectiveness and improving the retention rate.
Key Words: E-HRM, Talent Retention, Engineering and Management Faculties.

Introduction

Faculties being the back bone of any institute, whether it is Engineering or a Management institute, it has become very important to manage them more effectively and efficiently. Retaining the desirable employees is beneficial to an organization in gaining competitive advantage that cannot be substituted by other competitors in terms of producing high morale and satisfied coworker who will provide better customer service and enhanced productivity, which subsequently result in better sales, customer satisfaction, smooth management succession and improved organizational learning (M. Heathfield, 2005). Similarly, in an educational institute, a satisfied faculty will contribute to better teaching and research opportunities, thus enhancing the overall institutional performance.

Since Human Resource Management (HRM) plays a vital role in enhancing the performance of an

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organization, it is important to pay greater attention to this component of management. It is that dynamic aspect of the management which constantly deals with the development of the most valuable asset of the organization, namely, human resource. The concept of dealing with the people has changed dramatically due to the introduction of technology. Today the Information Technology has become a boon for the organizations, in almost every sphere of the management function, especially in the case of human resource function where tracking the progress of the people has become easier for the administrator. With the arrival of Information Technology, the Human Resource management has shed its old personnel image and gained recognition as a vital player in corporate strategy. HRM departments not only support the organization's strategic objective but actively pursue an ongoing, integrated plan for furthering the organization's performance. In today's era, the success of a company/institution depends on how it manages its employees, since HRM is the most important factor in sustaining competitive success. Thus, current strategic issues for any HR department are to become more competitive globally; improve quality, productivity and customer service; manage the merger and acquisitions; and apply new information technology for e-business.

To attain the above-stated goals, HR departments intent on designing an integrated computer system which will support them in providing data and information that can be used in HR planning and decision making. The system is now shifting from traditional HR to E-HR, thus significantly affecting every area of human resource management. Some organizations have advanced themselves so much that they are close to a paperless HRM system which saves their time, money, and frees staff for other important issues.

Since E-HRM is replacing traditional HR practices, it is important to have a fuller grasp of this development. It is in essence the (planning, implementation and) application of information technology for both networking and supporting at least two individual or collective actors in their shared performing of HR activities. It is not the same as HRIS (Human Resource Information System) which refers to ICT systems used within HR departments. Nor is it the same as V-HRM or Virtual HRM – which is defined by Lepak and Snell as "a network-based structure built on partnerships and typically mediated by information technologies to help the organization acquire, develop, and deploy intellectual capital." Ruel Bondarouk and Looise further clarifies the concept. They define it as "a way of implementing HR strategies, policies and practices in organizations through a conscious and directed support of and/or with the full use of web-technology-based channels" (Ruel, Bondarouk and Looise, 2004, p. 281).

Review of Literature

According to Enshur, Nielson and Grant-Vallone, 2002, the use of E-HRM varies greatly, depending on the HR activities it supports, for example, recruitment and selection, performance management, training and development, compensation and benefits, health and safety, employee relations, work-life balance and managing HR and employee information across the entire employment cycle. E-HRM varies not only in the functions for which it is used but also in the degree of sophistication which it involves (Martinsons, 1994).

E-HRM is in essence the devolution of HR functions to management and employees. They access these functions typically via the intranet or other web-technology channels. The empowerment of managers and employees to perform certain chosen HR functions relieves the HR department of these tasks, allowing HR staff to focus less on the operational and more on the strategic elements of HR, and allowing organizations to lower HR department staffing levels as the administrative burden. Though these changes are not yet evident, it is anticipated that as the E-HRM develops and becomes more entrenched in business culture, these changes will become more apparent. A 2007 CIPD survey states that "the initial research indicates that much-

commented-on development such as shared services, outsourcing and e-HR have had relatively little impact on costs or staff numbers."

Lengnick-Hall and Moritz emphasizes the importance of e-HRM for the HR function, according to them, "For the HR function, e-HRM has the potential to affect both efficiency and effectiveness. Efficiency can be affected by reducing cycle times for processing paperwork, increasing data accuracy, and reducing HR staff. Effectiveness can be affected by improving the capabilities of both managers and employees to make better, timelier decisions. E-HRM also provides the HR function the opportunity to create new avenues for contributing to organizational effectiveness through such means as knowledge management and the creation of intellectual and social capital." Thus, the e-HRM helps in initiating the effectiveness and efficiency of the organizations, through the help of newly created intellectual capital.

E-HRM Types

The current literature distinguishes three types of E-HRM:

   a)   Operational E-HRM

   b)   Relational E-HRM

   c)   Transformational E-HRM

Operational E-HRM is concerned with administrative functions such as payroll management and employee personal data. Relational E-HRM supports business processes by means of training, recruitment, performance management and so forth. Transformational E-HRM is concerned with strategic HR activities such as knowledge management, and strategic reorientation. An organization may choose to pursue E-HRM policies from any number of these tiers to achieve their HR goals.

Within all the types of HRM, choices have to be made in terms of which HRM activities will be offered face-to-face, and which will be offered through the web. For the operational type of HRM, the employees may keep their own personal data up-to-date through an HR website or can have the help of the administration to manage their records for them. In terms of relational HRM, there is a choice between supporting recruitment and selection through a web-based application or using a paper-based approach. The training and performance management like HR activities can be managed by the employees themselves by self-learning online training sessions and self-feedback forms respectively. Finally, in terms of transformational HRM, an overall organizational change is sought after through an integrated set of web-based tools that enables the workforce to develop in line with the company's strategic choices, or to use paper-based materials.

Ruël et al. have also shown that although, in practice, the E-HRM types tend to be mixed, a strong foundation layout at operational level becomes an essential prerequisite for relational and transformational E-HRM; and that this requires a complete makeover in the way the things are being operated in the organizations; for example, paperless administration, more IT enabled workforce, etc. They also emphasized that these E-HRM types are not the criteria for judging a company's performance; rather these are just the level of the implementation of the E-HRM practices in any organization. It is not about better or worse E-HRM types. Further, it was shown that there is a "gap" between E-HRM in a technical sense (the available functionality) and its use and adoption by employees and line managers. Moreover, it is also not possible for any traditional company to move to transformational type of E-HRM just like that. This movement is not possible without first going through operational and relational E-HRM stages.

E-HRM Outcomes

Beer et al. distinguish four possibilities:

a) High commitment

b) High competence

c) Cost effectiveness

d) Higher congruence

These outcomes, in turn, may change the state of HRM in an organization, or the new HRM state may result through the efforts of individuals and/or groups within an organization. This closes the circle. With the addition of the E-HRM outcomes, the building blocks which are needed to finalize our E-HRM model have been identified (Figure 1). Literature suggests that the various goals of E-HRM and the different types of E-HRM are expected to result in outcomes including more efficient HRM processes, a higher level of service delivery and a better strategic contribution. Such expected outcomes can be "encapsulated" in one concept, which could be counted as HRM effectiveness. E-HRM, as the matter of fact, is expected to contribute to the effectiveness of HRM, which consequently could help achieve the organization's goals.
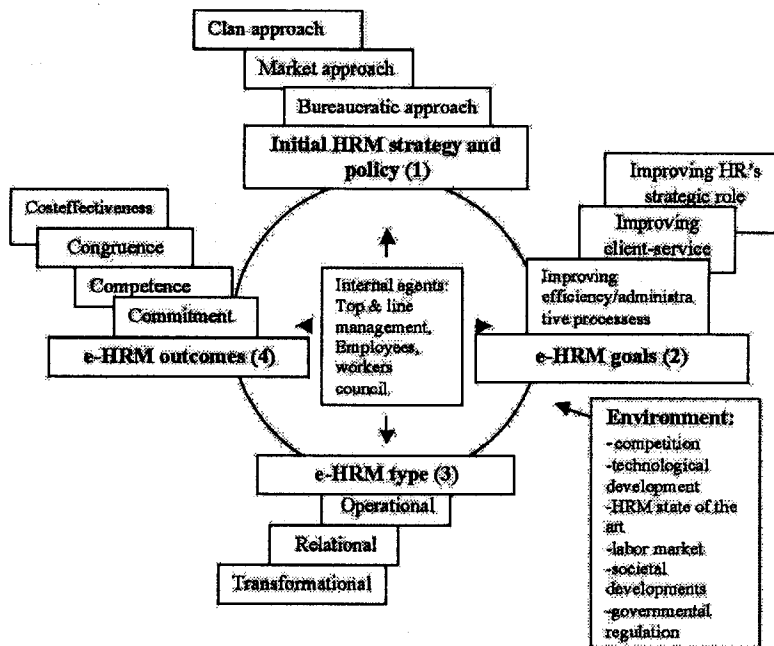

Figure: Demystifying E-HRM dimensions.

Aligning E-HRM with HRM – The Research Framework

Since HR is involved in a more "strategic role" in the organizations and move towards becoming "business partners" rather than just being a support department, the importance of E-HRM has gained substantially. The E-HRM provides solutions for routine HR functions, which can be performed by the employees themselves, thus shifting the focus of the HR people towards more strategic issues in the organization. As the faculties today have become more technologically advanced, the e-solutions related to basic HR functions,

help them in not only checking their own progress, but also in boosting their morale, raising their confidence level, and finally leading to enhanced institutional performance.

Since E-HRM facilitates the employees, makes employee-organizational affiliation more unambiguous, reduces potential misapprehension, and creates a viable transparency in the total HR function in the organization, E-HRM is beneficial for both Engineering and the Management Institutions in the state.

Objectives of the Study

The objective of the study is to:

1. Analyse the Engineering and Management faculties' opinions towards introduction and implementation of E-HRM in the institution.

2. Compare the adoption of E-HRM practices by Engineering and Management Faculties of selected institutions in the state.

Research Methodology

Research Types: Simple random sampling.

Sample Type: People were randomly selected and the sample was composed taking into consideration the proportion of the population of each institute. The faculties with minimum six months experience were selected.

Sample Size: 400 faculties (200 Engineering and 200 Management Faculties)

Data Collection: A structured survey was used to collect data on faculties of various levels from various Management and Engineering of various institutes in Rajasthan that were part of the both Generation Y and the Generation X. Data was collected via an e-mail survey sent to 200 Engineering Faculties and 200 Management Faculties, yielding a response rate of 100%, i.e. we have thus far obtained 400 valid responses. The respondents included in our analysis fell into three occupational categories and are involved in Management and Engineering institutes.

Hypothesis

The goal of the study was to compare the adoption of *E-HRM* practices by Engineering and Management Faculties of selected institutions in the state. Hence, the following hypothesis can be proposed:

H0: There is a difference between Engineering and Management faculties' opinion towards E-HRM as a retention strategy.

H1: There is no difference between Engineering and Management faculties' opinion towards E-HRM as a retention strategy.

The null hypothesis is relevant since it enables us to broaden our final discussion considering not only Generation Y employees, but also all employees who demonstrate different degrees of technological attitude and high-perceived utility.

Limitations

1. The main limitation of this study is the influence of the external environment on human behaviour. The external environment plays a very important role for the respondent, as it affects the state of the mind of the respondent, when he/she is responding to the questionnaire.

2. The other limitation of the study is its sample size. Only a preliminary study has been done on this topic.

3. The research was not extensive. It covered only certain preliminary areas of E-HRM, thus leaving a scope for further investigations in the same area by the researchers.

Findings and Analysis

To substantiate our analysis and fulfil the objectives, the total study has been divided into two parts. In the first part, the analysis of total faculties (Engineering and Management – considered as one sample) and their opinion on the introduction and implementation of E-HRM in the institution is considered. The second part focuses upon the difference in adoption of E-HRM systems by both Engineering and Management faculties.

Objective 1

To analyse the Engineering and Management faculties' opinions on the introduction and implementation of E-HRM in the institution.

Analysis

F1: E-HRM adoption and efficacy: The respondents were asked whether they are interested in maintaining their own HR functions, e.g., leave record, performance appraisal, and payroll system. As the respondents were academicians, mostly it was found that they were not so interested in maintaining their own records. They are in favour of implementing the E-HRM system in their organizations, but were of the view that record maintenance has to be handled by someone in the administration.

F2: Easy access to information: Next, the respondents were asked about their views on whether E-HRM provides them with easy access to the information collected. The respondents unanimously agreed that implementation of E-HRM practise will definitely provide an easy access to the information related to various processes and functions related to basic and strategic HR practices.

F3: Upgradation to additional IT skills: To measure the extent to which people feel comfortable with technology and their intention to upgrade to additional IT skills. Surprisingly, it has been found that the respondents from both the management and the engineering institutes of Rajasthan are in favour of increasing their IT skills. The faculties are optimistic towards technology, has a strong belief that the technology offers people increased control, flexibility and efficiency. Though reluctance, discomfort and insecurity were some of the negative features, technology brings greater efficiency and flexibility.

F4: Increasing the effectiveness: A technology-driven system results in better functioning of the organization; this has been again proved by the respondents, who strongly welcomed the implementation of the E-HRM system in the organization. As per the respondents, the E-HRM system boosts the confidence of the employees, thus increasing the overall effectiveness of the various functions of the organization.

F5: Improvement of retention rate: Technology provides the employees with a sense of security; wherein the employees have an easy access to all the information, can maintain their own HR functions, and are comfortable

with the various processes. Such a system, improves the retention rate of the employees, as is observed in the survey. The survey findings suggest that the respondents strongly believe that the E-HRM system helps in improving the retention rate of the organization.

Objective 2

To compare the adoption of E-HRM practices by Engineering and Management Faculties of selected institutions in the state.

Analysis

To test our hypothesis we designed a questionnaire, on a 5-point scale, ranging from "Strongly Disagree" to "Strongly Agree". The respondents were asked to give their response on following parameters: perceive adoption of various E-HRM systems, able to upgrade to gain additional IT skills, easy access to information collected, and increase in effectiveness of the functioning, improvement of the retention rate.

Table 1: Response towards E-HRM

Sl No	Factors	Sector	N	Mean	Std Deviation	t-value	Sig (2-tailed)
F1	E-HRM adoption and efficiency	Engineering	200	4.00	0.428	2.544	0.011
		Management	200	3.84	0.759		
F2	Easy access to information	Engineering	200	4.04	0.385	-1.886	0.060
		Management	200	4.16	0.805		
F3	Upgradation to IT additional	Engineering	200	4.15	0.478	-5.630	0.000
		Management	200	4.45	0.582		
F4	Increasing the effectiveness	Engineering	200	4.11	0.482	-0.561	0.000
		Management	200	4.15	0.837		
F5	Improvement of Retention Rate	Engineering	200	4.01	0.709	0.378	0.705
		Management	200	3.98	1.100		

F1: E-HRM adoption and efficacy: From Table 1, it is clear that the mean value for the respondents of Engineering and Management faculties (Factor 1) is 4.00 and 3.84 with value of S.D. 0.428, 0.759. The value of t is 2.544 at 0.011 significant levels. It means there is significant difference (the level of significant level for t-test is more than 0.05) between the opinions of respondents of various sectors towards factor 1. Hence H_0 is accepted and H1 is rejected.

F2: Easy access to information: The mean value for the respondents of Engineering and Management towards easy access to information (Factor 2) is 4.04 and 4.16 with value of S.D. 0.385, 0.805. The value of t is -1.886 at 0.060 significant levels. It means there is no significant difference (the level of significant level for t-test is more than 0.05) between the opinions of respondents of various sectors towards factor 2. Hence Ho is rejected and H1 is accepted

F3: Upgradation to additional IT skills: The mean value for the respondents of Engineering and Management towards upgradation to additional IT skills (Factor 3) is 4.15 and 4.45 with value of S.D. 0.478, 0.582. The value of t is -5.630 at 0.000 significant levels. It means there is significant difference (the level of significant

level for t-test is less than 0.05) between the opinions of respondents of various sectors towards factor 3. Hence H_0 is accepted and H1 is rejected.

F4: Increasing the effectiveness: The mean value for the respondents of Engineering and Management towards increasing the effectiveness (Factor 4) is 4.11 and 4.15 with value of S.D. 0.482, 0.837. The value of t is -0.561 at 0.000 significant levels. It means there is no significant difference (the level of significant level for t-test is more than 0.05) between the opinions of respondents of various sectors towards factor 4. Hence H_0 is rejected and H_1 is accepted.

F5: Improvement of retention rate: The mean value for the respondents of Engineering and Management towards Improvements of retention rate (Factor 5) is 4.01 and 3.98 with value of S.D. 0.709, 1.100. The value of t is 0.378 at 0.705 significant levels. It means there is no significant difference (the level of significant level for t-test is more than 0.05) between the opinions of respondents of various sectors towards factor 5. Hence Ho is rejected and H_1 is accepted.

Conclusions and Suggestions

The focus of this study was to gain an insight into whether the introduction and implementation of the E-HRM system will empower the faculty fraternity and help in improving the retention rate of the institute. The analysis seems to support our null hypothesis. The respondents have same opinion on easy access to information, increasing the effectiveness and improvement of retention rate while they have different opinions on the efficiency of adopting or upgrading to additional IT tools.

The results suggest that both the Engineering and the Management Faculties are prepared for technological advancement. They believe in progression and the expansion. Implementation of E-HRM in the institutes gave an impression to the employees that the management is concerned about its employees, thus causing a positive impact on commitment, fairness and increased retention rate.

The difference visible in adoption of E-HRM system and upgradation of additional IT skills can be easily managed by the institute through proper training programmes. Such programmes will not only help the employees to overcome their fear of learning and implementing new technology, but also enhance their expertise and overall skill-set.

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PROSPECTS AND CHALLENGES OF SAARC COUNTRIES

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Abstract

The South Asia Association for Regional Cooperation (SAARC), a coalition of seven countries, namely, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka, was instituted in 1985 with the cynosure to accelerate the process of economic and social development in member countries and to increase trade in the region by gradually curbing tariffs. Afghanistan became its eighth member in April 2007. Data show that these states, which have great economic strength in terms of its market size, vast natural resources and capable human resources, are all positioned within a close proximity to one another but are unable to achieve the desired results of enhancing trade. The regions' total trade accounts for less than 1% of the world trade, and its intraregional trade has also been insignificant around 4% of its total trade.

SAARC, which aims to develop the region as a whole, is unable to fully capitalize on the benefits of cooperation as countries are advancing their economic interests through bilateral agreement rather than multilaterally, thus jeopardizing the long-term goal of building a single south Asian region.

Based on the analysis of SAARC trade, this paper tries to identify the potential barriers and impediments which restrict the region from achieving its full potential. It concludes with recommendations to make this organization effective and viable.

Introduction

Regional trade agreements among countries are one of the pertinent trends in world economy these days. Most of the countries of the world are members of a block, and many belong to more than one. Developing countries diversify because their regions integrate with each other to specialize according to regional comparative advantage.

To reap the benefits of regional integration, a trade bloc South Asia Association for Regional Cooperation (SAARC) was instituted in 1985 as a grouping of seven countries, namely, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Afghanistan was added to the regional grouping at the behest of India on 13 November 2005 and became its member on 3 April 2007. With the addition of Afghanistan, the total number of member states was raised to eight.

These countries are extraordinarily diverse in terms of size, economic and social development, geography, political systems, languages, and cultures. Three of the eight countries under South Asian region, viz., Afghanistan, Nepal, and Bhutan, are landlocked and mountainous; while Sri Lanka is an island and the Maldives is an archipelago of low-lying coral islands in the central Indian Ocean.

This regional bloc was created with a view to promote collective economic, technical, social, and cultural development of member states. More specifically, it was meant to accelerate the process of economic and

social development in member countries and to increase trade in the region by gradually cutting down tariffs. However, data show that these states, which have great economic strength in terms of its market size, vast natural resources and capable human resources, are all positioned within proximity to one another but are unable to achieve the desired results of enhancing trade. The regions' total trade accounts for less than 1% of the world trade, and its intraregional trade has also been insignificant around 4% of its total trade.

This shows that SAARC, which aims to develop the region as a whole, is unable to fully capitalize on the benefits of cooperation as countries are advancing their economic interests through bilateral agreement rather than multilaterally, thus jeopardizing the long-term goal of building a single south Asian region.

Based on the analysis of SAARC trade, this paper tries to identify the potential barriers and impediments which restrict the region from achieving its full potential. It concludes with recommendations to make this organization effective and viable.

The paper suggests that to make SAARC a more viable venture, trade should be more liberalized by reducing tariff and nontariff barriers. Political and military rivalry, territorial disputes, border problems, and illegal immigrants are some of the vital reasons for the slow progress in the realization of the goals of SAARC. Appropriate policies need to be formulated for more regional integration.

Trade Creation and Trade Diversion Effects of Regional Integration

When countries become the members of a bloc, the flow of trade diverts from the outside world to the countries entering in the new bloc. This happens because member countries eliminate barriers to trade among themselves, and thus provide considerable amount of incentives to member countries for trade. Regional integration helps the less efficient member countries to develop through trade, which would not have been possible in a milieu of free trade. Developed countries of the group, on their part, can profit by investing in the less developed countries of the group, and in this way the bloc can develop as a whole.

As most of the SAARC countries are underdeveloped, economic integration is much needed for the development of the region. This region needs to move towards a more liberal bloc as huge amount of trade barriers restrict this region from tapping its full potential. Compared with other economic regions this region has been moving very slowly.

No doubt, regional integration has positive impacts in terms of trade promotion, as trade diverts from distant countries to member countries. But on the other hand, it also has negative impact in terms of trade diversion as trade diverts from low-cost-producing countries to high-cost-producing member countries. The whole success of regional integration depends on the net of these two effects. As far as SAARC is concerned, this region has not achieved regional integration in true terms as most of the countries are trading with outside world rather than within the region. Moreover, they have more bilateral agreements which reduce the incentive to connect multilaterally, thus jeopardizing the long-term goal of building a single south Asian region. For the success of regional integration, this region needs to place emphasis on trade among themselves and divert trade from outside countries to member countries.

SAARC Economies: An Overview

In terms of population, SAARC with its eight member states is the largest of all regional organizations with over 1.6 billion people (23% of world population). Two-third of the population of Bangladesh, India and Pakistan are below the age of 30. However, the total GDP of the SAARC member states was US$ 2.1 trillion

in 2011, i.e. only 3% of the total world GDP. Considering the market size in terms of population, SAARC is one of the largest economic blocs in the world. However, as measured by GDP as well as per capita income, the size of the economy of this region is very small as compared to the rest of the world. According to a research, if the member states make an investment of 7.8 % of their GDP to infrastructure, together this bloc can attain and sustain a growth of over 8 %.   Table below shows the macroeconomic indicators of SAARC countries:

Table 1

MACRO ECONOMICINDICATORS OF SAARC COUNTRIES (2012)

Indicators	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
Population Total (millions)	32.4	150.5	0.7383	1241.5	0.3201	30.5	176.7	21.0
Population Growth (average annual %) 2005-2010	2.6	1.1	1.9	1.4	1.4	1.9	1.8	1.0
Population living below $1.25 2005 PPP a day (%of pop. 2010)	....	43.3	10.2	32.7	.....	24.8	21.0	7.0
National poverty line (% of Population)	36.0	31.5	23.2	29.8	.....	25.2	22.3	8.9
Economic Growth GDP at current prices(billion US$)	15.7	99.7	1.5	1722.3	1.5	16.0	174.2	49.5
Growth Rate (average annual %) 2005-2010	7.5	6.2	8.5	8.4	6.4	4.4	4.2	6.4
Per Capita (2005 PPP$) 2010	1185	1488	4780	3073	7645	1075	2411	4555
Gross Domestic Investment Rate (% of GDP)	26.5	24.9	47.9	34.8	56.7	35.0	15.4	27.4
Fiscal Balance Govt. Revenue (% of GDP 2009)	8.7	11.5	23.6	10.4	28	15.0	14.0	14.6
Govt. Expenditure (% of GDP 2009)	21.8	15.9	39.0	15.4	45.7	20.4	20.0	22.1

Source: SAARC Countries Statistical Year Book 2012

In terms of growth, most of the countries involved in the SAARC have low GDP growth, low per capita, and low level of human development. Over 40 % of the world's poor people live in the SAARC countries.

From SAPTA to SAFTA: A Way towards More Free-Trade Area

To boost trade among the SAARC countries, the pact on South Asia Preferential Trading Agreement (SAPTA) was signed on 11 April 1993 and it entered into force on 7 December 1995. The Agreement reflected the desire of the member states to promote and sustain mutual trade and economic cooperation within the SAARC region. As far as creation of FTA is concerned, the SAARC has unique situation compared to other regional groups, because before creating an FTA, this group already had bilateral FTAs among member nations like India-Sri Lanka FTA, India-Nepal FTA, Pakistan-Sri Lanka FTA, etc. the SAARC countries even had FTAs with nonmember countries like Bangkok and BIMSTEC. Signing of SAFTA has helped in boosting the growth in the SAARC countries as member countries are now able to buy commodities at much lower prices. Moreover, it has also helped member states to raise their exports. The exports under SAFTA have been witnessing considerable growth since the launching of the Trade Liberalization Program (TLP). As of 13 September 2012, the total f.o.b. value of exports by member states under SAFTA has crossed US$2 billion since the launching of SAFTA Trade Liberalization Program in July 2006. The cumulative value of exports under SAFTA has crossed US$2 billion but it is far below the actual potential. For the smooth functioning of the SAFTA, customs notifications for implementing Trade Liberalization Program (TLP) are issued as per the agreed timeline by the member states. While shortening the sensitive lists is important to increase the quantum of regional trade, efforts are being made to take out of the sensitive lists those products that are of export interests to the SAARC member states for trade within South Asia.

The FTA agreement of the SAARC regions needs to be strengthened more by promoting intraregional trade, which in result will help in minimizing the trade diversion costs and in maximizing the potential benefits.

Trade Policies in SAARC Countries

Intraregional trade in South Asia is relatively low as compared to other regions, such as ASEAN in Asia. The South Asian countries exchange goods principally with countries outside the region. For example, India's exports to the SAARC nations constitute less than 5% of its total exports during the last decade. Individually, India's exports to Pakistan were 0.4% of its total exports. Only Bangladesh and Sri Lanka have more than 1% share of India's total exports.

Trade liberalization in South Asia started with a series of sweeping reforms in Sri Lanka in 1977-78 followed by a new second phase of trade liberalization during the 1990s. For the rest of the Asia, the 1980s and 1990s saw substantial reductions of tariffs and phasing out of QRs along with liberalization of the exchange regimes. Even after trade liberalization, this economic group still has persistent high level of tariff and nontariff barriers and these result in low trade among the SAARC countries in comparison with other economic groups

Table 2

AVERAGE TARIFF IN THE SAARC COUNTRIES, 2006 (Percent)	
Countries	Tariff Level
Afghanistan	5.7
Bangladesh	15.2
Bhutan	22.1
India	15.8*
Maldives	20.2
Nepal	13.9
Pakistan	14.3
Sri Lanka	11.2
SAARC	15.5

SOURCE: World Tariff Profiles 2006, WTO;
* Trade Policy Review 2007, WTO

The table clearly shows that SAARC still has considerable amount of tariff barriers, which leads to low trade growth in these countries. Even after the signing of SAFTA agreement, member countries are using various trade barriers. Take for example, the case of tea import by Pakistan. As reported by *the Economics Times,* "The country consumes an estimated 140 million kg of tea a year. Nearly three-fourths of this is brought from far away Kenya when its immediate neighbor India together with another SAARC nation Sri Lanka can solve its purpose. Tea is just one example. Be it transport equipment, machinery, drugs and pharmaceuticals, cotton yarn, chemicals or consumer durables, the SAARC nations can easily meet their needs within the group. But till date they chose to look for these goods elsewhere. In fact, Pakistan has been importing consumer durables at exorbitant rates from distant countries, rather than obtaining the same at almost half the cost from its neighbors."

Role of India in SAARC

India is the third largest Asian economy after China and Japan. Among the major emerging markets, India ranks second in terms of economic growth with the IMF forecasting a GDP growth rate of 6.0 percent for 2012. India is the second most populous country in the world, and approximately thirty percent of the country's 1.2 billion inhabitants reside in urban areas. India is the major contributor to human capital development in the SAARC through education and health. Because of its territorial size, huge population and fast growth, India can be central player in the SAARC. In this way, India's notable growth could act as an anchor for the whole region and make a positive contribution to the development of this region. On the other hand, India's position of prominence seems to be a great obstruction in the way of South Asia's complete integration, as small countries of the group view India as both a savior and part of the problem. Another difficulty is that while India borders every other SAARC country, the other SAARC countries with the exception of Afghanistan and Pakistan, do not share any mutual boarders except with India. This means that most SAARC countries have geographical access to the other members only through India. India on its part fears that its neighbors will join together to oppose its interests. This fear is lit and fueled by the role of Pakistan and China's involvement in the region.

To tide over these hurdles member countries need to harmonize their political relation. The success with which European countries had managed to overcome the age-old rivalry between France and Germany and achieve economic integration has inspired many countries, particularly from the developing world, to emulate this model. However, it is difficult to imagine a similar development in the case of India and Pakistan. Nevertheless, India could play a pivotal role in integrating trade and investments and promoting economic cooperation. This could help India to access the energy resources it so badly needs to power its growth. The whole cycle can begin through a process of compromise.

Emphasizing the importance of India in bringing economic integration DS Rawat, the secretary general of the Associated Chambers of Commerce and Industry of India, writes:

"India is required to play a lead role by integrating trade and investments while promoting economic cooperation." "The BIMSTEC member countries could jointly develop infrastructure and technology in enhancing renewable energy." The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) brings together 1.3 billion people or 21 per cent of the world population, a combined GDP of 750 billion dollars and a considerable amount of complementarities," said the Associated Chambers of Commerce and Industry of India (Assocham) in a statement issued. *(The Times of India)*

SAARC – A Bright Hope for South Asian Development

Most of the SAARC countries are well endowed with natural resources, and all are positioned in proximity to each other, but a major problem lies in the utilization of natural as well as human resources. If all the SAARC countries use these resources for their benefits this could help in the development of this region as a whole and thus provide bright hope for South Asian development. Except India and Pakistan most of the countries of this bloc are poor, and are having low GDP growth; the hope of their development lies in the utilization of resources they are well endowed with.

A report in the New York Times gives an estimate of the resources found in Afghanistan alone:

> The United States has discovered nearly $1 trillion in untapped mineral deposits in Afghanistan. The previously unknown deposits–including huge veins of iron, copper, cobalt, gold and critical industrial metals like lithium–are so mammoth and include so many minerals that are essential to modern industry that Afghanistan could eventually be transformed into one of the most important mining centers in the world, the United States officials believe. An internal Pentagon memo, for example, states that Afghanistan could become the "Saudi Arabia of lithium," a key raw material in the manufacture of batteries for laptops and Blackberries, which are a demand of the day. So far, the biggest mineral deposits discovered are of iron and copper, and the quantities are large enough to make Afghanistan a major world producer of both, United States officials said. Other finds include large deposits of niobium, a soft metal used in producing superconducting steel, rare earth elements and large gold deposits in Pashtu areas of southern Afghanistan. (Risen)

Not only Afghanistan, even other countries are endowed with rich natural resources that can be tapped to spur economic growth in the region. Bangladesh, for instance, has significant reserves of mineral resources. Coal reserves of about 3.3 billion tons comprising 5 deposits at depth of 118-1158 meters have been discovered so far in the north-western part of Bangladesh. It also has other mineral recourses like white clay.

The tiny kingdom of Bhutan is also not behind. Geological surveys have revealed an array of valuable mineral deposits in Bhutan, but mining remains a slow-growing portion of the economy. Calcium carbide– the country's main mineral export–limestone, dolomite, gypsum, coal, marble, quartzite, and talc are the primary products of the country's mining activities. Other minerals, extracted in smaller quantities, include slate, beryl, pyrite, and various gemstones, as well as a number of metals, such as lead, copper, tin, iron, and silver, ass sand, limestone, peat, hard stone.

All these reserve deposits with SAARC countries provide hope for their future growth. According to a research if the member states together make an investment of 7.8% of their GDP to infrastructure, this bloc can attain and sustain a growth of over 8%.

SAARC's Global Trade Relations and FDI Flows

A major factor that contributed to the growth of ASEAN countries was external investment from Japan. But SAARC is still not in a position to attract similar investment from outside the region and from within.

The table shows exports and imports of the SAARC countries and FDI inflow and outflow in the region. Most of the SAARC countries are not open and they do not trade much with each other. FDI inflows from outside the region are negligible in comparison to other regional blocs. A major factor that contributed to the growth of theASEAN countries was external investment from Japan. Moreover intra-regional investments are also very low. SAARC needs to harmonize investment policies to facilitate intra-regional as well investment from outside the region.

Table 3

SAARC's GLOBAL TRADE DURING 2011								
Indicators	Afghanistan	Bangladesh	Bhutan	India	Maldives	Nepal	Pakistan	Sri Lanka
Exports of merchandise (% of GDP)	2.5	23.0	38.5	16.1	32.0	5.6	14.5	19.1
Imports of merchandise (% of GDP)	32.9	34.1	59.0	24.5	91.8	34.7	24.7	37.2
FDI inflows (% of GDP)	1.3	1.1	0.9	1.7	53.2	0.6	0.7	0.6
FDI outflows (% of GDP)	.....			0.8	17.7	....	0.0	0.1

Source: SAARC Countries Statistical Year Book 2012

The table clearly shows that FDI inflows in SAARC countries have been insignificant. Not only FDI inflow from outside world is low in this group, but FDI inflow from within the group is also very low. FDI could be used as one of the ways to meet financial constraint which most of the SAARC countries are facing.

Recommendations

1. Myanmar as a SAARC member country: Myanmar should be added to SAARC region. A World Bank's study on cross-country trade of electricity and natural gas in South Asia makes this recommendation:

Myanmar with its vast reserves of energy, both oil and gas, and other natural resources, could export gas to India and possibly to Nepal and Bhutan. All these factors suggest that Myanmar and SAARC would both benefit by working together and the inclusion of Myanmar in SAARC may prove to be a win-win situation for SAARC and Myanmar.

In Myanmar, India can focus on agriculture and allied activities, mining and related products, hydro power, chemicals, upstream and downstream oil and gas operations, renewable energy, gems and jewelry.

2. **Resolving political differences:** Resolving political differences can help SAARC in expanding its intra regional trade.

3. **Harmonizing relation with the member countries:** India needs to harmonize its relation with the member countries which will help India to access the energy resources it so badly needed to power its growth.

4. **Developing Infrastructure:** Infrastructure development is required for better connectivity of the member countries, as most of the SAARC countries lack good infrastructure.

5. **Promoting research and development:** Focus on research and development will help this region to become globally competitive.

6. **Adopting trade-friendly measures:** Reduced problems at customs, lower rates of tariff and nontariff barriers, and better marketing facilities, open borders and trade at borders etc. will help.

7. **Knowing one another's potentials and policies:** Increased awareness of one another's potentials and policies will help in developing common policies.

Conclusion

It will not be correct to use the same yardstick to measure the viability of SAARC countries as the ones used for other regional blocs. While assessing the viability of SAARC, one needs to take in to account the difficult starting position, the different regional situation and different stages of growth of member countries. Except India, which has an impressive growth, all the states are plagued by extreme poverty, low GDP, immense disparities between the rich and the poor, low development in the areas of infrastructure, energy production, and low utilization of natural as well as human recourses. If we compare SAARC with European regional bloc, the latter took nearly 50 years to achieve its current level of economic integration and to move from a common market to economic union. After the integration, the EU has not only free trade but also free mobility of labor and capital, common external tariff policy, a common currency and a central bank. South Asia could also achieve the same level of economic integration as seen in Europe by 2020, argues the group of eminent persons (Report of the SAARC 1998).

To conclude, the growth of intraregional trade has remained subdued due to considerations other than economic issues. In ensuring stability and growth in intraregional trade, bilateral relationship between countries needs to be harmonized and well synchronized.

The trade theory based on comparative cost advantage will no longer be the binding force. The political and military rivalry between countries, often credited for SAARC's inability to work in a unified form, needs to be harmonized. SAARC has the potential for exports in a number of commodities like textiles, gems and jewelry, handicrafts, fish and fish products, minerals, engineering goods, etc. Countries like Afghanistan and Bangladesh has huge amount of mineral resources, which can be of great help in fast industrial development within the region. To be at par with other regional organizations in terms of growth, the countries within this

group need to have more multilateral trade agreements than bilateral agreements. For example, Pakistan can import tea from India rather than from Kenya, at a comparatively lower rate. Although the major SAARC countries are better synchronized in terms of their GDP cycles, they still continue to lag behind in trade integration due to high level of protectionism existing amongst the them, compared to the rest of world. The trade policy of the SAARC countries, therefore, needs to ensure that SAFTA focuses on trade creation within the region rather than trade diversion from the region. To strengthen trade ties within the region and to make this region at par with other regions, more trade liberalization in terms of reduction tariff as well as non tariff is required.

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TURNING TOWARDS THE GREEN INNOVATIONS: A NEED OF THE HOUR IN INDIAN BANKING SECTOR

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Abstract

The "Go-Green" revolution has brought a momentum world over. Everybody is going green today – to become environmentally correct. Sustainable Banking, Ethical Banking, and Green Banking are the contemporary issues in the banking sector too. In order to analyze the Indian scenario the questions answered by this paper includes: Which are India's most eco-friendly banks? What kind of 'green' policies do they follow? And does eco-efficiency leave an impact on the customer? The result drawn is that the Indian banking sector is in its beginning phase and most of the banking companies are venturing into green practices because of available opportunities, social responsibility, government and RBI pressures, competitive advantages, the desire to become the "first mover" and cost reduction. Customers have an inclination towards eco-friendliness but are less aware of the role of banking in saving our planet.

Introduction

Environmentally sustainable industrial development is an essential precondition in today's globalized world. In the race of becoming a green economy countries are getting more concerned about environment, employing measures like 3Rs (Reduce, Recycle and Reuse) and getting more concerned about 3 Ps (People, Planet and Profit) for future sustainability and are finding ways to mitigate the global warming problems.

With the emergence of Kyoto protocol,[1] UNFCCC,[2] EU-ETS,[3] other eco-concerned parties and advent of carbon trading, the business scenario all over the globe is warmed and warned at the same time. Organizations are investing their profits and learning carbon trading practices to turn greener and profitable at the same time.

Since the banking sector is one of the major stake holders and a great contributor to the growing business sector, it has turned its focus to sustainable finance, sustainable banking and green banking. According to IFC, sustainable finance is defined as the provision of financial capital and risk management products to projects and businesses that promote, or do not harm, economic prosperity, environment protection and social justice.[4] Sustainable banking can be defined as a decision by banks to provide products and services only to customers who take into consideration the environmental and social impacts of their activities.[5]

Green banking refers to the initiative by banks to encourage environment-friendly investments. By adopting green HR practices and adopting green managerial framework during their day-to-day operations, banks

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[1] The Kyoto Protocol to the UNFCCC sets binding obligations on industrialized countries to reduce emissions of greenhouse gases.
[2] United Nations Framework Convention on Climate Change
[3] European Union Emissions Trading System
[4] Forum for the Future (2002), p. 3.
[5] Bouma, Jeucken, and Klinkers (2001, p. 101).

heavily contribute towards the carbon emission in terms of use of paper, electricity, stationary, lighting, air conditioning, electronic equipments, etc. even though this is moderate compared to other carbon sensitive industries like steel, oil and gas, etc. In the case of banks, the direct interface with the environment has considerably increased due to rapid growth of the banking industry.

In view of this scenario, the paper is an attempt to check the level of green innovations taken by the Indian banking sector and concludes to suggest ways to improve the green framework in banking industry. The study also aims to check the awareness level of consumers, their concern towards environment and willingness to support the eco-friendly measures of banks.

Green Innovation in Banking as an Opportunity

As Green innovation is the recent buzzword ruling the corporate world, every sector is responding towards this move. The banks in India can enjoy the early mover advantage and build their competitive advantage by acting as an agent of change. The available opportunities for green banking in India are:

- Greater and higher long-term returns by financing more sustainable projects and businesses.

- Saving money in the long run, though initial cost is high.

- Keeping employees more satisfied and giving them a feeling of pride to be working for an environment-responsible company.

- Innovations in the product and services could support in sustained long-term growth along with profitability.

- Enhanced reputation and better brand value.

- To build global presence and better access to capital from international financial organizations

- Increased value to shareholders, etc.

Review of Literature

The Green Brands Survey (2011) is the study conducted by Cohn and Wolfe, Landor Associates and Penn, Schoen and Berland, with consultation from Esty Environmental Partners, which explores consumer attitudes and perceptions towards green issues. The study reveals that consumer interest in green products has expanded across categories. Consumers worldwide intend to purchase more environmental products in the auto, energy and technology sectors.

As per the research, India is the only country to choose deforestation and air pollution as the most important green issue. India is also the only country in which more consumers say it should be developing countries that should focus on green innovation versus developed countries. The 2011 ImagePower® Green Brands Survey reveals that an increasing number of consumers have a desire for going green and are willing to pay relatively more to buy a green product.

According to P. Vijaya Bhaskar, Chief Generel Manager RBI, there is a general lack of adequate awareness on the green issue in India. In this context, the need for sustainable developmental efforts by financial institutions in India assumes urgency and banks, in particular, can help contribute to this effort by playing a meaningful role.

Green innovation as a concept has gained momentum in India, but a great deal of research is required to implement such issues in the banking sector; therefore this subject is chosen to study further.

Objective of the Study

- To assess the level of green innovations taken by Indian Banking Sector.

- To analyze the awareness level of consumers, their concern towards environment and willingness to support eco-friendly measures of banking sector.

- To look forward to green innovations as an opportunity and to suggest ways for improving green framework of banking sector.

Methodology

The study is based on the data collected from multiple secondary and primary sources. The Primary survey was conducted on 100 respondents of Jaipur city from different backgrounds aged 25 and above. This age is chosen as respondents as this is the major customer group handling the banking transactions and is supposed to be aware and smart class customers.

The level of green initiatives and the green elements introduced and adopted by banking sector in the city is also examined by inclining the questionnaire in the direction of asking queries related to paperless banking, online banking, mobile banking, etc.

The level of green initiatives taken by banking sector is obtained through multiple secondary sources and direct interview response from selective bank employees of Axis, SBI, ICICI, and IndusInd Banks.

Main Text and Findings

Exploring the extensive literature the study revealed the status of green innovations in the global environment and in India. The Indian banks are advised to follow the footprints of foreign banks, which will not only help them to build global presence but also help Indian economy become a green economy.

Global Green Initiatives in Banking Sector

In the global scenario, there is growing pressure from society, government and customers for businesses to act in an environmentally responsible way. The attitudes and expectations of consumers are changing rapidly and businesses need to be able to adapt to green initiatives quickly. Those that fail to meet these expectations are causing damage to their brand, ability to win customers and attract and retain the best employees.

Two hundred financial institutions around the globe who are signatories to the United Nations Environment Programme Finance Initiative (UNEPFI) like ABN Amro, Deutsche, Standard Chartered, HSBC Bank etc. attend to the environment issues discussed under Kyoto Protocol. 'BankTrack' a global coalition of NGOs formed a network in 2002 to promote sustainable finance in the commercial sector.[6]

A few green banking strategies adopted world over are: (i) Carbon Credit Business (ii) Green Financial Products and Services (iii) Energy-Efficient Mortgages (iv) Green Credit Cards (v) Project Finance (vi) Carbon Footprint Reduction (vii) Green Buildings (viii) Paperless Banking (ix) Paperless Billing (x) Using Mass Transportation Systems (xi) Social Responsibility Services, etc.

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[6] www.banktrack.org

Working from home or working with flexible timing is another popular culture in foreign countries which reduces the fuel consumption, pollution, etc. A few researches also show that it makes employees around 20 percent more productive and efficient.

Present Scenario in India

Amul, Dabur, Infosys. Taj Hotels, Britannia, Suzlon, Hindustan Unilever, Wipro, Maruti, and Godrej Consumer Products are the top green Indian Brands.[7] None of the financial organizations are lying in the top 10 list, which reflects that the financial sector has been late to respond to the green initiatives. Although the Indian banks have also started taking the green initiatives, they are far behind in the race.

So how can banking contribute to saving environment is an important question to be considered.

Many innovations unleashed by India's banking and financial sector in the last two decades in particular include – any time-anywhere banking through Core Banking, e-banking and a vast network of ATMs, a wide variety of financial products, new delivery models for retail loans, alliances for home loans, extended banking hours, carbon credit, credit, debit and smart cards, etc. They have contributed not only to the growth of banking sector but also to indirectly saving the environment by reducing the carbon footprint of the customers in the branches.

In the banking sector, new standards and codes of conduct promote corporate accountability, transparency, and consideration of impacts on environment and society. Banks are investing / spending huge funds for technology as well as training its staff in order to meet the changed work environment. But still in the Indian scenario there is no law and rule that can hold banks responsible for scrutinizing investment projects before financing and for the environmental damage created by its client.

On line banking is an example of an initiative of Green Banking. When a bank's customers go on-line, the environmental benefits work both ways. Besides several benefits of computerization like speed, accuracy, ambience, efficient handling of sizeable business, etc., there is a factor like paperless business resulting in waste management, eco-friendliness and pollution control. In addition to the providing of on-site and off-site ATMs, some banks have gone ahead with innovative ideas like installing bio-metric ATMs, solar based ATMs, white-labeled ATMs, brown ATMs, SMS alerts, Mobile Banking, etc. Besides reducing any environmental pollution, these initiatives are helping the banks in reducing their cost of operations and delays which results in increased customer satisfaction too.[8]

All the above developments have definitely helped the transformation of banks in India during the last two decades. There has been a remarkable improvement in the working of banks in terms of cutting costs, increasing productivity, improving the profitability, manage the changes in interest rates, handle the foreign exchange rate fluctuations, comply with the regulator's requirements and finally improve the customer service to their best satisfaction.

Some Examples

The specific green initiatives taken by banks in India are – IndusInd Bank introducing solar-powered ATMs, SBI adopting green banking policy and offering green home loans, Union Bank of India's energy efficiency measures, IDBI Bank's membership in National Action Plan on Climate Change, ICICI Bank's Corporate

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[7] Source : http://www.cohnwolfe.com/en/ideas-insights/white-papers/green-brands-survey-2011
[8] Devaprakash R. (2008)

Environmental Stewardship Initiatives and also Clean Technology Initiatives, YES Bank's community development initiatives, ABN Amro Bank's (now Royal Bank of Scotland) launching of Indian Sustainable Development Fund and also the role played by RBI in its CSR initiatives.

The study shows

Consumer survey results

Today the customer has concern for eco-friendliness while making any purchase decision and therefore is creating pressure on companies to take such initiatives. As evident from figure 1, 67% customers, i.e. 12% (Always), 17% (Often), and 38% (sometimes), give a notice on the word "Eco" or "Green" while purchasing and 33% customers, i.e. 22% Rarely and 11% Never give focus on eco-friendly products.
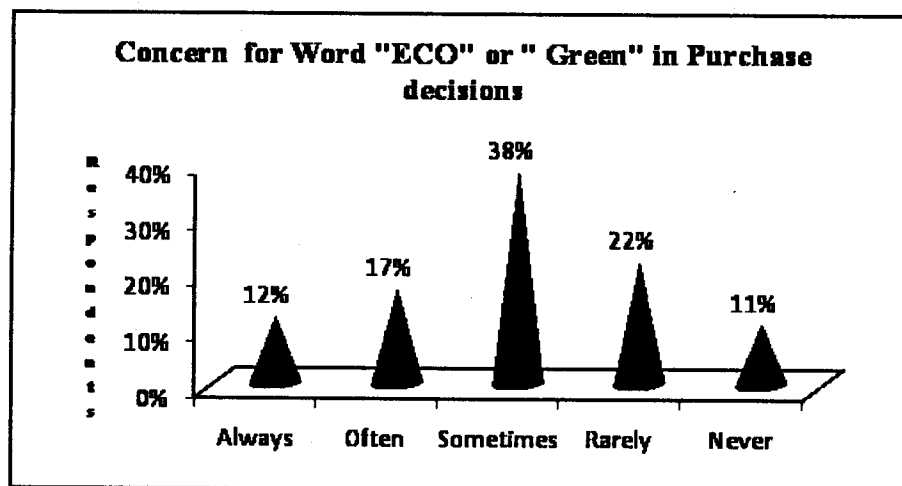
Figure 1: Concern for "Eco" or "Green" in Purchase Decisions

The perception of respondents revealed that the major reasons responsible for increasing problem of global warming are deforestation, increasing pollution, industrial waste, and they revealed that it is less affected by the reasons like disposal of garbage, ultra-violet radiations from electronic gadgets or day-to-day working as compared to the above reasons. Thus consumers believe that as banks are not into production of goods, they hardly contribute to rising environment problems. The customer is totally unaware about how banking sector can make any contribution to saving our planet.

The majority of bank customers demand better products and services, accessibility, trust, confidence, customer care, and they give less importance to branding, advertising and green orientation, etc., while making choice among the multiple banking organizations.

Online banking, Mobile banking or anywhere-anytime banking has been a highly profitable channel for the banking sector due to convenience, flexibility, speed, low transaction fees, user friendliness and technical orientation. Though among the respondents 58% to 72% customers, i.e.18% (Always), 18% (Often), 22% (Sometimes), 14% (Rarely), somehow support e-banking and mobile banking but the reasons for support are not in favor of green banking initiatives like saving petrol or paperless transactions, but are the same as mentioned above (Figure 2 and 3).
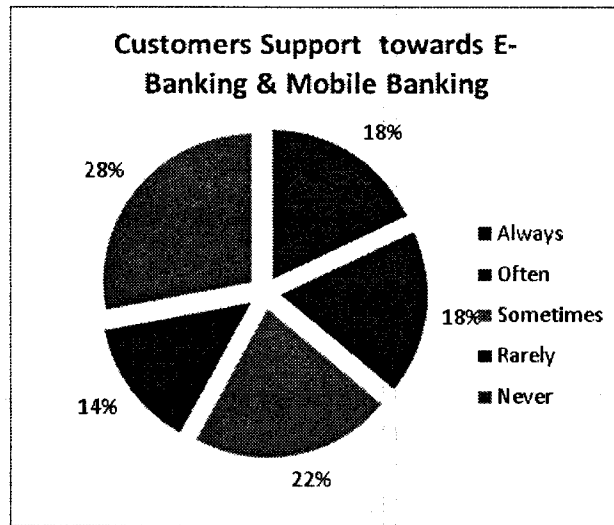
Figure 2: Customers support towards E-banking and Mobile Banking
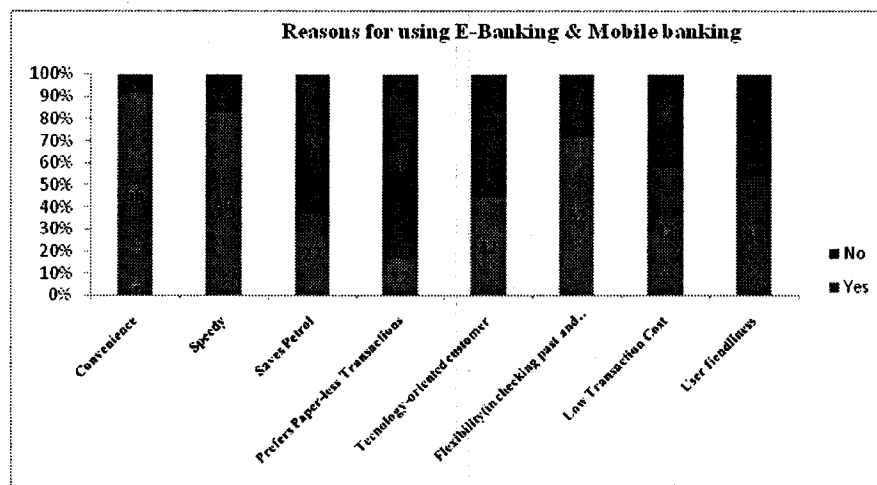

Figure 3: Reasons for using E-Banking and Mobile Banking

Thus banking sector for sustainability has to work first in the direction of creating awareness and then introduce its major initiatives and attract awakened group as target customers.

Future of Green Banking in India

The vision statement of RBI for 2012-2015 is totally oriented towards promoting a cashless paperless society, i.e. a society with green initiatives. It also emphasized the use of electronic payment products and services which can be accessed anywhere and anytime by all at affordable prices.

So apart from the RBI efforts and introduction of multiple green innovations, Green Banking could also be initiated by managing day-to-day working through:

• Improving energy efficiency by making maximum use of power-saving gadgets.

• Adopting flexible work timings, work from home concept and adopting smart phone technology. This

will reduce congestion on the roads and in effect reduce pollution.

- Try to reduce travel and especially air travel, this will encourage reducing high altitude carbon emission.

- E-learning and e-training, this will reduce the need of paper and in turn the requirement for employees or trainees or trainers to travel to or from the training centers.

- Making maximum use of stationary, and printing on both sides of the paper and recycling will help in waste management.

- On-line marketing, especially on social networking sites, provides maximum coverage and minimum environment impact.

- Encouraging and motivating employees for saving energy by switching off computers, laptops, copiers, lights air conditioners etc. while not in use.

Conclusion

Green Banking is a revolution in the area of traditional banking practices. The number of Indian banks is setting the trend with green initiatives and sustainability measures in their day-to-day operations. In India, particularly in Jaipur city, people have concern for eco-friendliness, but are less aware about banking initiatives in this direction. Customers are making use of green innovations but for the reason of convenience and speed and not for the sake of saving the planet.

Most of the banking companies are venturing into green practices because of available opportunities, social responsibility, government and RBI pressures, competitive advantages, the desire to become the "first mover" and cost reduction.

Green innovations, though it is the need of the hour in banking sector, is still in its infancy and a lot of research is to be done in this direction to fully explore the area. More than mere exploration the need is to act – and act now.

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INNOVATIVE PRACTICES IN PRINT ADVERTISING

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Introduction

The contemporary sphere of advertising is making the call for innovation intense day by day. Advertising today has become a gladiatorial combat and innovation is the sure shot winner's weapon of the advertising arena.

This paper analyses the relevant contemporary innovative practices as observed in print advertising nationally and internationally and the response of the consumers towards it. It combines information about the consumer behavior towards an innovation used by a brand in advertising through print media. This paper also throws light on the adequacy and appropriateness of innovative practices of national and international print advertising.

Objective of the Research

This research paper will try to judge the effectiveness of the innovative practices being used in print advertising today. The World Newspaper Advertising Conference examined many of the new trends and some unusual projects that show just how flexible newspapers can be.

Research Problem

The research problem of the proposed study is to find out whether any impact is created by the advertisements in newspapers which are using various innovations.

Hypothesis

An advertisement using innovations will have more impact on the viewers (readers) than an advertisement not using any innovations.

Literature Survey

In the chapter on "Advertising" in his book *Marketing Management*[1], Philip Kotler stressed the effectiveness of innovation by saying that the advertiser must develop a creative concept or a big idea that will be the message strategy in a distinctive and memorable way. Usually, copywriters and art directors will team up to generate many creative concepts, hoping that one of these concepts will turn out to be a big idea. Kotler is silent about any specific study which proves the hypothesis of this research.

In an article "Media Innovations Are Not Brand Ideas," published in *The Economic Times*, Mar 25, 2010[2], it has been stated that the future of brand building will be about creating brand-consumer conversations through media-neutral ideas, and not about buying idea-neutral media. Fragmentation, regional complexity and media costs have resulted in media agencies developing specialized skills to master this new landscape. As a result, they have grown in size and stature. However, by no stretch of imagination can media be said to be more

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important than the idea creators themselves, for the simple reason that media innovations are not brand ideas. A media innovation can make a good brand idea great. But, a weak brand idea renders a strong media innovation useless. In a world of over-choice and hyper competition, merely focusing on brand awareness is futile. The goal of brands should not be to increase awareness, but to reduce choice. And the only way this can be achieved is through avid consumer engagement. This again proves the hypothesis of this research paper. Though the book *Advertising Management* by C. L. Tyagi and Arun Kumar[3], also reinforces the idea discussed by Philip Kotler, it is silent on any specific Indian study conducted on print media. Batra, Myers & Aaker in their book Advertising Management have discussed many articles about media innovations but haven't quoted any research study which comes closer to the research problem put forward by the research paper.

The relevance of the research paper can be proven from the book of Manendra Mohan titled *Advertising Management*[4]. This is a comprehensive book presenting an integrated approach to concepts and cases in advertising and sales promotion. It is written in the Indian context but lacks comprehensive reference to media innovation studies. Another famous Indian book *Foundations of Advertising Theory and Practice* by S. A. Chunawala and K. C. Sethia[5], covers a lot about print media – newspapers and magazine – adverting in a perfect and comprehensive manner with supporting data, presenting good examples and case studies but does not deal in depth about media innovations. *Response to Innovation: A Study of Popular Argument about New Mass Media* by Robert Edward Davis[6] talks about mass media, motion picture and social aspects of the USA but is silent on the print media innovation in display advertising and on Indian application of media innovation. *Handbook of Print Media – Technologies and Production Method* by Helmut Kipphan[7], does talk about the different technology of print innovations, yet lack knowledge of acceptability and effectiveness of print media innovation which again makes this research paper very relevant as we can see that everyone is talking about the innovations in advertising but none is discussing their effectiveness as far as audience's perspective is concerned.

Engelbert Dockner and Steffen Jorgensen's article "Optimal Advertising Policies for Diffusion Models of New Product Innovation in Monopolistic Situations,"[8] discusses how to determine optimal advertising strategies for new product diffusion models. The above authors have tried to characterize the structure of an optimal advertising strategy for various versions of diffusion model which lacks the full reference and study of the effectiveness of media innovations.

"The Effect of Information Overload on the Innovation Choice Process Innovation Overload,"[9] a study by Paul A. Herbig,[10] Hugh Kramer,[11] talks about information overload which is a subject of immense debate among consumer marketers. Does too much of information bombardment on consumer cause an overload on the consumer resulting into adverse judgmental decision making? Can the consumers control the flow of information towards them? Similar is the case with a lesser known and little researched phenomenon called "Innovation Overload," which deals with the ever increasing pace of innovations. The article examines the effect 'Innovation Overload' will have on diffusion curves and adoption patterns. The article does talk about the information overload of innovation but lacks specific reference to any media innovation which may generate overload and decrease the effectiveness of advertisement. Hence the literature survey proves that the proposed study is unique and will significantly add to present knowledge of media innovation, especially in the Indian context.

Research Design

This research paper seeks to study the facts about the innovative practices that are being used by advertisers and advertising agencies to popularize their products. Thus this research is of exploratory type and the data that has been used for analysis are taken from secondary sources, mostly journals, magazines and various Web sites.

Operational Definitions

Innovation: "Innovation" in this paper means those creative ideas and technological improvements which are used by the advertisers or advertising agencies to make the ads more attractive and eye catching.

Advertisements: "Advertisements" in this paper means the advertisements which are published in newspapers or magazines.

Creating a buzz: In this paper "creating a buzz" means to get the audience talking about you to create a recall.

Effective frequency: In this paper "effective frequency" means the number of times you need to publish an advertisement to create a recall in the reader's mind.

Data and Data Analysis

Gone are the days when attractive color schemes and punch lines were enough to make a mark. Today, you have to go far beyond that. Surely, the advertisers today are not leaving any stone unturned.

Inks

Ogilvy India launched HULs with a creative innovation where the aroma of coffee was added to the newspaper ink. The idea was to launch Bru Gold with its concept of being 100 percent coffee and having a strong aroma. The advertisers wanted to highlight this aspect of the coffee as it stands for the aroma. According to the critics, it was relevant enough to create an aromatic appeal amongst the readers of 19th February's, Sunday Times in Mumbai, New Delhi and Bengaluru. Similar perfumed ink concept was used by Godrej when it launched the campaign for its AER range of home and car fragrances with a perfumed print ad in the Bombay Times. These ads were very successful in creating a buzz amongst the audience and the critics of the advertising world. And this surely can be seen from the reviews of AFAQS advertising review magazine's articles. Hence it proves the hypothesis of the research paper to be right.[12]

Advertising Innovations Used by Advertisers and Advertising Agencies

Could you imagine the moment when you are surprised and have your eyes widened to find your entire newspaper of hard silver paper with the headline on the front page as "Time for Volkswagen"?

A bright shiny silver jacket was used to create an impression of the all-new silver Jetta, which was actually the USP of Jetta. Lutz Kothe, Head of Marketing and PR, Volkswagen Group Sales India, said, "The jacket connotes the USPs of the all-new Jetta. Silver is our communication color and therefore the jacket is silver, a much thicker cover represents the quality of the car while the glitzy looks stands for the all-new design of the new Jetta."[13]
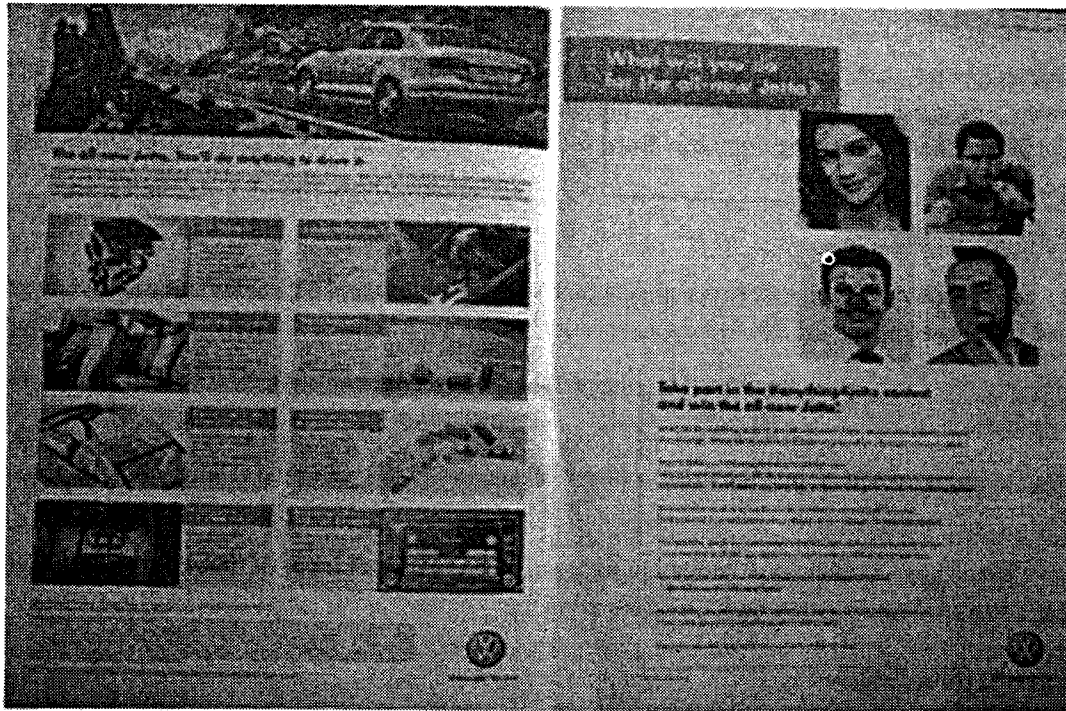
(Image source: www.exchangeformedia.com)

Audio-in-print – "A Talking Ad"

The main aim of this ad was again the same: to create a buzz amongst the customer community. And it really was a buzz to be cheered for in the Volkswagen group as well as the Mediacon Ad Agency, the creators of these innovative ad campaigns. The prime motive of this ad innovation was to get the audience talking about the product for a long time. And not only the people but the media and news channels were also talking about Volkswagen's giant leap to touch the unexplored boundaries which print media was yet to see.

And it needed no magical wand for that; but Mediacon deserves great applause for creating the magic using a photodiode, audio clip and a small speaker. They get activated when the reader turns the leaf of the newspaper and start playing in an endless loop until the leaf is refolded. This buzz factor which Volkswagen has created helps the company reduce the advertisement's effective frequency to 1. Effective frequency means the number of times the ad has to be shown to get the word spread amongst the audiences. And to achieve that at a cost-cutting price was really commendable. And the retention period was around a year.

Print media, which advertisers were almost beginning to neglect, was threatened to be on a verge of demise due to the tremendous use of cyber-space advertising and various other stronger medium available. But this audio-in-print truly proved to be a carpet bombing strategy for Volkswagen for its self-introductory advertising in India.

Print has its advantage of still remaining the strongest news delivering agent, especially for the age groups above thirties, and it has a longer shelf life as well. And Volkswagen has given it stronger reasons to be called a priority advertising medium by giving India its first print Roadblock.[14]
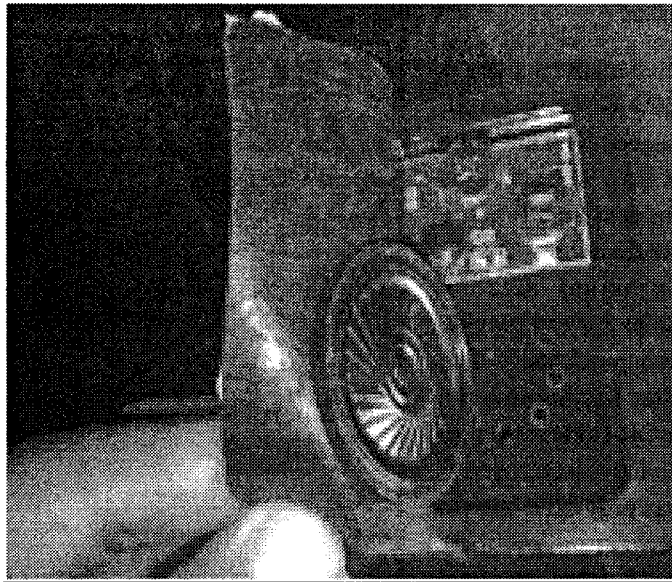
Image source: www.meowlife.blogspot.com

Another Print Advertisement That Made the Readers Shiver

There can be no denial of the fact that VW is the master of creative strategies in print advertising. After the success of audio-in-print, to create a buzz amongst the audience, VW created a four-page ad which said, "Feel the shiver of excitement."

Not much other than a light detecting resister (LDR) was required to literally create an ad apt to its punch line. The light detecting resister (LDR) is connected to a battery-operated buzzer which started vibrating as soon as the newspaper leaf is unfolded and the vibration stimulates the vroom sound of an engine just to create an urge amongst the people to test drive VW cars. But this ad hardly surprised the audience because they had seen one of the greatest print media innovations in talking newspaper advertising.[15]
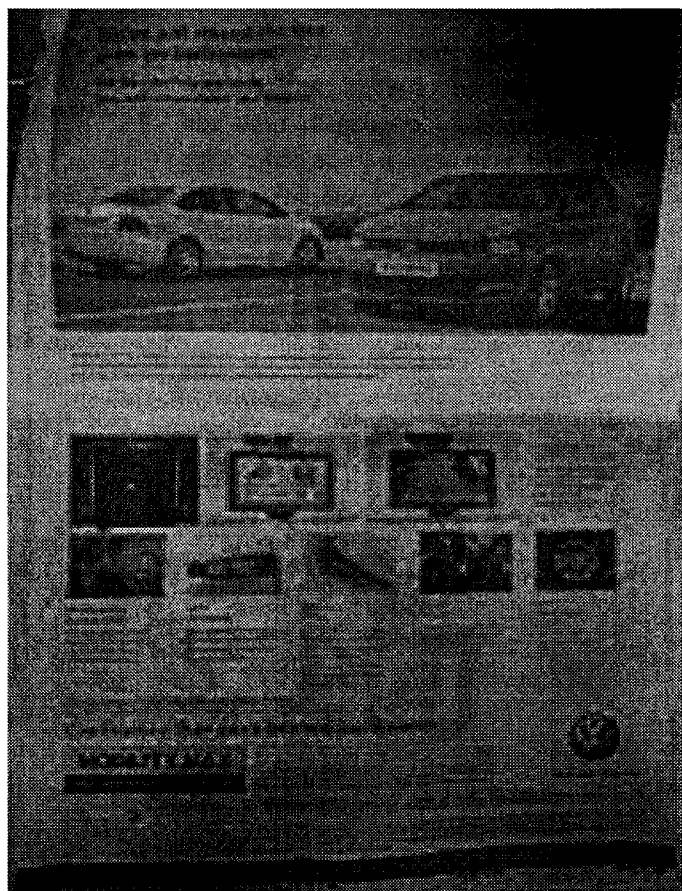
Quick Response (QR) Code

One of the most widely used markers today is the Quick Response (QR) Code, a small, square code that when scanned with a mobile phone, opens a file or links to a Web site. This file could be a list of train departure times, a music file or a simple Word document. Tourist brochures can deliver actual data on attractions, while advertisements can provide more information on food products.[16] The Indian newspaper *Mid-Day* has become the first in the country to use QR Codes as a way to give readers a more interactive experience.[17] Although the QR code was only used once to begin with, the newspaper plans to roll them out more frequently as readers become acquainted with the technology. The QR codes direct readers an mp4 video.

Augmented Reality

Volkswagen has been successful in implementing the use of Augmented Reality and Quick Response Codes in its print ads where you just have to scan these codes with your smart phone and a Web site link or a complete video of the brand begins where you can visualize the minutest of the details which cannot be published in the single print advertisement plus it also has an advantage that it can be viewed as much number of times as you want but yet in countries like India people are still not very familiar with these codes and tend to avoid them. But with the increasing use of smart phones and techno-savvy attitude VW will be able to use these advancements in India also.[18]
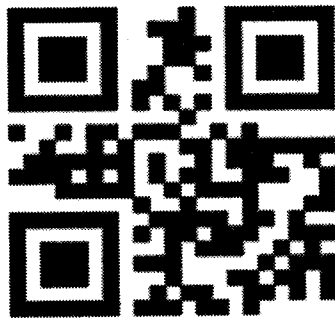
(Image Source: www.digitalbuzzblog.com)

Talking about the numbers, Volkswagen had just had a meager growth of 1.3% increase in sales in 2009 as compared to sales in 2008 with the number of units sold standing at 19,001. But with the launch of the brand campaign in Nov 2009 its sales improved in the following year. There was a whopping growth of 181% with a total of 53,341 units sold and also a 100% increase in the number of employees. During the period of Jan-June 2011 Volkswagen had already sold 55,091 units recording a growth of over 217% during the same period. That is around 10 times the growth figure of Maruti.

3D in Print

Sources: www.forum.xcitefun.net ; http://www.bestmediainfo.com

Providing three-dimensional experience in print advertisements has been tried out by many newspapers and magazines. For example, the Hindi daily Dainik Bhaskar, Jaipur, had its 5th November 10 issue full of 3D pictures and advertisements. Again on Diwali the same daily brought a unique interactive and spectacular 3D viewing experience for its readers.

Before trying out this concept, it was pre-tested with the readers and the advertisers and their reaction encouraged the daily to circulate this unique issue. Before the distribution of the 3D edition, the production department did a few dry runs also.

Speaking on the challenges in the execution of the task, Manoj Agarwal, COO, Rajasthan, Dainik Bhaskar Group, stated, "The task did look daunting at the start but then sheer belief in our capability and result-oriented project working made it possible with joint efforts of all the verticals. Doing unique things and providing newer, relevant experience to the readers and in the newspaper category has been a focus area for us and I am sure that this initiative will strengthen our image as an innovative and aggressive brand." This issue was surely read by maximum readers to know about the 3D effect and surely all the advertisements published in 3D got noticed very well and remained in the conversations for a long period of time. This again proves the hypothesis of the paper to be right.[19]

Video-in-Print (VIP)

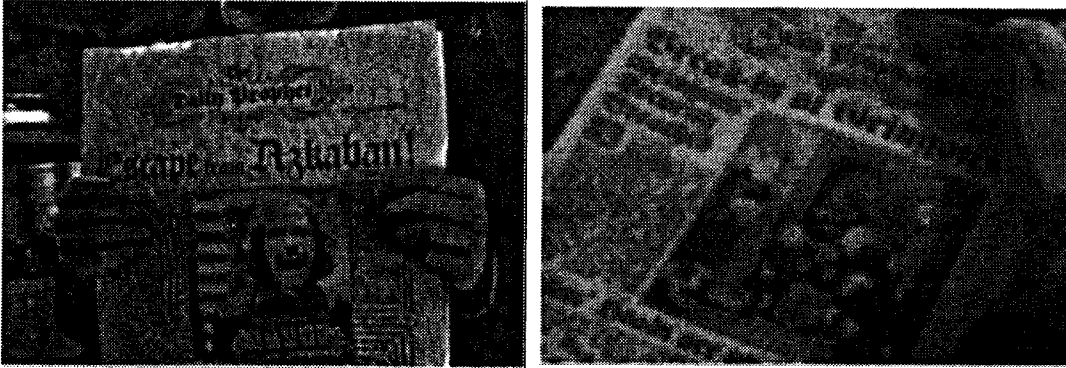A newspaper from the movie Harry Potter and the Prisoner of Azkaban with moving pictures:

Image Source: harrypotter.wikia.com

The print industry in contemporary advertising world is facing maximum turbulence and greater uncertainties. Surely, you need a magical wand sometimes to create the magic. Do you remember a newspaper of the wizardly world of Harry Potter movies *The Daily Prophet,* which had some moving pictures in it? Do you think this kind of magic can be really created in magazines or newspapers?

This concept of Video-in-Print (VIP) has taken innovations in print advertising to the next level where you would least expect to find it. This was not really the work of some J. K. Rowling's wizard but of the creative heads of the advertising agencies. This effect was achieved by inserting a small screen (90 mm wide and just 3 mm thick), which can present high-definition video and audio, in a brochure or magazine. This technology not only increases the effectiveness of print advertisements but also adds content previously restricted to television or radio channels.[20]

CBS is embedding a video player in a print ad in Entertainment Weekly. The CBS's foray into a print-digital alliance plays full-motion video at a crisp resolution. The ad is dubbed by CBS and partner Pepsi Max as "the first-ever VIP (video-in-print) promotion." Opening the page activates the player, which is a quarter-inch-thick screen seen through a cutaway between two pages concealing the larger circuit board underneath.

Audience and critics did comment on the loud sound with no volume controls and poorly-shot videos but it was seriously considered as a dramatic shift in the advertising world by most of the advertising critique magazines and news channels.

The magazine not only earned a lot with this form of advertising, which had greater potential of catching the reader's eye in comparison with other existing forms of advertising but also managed to create a buzz around and earned a lot of publicity through word of mouth and by creating news.
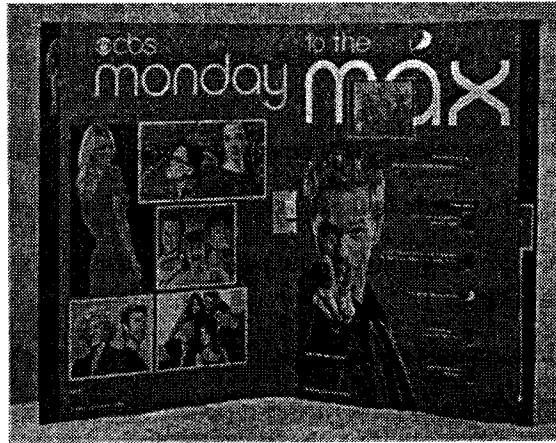
Image Source: http://www.wired.com

Findings

- There are pros and cons to any kind of advertising, and it is beneficial to understand what these are before dipping into your hard-earned marketing budget.

- Every advertising innovation that we analyzed in this paper was successful in making a mark in the readers' mind and that is what innovation is all about.

- Q. R. codes and Augmented Reality have helped the readers not only get into the minutest details but also carry it along with them.

- The more technologically sound the people get, the better are the chances of advertising in print media.

- Print media, once thought to be on the verge of demise, is now slowly proving to be a charm for the advertisers as the innovations that it carries are more talked of and really create a mark, unlike the regular advertisements.

- Advertising innovations are liked by the people only if they are relevant to the brand they are used for.

- Advertising innovations are more successful in creating an impact on the readers than the usual advertisements, as proven by every innovation that we talked about.

- Innovations have helped the brands to turn their effective frequency to 1 and the retention period to around one year.

- Innovations create news on the Web sites and news channels and get the people talking about them for longer time duration. This helps good publicity.

- All the above findings are clearly proving the hypothesis that an advertisement using innovations will have more impact on the viewers (readers) than one not using any innovations to be right.

Limitations

1. This research paper is totally an analytical paper and it had to rely only the secondary data because collecting the primary data in this type of research makes it as vast as a thesis.

2. The study did not take into consideration the frequency of ads as the innovative ads are not published frequently.

3. The study does not explore the role of creative variables of an advertisement such as headline, creative theme, illustration, body copy, advertising appeals, execution style, etc. as it is considered to be the job of the advertising agency producing the ad.

4. The study has not considered the role of the time of the release of advertisement using innovations.

5. The impact created by the offers made in the advertisements have not been considered by the study.

6. The effect of the editorial columns printed on the page on which the ads using innovations appear has not been considered by this study.

7. This study does not take into account the consumer behavior regarding the particular brand.

8. The study is exploratory in nature and conducted as a part of the Ph.D. degree; hence it will suffer from resource constraints in terms of time and money.

9. Any type of external environmental factors like strikes, agitation, political unrest, communal riots, etc. have not been considered by this study

Conclusion

There are close to 70-80 ads in the newspapers and most of them the readers tend to forget even though the shelf life of newspaper is longer as compared to other traditional media. Readers mostly read the ads in which they are interested and which are really eye catching. Ad agencies have been creating buzz/viral marketing through the innovations that they use in print advertising. Innovations have helped the brands to turn their effective frequency to 1 and the retention period to around one year. To add to the cherry on the cake, the newspapers and TV channels also give you the required publicity by talking about these ads and taking interviews of the creators of these ads that have been shifting in unconventional directions lately in an attempt to break through cluttered marketing. Though these innovative strategies have been successful in creating a buzz, there have been many critics who pointed out that if everybody tried to make talking ads, then the newspaper will end up becoming too noisy; others were worried about the e-waste generated. Besides, not everyone likes the idea of having an unnecessarily vibrating newspaper. Moreover, many people complained that the speakers/pulsating devices had been stolen from the newspapers before they were delivered. Despite these limitations, it must be admitted that innovative advertising boosts up sales.

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IT SECURITY PRACTICES IN AN ORGANIZATION: BALANCING TECHNOLOGY AND MANAGEMENT PERSPECTIVE

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Abstract

IT Security has long been considered a domain of technology. The hardcore IT specialists and technologists have been a source of influence in planning, designing, developing and implementing of IT security for organizations. IT security has been a matter of grave concern world wide since 1977 with reported incidents of security breaches like virus attacks, intrusion, spam emails, hacking, spoofing, phishing, SQL injection, DoS attacks, credit card and debit card misuse, identity theft, etc. As per recently available statistics, due to the unfortunate events of security breaches, globally, revenue losses have been reported which ranges from few million dollars to billions of dollars in some cases. Employing IT security has been traditionally seen as tantamount to technological afterthought overlooking the role of management practices. The above-mentioned evidences are adequate to establish the fact that management perspective should complement the technological aspect of IT security so that it can be applied in an organization in its entirety. The objective of this research paper is to explore and illustrate the evolving role and importance of employing management practices together with technological practices in IT security. The research paper highlights various established management practices and models associated with IT security along with their limitations through the help of recent published work. In addition, the areas that need further investigations are also identified in this paper.

Introduction

In today's information age, millions of people use software and applications to perform personal, business and professional activities bearing in mind that the software they use is reliable and trustworthy and operations they perform are secured. The world's economy depends on the coordinated and secured use of software which nowadays is considered to be an essential and integral part of everyday life. Security brings value to organizational units through use of software in terms of people's trust. Software is attacked intentionally to get hold of sensitive and highly important information. This results in breaches in security, organization's reputation and most importantly people's trust. The sole intention of the attacker is to carry out well funded, destructive and unethical objectives that could cause harm and damage to individuals, organizations, nations and the world at large (Banerjee 123-128).

Although, *risk* and *business* are two terms which are considered to be undividable, still, when it comes to security risk to data and information, unidentified challenges arise for organizations and government equally. Significant contributions are put forward by the technology community in terms of preventive, defensive and reactive methods and controls as a mitigation mechanism against security infringement. A number of security standards are also defined containing a set of security policies, procedures and guidelines which complement security methods and controls and aid security management. The technological approach and management approach as a separate individual unit to security of information has proven to be insufficient and there has been a rise in security incidents over the years (Johnson and Dimitriadis 16-24).

When it comes to implementing security in information and technology domain, the role of IT specialist has always been considered to be of utmost importance and a lack of management perspective to implementation of security is present. Although researchers have done remarkable work in the field of security and its responsibility in information and technology, still, much work needs to be carried out in order to make software more secure and reliable by a blend and synchronization of the technology perspective with management perspective. Extending the work carried out earlier, in this paper we intend to explore and illustrate the evolving role and importance of employing management practices together with technological practices in IT security. The rest of the paper is organized as follows: Section II highlights the importance of IT security from technology and management perspective, and section III, presents the review of literature as a brief overview of various established IT security standards, methods, and models along with its limitations. Section IV discusses the objective of our research work, and Section V focuses on the areas that need further investigations. 'Conclusion and Future Work' are given in Section VI.

Importance of It Security: Technology versus Management Perspective

Before proceeding further, we need to understand what security is? Security is a degree of protection where a separation is created between assets and threats (Schneier). The chief attributes which contribute to the security of information technology, includes Confidentiality, Integrity and Availability. Confidentiality is maintaining the privacy of the people and their information by preventing the disclosure of information to unauthorized system. Integrity ensures that data cannot be modified untraceably. Availability guarantees that the information must be made available whenever it is needed (Tipton and Krause). Now, we will discuss IT security from both technology as well as management perspective as follows:

It Security from Technology Perspective

In the IT realm, security exists as software security, computer security, data security, information security, web security and network security (Schneier). Software security also called application security includes procedures adopted throughout the software development process to minimize or prevent threats and attacks resulting due to exploits and vulnerabilities present owing to the flaws introduced or kept in the software during the requirements, design, development, deployment and maintenance phase of the software (McGraw). Data Security comprises of protection of database(s) from unwanted actions of unauthorized users (Glass 495-506).

Computer security encompasses information and assets protection from theft, corruption, or natural disaster, while allowing it to remain accessible and productive to its intended users (Bishop 67-69).

Information security includes protection of information and its system from unauthorized access, use, disclosure, disruption, modification, perusal, inspection, recording or destruction (Tipton and Krause). Network

security encompasses various provisions and policies taken by network administrator to prevent and monitor unauthorized access, misuse, modification, or denial of a computer network and network-accessible resources (Stallings).

Web security includes the objective to establish rules and measures to use against attacks over the Internet (Chakrabarti 13-21). Security controls such as firewalls, antivirus, data encryption mechanisms, digital signatures, digital certificates, data backup procedures, access control mechanisms, intrusion detection systems, secured software development models and methodologies, biometric systems, etc. are used for security of IT from technology perspective (Dimitriadis).

It Security from Management Perspective

Standards are principles which are established means of determining the quality of a practice or procedure when used as a model. Standard can also be defined as approved policies which can be monitored for compliance by an authority as a minimum acceptable benchmark. They guide decisions and help in achieving a rational outcome. Within an organization, the policy is adopted at a top management level and procedures are made to work at middle management level (Crook). It is a well-known fact that standards are important for the healthy growth of an organization (Role of Standards: A guide for small and medium-sized enterprises). For doing successful and productive operations in a business, we need standards. In a similar fashion, to implement security for information technology, an organization needs to adopt a model in the form of policies, guidelines, and procedures to standardize its secured operations.

To ensure proper security, the focus of an organization should be on the people and its management more than on technology. It is statistically proven that IT security administration is a management issue and not purely a technical issue. It is also stated that in IT security, 1/3rd of the time is spent on the tackling of technical issues and 2/3rd of the remaining time is spent on developing policies and procedures, performing security reviews and risk management, addressing contingency plans and on promotion of security awareness. Hence it is recommended that an organization needs to adopt a systematic approach for identification, assessment and management of information security threats and risk in the form of Information Security Management (ISM) (Rezakhani 4-8).

An organization needs a system for implementation of security standards often called Information Security Management System (ISMS). An ISMS is defined as a coherent set of policies for the implementation of information security management (Vacca). Since standards provides a theoretical way to solve a practical problem, hence, to practice such theories, i.e., to bridge the gap between theory and practical, the management of information security should be equipped with a sound maturity model like CMMI (Capability Maturity Model Integration), ISO (International Standardization Organization), ITIL (IT Infrastructure Library), etc. (Aceituno).

To address the issue of information security of an organization, a number of governments and institutes have developed a number of models and standards based on ISMS framework, which are readily available in the market for its adoption into the system. Organizations and Institutions like NIST, ISO/IEC, ITIL, etc. have developed and provided a number of Information Security standards and guidelines and have also proposed security models for their implementation in an organization. Although a number of information security standards exists, but an organization can derive profit only if these standards are implemented in a proper way (Thompson).

Combining Technology and Management Aspect of It

The technology perspective of IT security is more a concern with the tactical aspect which equates to technical requirements only. The management perspective of IT security focuses on the strategic aspect which equate to management requirements only (Seeholzer, pp.144-161). Every organization has specific business needs and to embed the information security into an organization, a detailed analysis of that organization becomes a necessity (Dimitriadis). Moreover, senior management, practitioners of information security and technology people should be made aware that a team effort and cooperation at all levels is required to secure the assets of an organization (Banerjee, pp.1-5).

Literature Review: Information Security Standard, Models and Methods

Many standards, models and methods have been proposed by many research organizations and institutions for security implementation taking into consideration the management perspective together with technical perspective but the latter seems to overpower the former in almost every case. The current standards of information security and management can be classified as process oriented like CMMI, ISO 9001:2000, ITIL/ITSM, control oriented like ISO13335-4, product oriented like common criteria, risk analysis oriented like OCTAVE, and best practice oriented like COBIT, ISO/IEC 17799:2000 (Aceituno). We present here a brief review of the various standards, models and methods currently being used for implementation of IT security in an organization:

Standards for Information Security Management

Looking into the present-day and future scenario, awareness has to be created among organizations for a need to dedicate more resources for the protection of information assets. For addressing the issues of information security and management, standards are laid down by organizations and institutions. Some of the commonly applicable standards in information security and management are summarized below:

ISO Standards

International Organization for Standardization (ISO) established in 1947 collaborated with International Electrotechnical Commission (IEC) and International Telecommunication Union (ITU) on Information and Communication Technology (ICT) standards. Some of the significant standards laid down by ISO/ IEC are as follows:

Some of the published standards

ISO/IEC Standards	Area(s) addressed
ISO/IEC 27000	Includes overview and vocabulary of Information security management systems (ISMS)
ISO/IEC 27001	Covers requirements related to ISMS
ISO/IEC 27002	Code of practice for information security management
ISO/IEC 27003	Provides implementation guidelines for ISMS
ISO/IEC 27004	Contains measurement of Information security management

ISO/IEC 27005	Covers Information security risk management
ISO/IEC 27006	Includes requirements for bodies providing ISMS audit / certification
ISO/IEC 27010	Provides Security techniques for IT and Information security management for inter-sector and inter-organizational communications
ISO/IEC 27011	Provides Information security management guidelines for telecommunications organizations based on ISO/IEC 27002
ISO/IEC 27031	Provides Guidelines for information and communications technology readiness for business continuity
ISO/IEC 27033-1	Includes overview and concepts of Network security
ISO/IEC 27035	Covers Security incident management

Source: http://en.wikipedia.org/wiki/ISO/IEC_27000-series
Some of the standards under publication

ISO/IEC Standards	Area(s) addressed
ISO/IEC 27007	Provides ISMS auditing guidelines with focus on management system
ISO/IEC 27008	Includes guidance for auditors on ISMS controls with focus on the information security controls
ISO/IEC 27013	Contains guideline on the integrated implementation of ISO/IEC 20000-1 and ISO/IEC 27001
ISO/IEC 27014	Provides a framework for Information security governance
ISO/IEC 27015	Provides Information security management guidelines for the finance and insurance sectors
ISO/IEC 27032	Includes guideline for Cyber Security
ISO/IEC 27033	Covers IT network security, a multi-part standard based on ISO/IEC 18028:2006
ISO/IEC 27034	Provides guideline for application security
ISO/IEC 27036	Includes guidelines for security of outsourcing
ISO/IEC 27037	Offers guidelines for identification, collection and/or acquisition and preservation of digital evidence

Source: http://en.wikipedia.org/wiki/ISO/IEC_27000-series

Apart from the ISO/IEC security standards mentioned above in tabular format, ISO/IEC 15408, is also called Common Criteria. It is a standard for evaluation criteria for IT security and constitutes three components, viz., ISO/IEC 15408-1:2005 which includes introduction and general models, ISO/IEC 15408-1:2005 which comprises of security functional requirements, and ISO/IEC 15408:3:2005 which contains requirements for security assurance. Further, ISO/IEC 13335 standard focuses on the IT security management and comprises

of four components, viz., ISO/IEC 13335-1:2004 which contains concepts and models for information and communication technology security management, ISO/IEC 13335:3:1998 which comprises of techniques for management of IT security, ISO/IEC 13335-4:2000 which focuses on technical security controls, and ISO/IEC 13335-5:2001 which covers network security management guidance (Djouab 3231-3239)

National Institute of Science and Technology (NIST)

National Institute of Science and Technology (NIST) founded in 1901 is a non-regulatory federal agency within the U.S. Department of Commerce. NIST promotes innovation and industrial competitiveness by advancing measurement science, standards, and technology in ways that enhance economic security and improve our quality of life.

Some of the standards which are published by NIST are given below with areas they intend to addressed related to IT security management:

NIST Standards	Area(s) addressed
SP 800-137	IS Continuous Monitoring for Federal IS and Organizations
SP 800-115	Technical Guide to Information Security Testing and Assessment
SP 800-100	Information Security Handbook: A Guide for Managers
SP 800-60 Rev. 1	Guide for Mapping Types of Information and IS to Security Categories: (2 Volumes)
SP 800-59	Guideline for Identifying an IS as a National Security System
SP 800-53 Rev. 4	DRAFT Security and Privacy Controls for Federal Information Systems and Organizations
SP 800-50	Building an IT Security Awareness and Training Program
SP 800-47	Security Guide for Interconnecting Information Technology Systems
SP 800-39	Managing Information Security Risk: Organization, Mission, and Information System View
SP 800-37 Rev. 1	Guide for applying Risk Management Framework to Federal IS
SP 800-36	Guide to Selecting Information Technology Security Products
SP 800-35	Guide to Information Technology Security Services
SP 800-32	Underlying Technical Models for Information Technology Security
SP 800-30 Rev. 1	Guide for Conducting Risk Assessments
SP 800-27 Rev. A	Engineering Principles for Information Technology Security
SP 800-14	Generally Accepted Principles and Practices for Securing IT Systems

Source: http://csrc.nist.gov/publications/PubsSPs.html

ISACA

ISACA previously known as Information Systems Audit and Control Association was founded in 1967 in the USA. It is an international professional association that deals with IT governance. ISACA has co-developed standards, guidelines and procedures for the auditing of information system along with the International Federation of Accountants (ISACA). ISACA has created a framework named Control Objectives for Information and Related Technology (COBIT) 5 in 2012 for information technology (IT) management and IT governance which allows managers to bridge the gap between control requirements, technical issues and business risks (Abu-Musa 99-126; Susanto 23-29).

Information Technology Infrastructure Library (ITIL)

Information Technology Infrastructure Library (ITIL) published between 1989 and 1995 in the UK on behalf of the Central Communications and Telecommunications Agency (CCTA) is a set of practices for IT service management with focal point on aligning IT services with the business needs as shown in the figure 1.1. given below. Presently ITIL v3 is in use by many organizations worldwide (Susanto 23-29; Cartlidge)
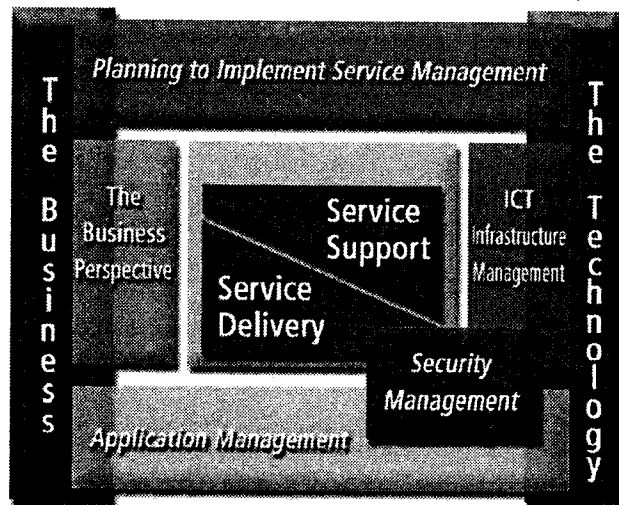

Figure 1.1: ITIL showing alignment of Management and Technology Aspects

Source: http://www.ijens.org/vol_11_i_05/113505-6969-ijecs-ijens.pdf

Maturity Models for Information Security Management

Information security maturity model is intended to be used as a tool for evaluation of organization's ability to meet the objectives of security. If properly used it ensures the mapping of security requirements with the business goals. A sound information security maturity model addresses four domains, viz., organization governance, organizational culture, the architecture of the systems, and service management which affects the security in an organization and helps an organization to identify and explore strength and weakness of its security aspect (Saleh 316-337).

Below we present a brief outline of various information security management maturity models.

Capability Maturity Model Integration (CMMI)

Capability Maturity Model Integration (CMMI), a successor of CMM, is developed by Software Engineering Institute (SEI), Carnegie Mellon. It is a suite of products used for process improvement as shown below in figure 1.2.
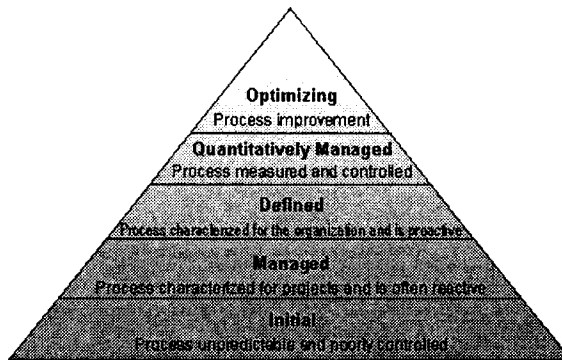

Figure 1.2: Five Stages (Levels) of CMMI Model

It has two representation layers, viz., continuous and staged representation. Continuous representation has 6 capability levels and allows organization to select a process area and improve processes related to it. Staged representation includes 5 maturity levels and uses predefined sets of process areas to define an improvement path for an organization. The organizational benefits of CMMI are shown in the figure 1.3 given below (Chen; West; Shrum; Spence; Constantinescu).

Performance Category	Median Improvement
Cost	34%
Schedule	50%
Productivity	61%
Quality	48%
Customer Satisfaction	14%
Return on Investment	4:1

Figure 1.3: Organization Performance of CMMI

The technical benefits of CMMI are that it provides more detailed coverage of the product life cycle, provides a set of well-integrated models that facilitate project management and improves the development process, promotes collaboration between system engineering and software engineering and it has the better ability to address scalability.

ISM3

The foundation of ISM3 has been laid taking into account the best ideas of management systems and controls from ISO 9000, ITIL, CMMI and ISO 27001. It can be used both at an entry level by small organizations and at a sophisticated level by major organizations as part of their governance assurance processes. It comprises of four conceptual models, viz., information security management model, organization model, information system model and security-in-context model. The business focus of ISM3 is shown in figure 1.4.
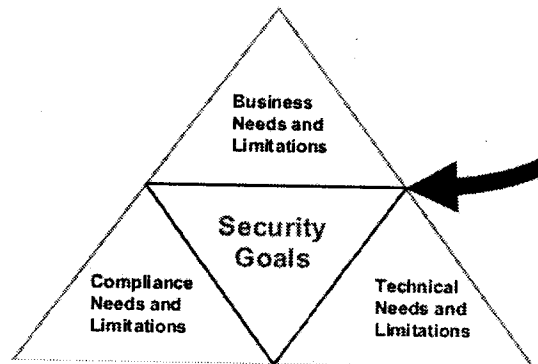
Figure 1.4 Showing Business Focus of ISM3

Every ISM3 process has a rationale section, which expresses how the process contributes to the goals of the operational, tactical, and strategic level. ISM3 is a complete standard that is business-friendly, adaptable, creditable, compatible, scalable and open (Narayanan).

Methods for Information Security Management

There are a number of methods available for information security management like OWASP CLASP (Comprehensive, Lightweight Application Security Process), Microsoft SDL (Secure Development Lifecycle), Macgraw's Touchpoint, etc. but they only provide a well-organized and structured approach for moving security concerns into the early stages of software development process. These methods use a prescriptive approach and help organizations to document activities. They are more technology oriented and much focus and work in needed to explore their management aspect (De Win).

Limitations

The majority of the information security standards are suitable for large organizations and medium-sized as well as small organizations often have difficulty in adopting them. Due to this the objective of security and its alignment to business needs cannot be achieved in totality with respect to organization size. Also a pessimistic view by smaller organizations in terms of cost, documentation and bureaucracy is taken for implementation of standards. They also find it difficult to relate standards to their business needs and to justify the application of the international standards in their operations. There are many misconceptions about the implementation of standards like standards force people to change their methods, standards reduce productivity by forcing unnecessary actions, major time and effort is required for its implementation. A major shift in organizational culture and attitude of people involved is required (West; Shrum; Spence; Constantinescu; Higgins).

From the literature review, it is evident that most of the information security management maturity models utilize the process-centric method of assessment and not much work in done in other aspects like product centric method of assessment, control centric and risk assessment centric. This information security management maturity model also does not address the threat issues like human error, incompetence, fraud and corruption (Narayanan).

As per the facts stated above, the information security models are more technology oriented and the researchers need to work on combining the strong points of all approaches in order to distill an improved, consolidated and secure development life-cycle process. Complementary activities may be selected in order to improve the overall coverage of the process. Finally, the management aspect needs to explore to fit it in any kind of organization (De Win 1152-1171).

Objectives of Research Work

The objective to the research work which is being carried out is to provide an initial platform through which any organization can achieves the following:

- Ensure that an adequate level of security is attained.

- Make optimum use of technology and management security resources.

- Help an organization adopt best security practice irrespective of its specific needs.

- Help bridge the gap between technology and management people by making the technology people understand that they cannot possibly cover all areas of IT security and the management people understand the importance and value of information security.

- Aid in the development of an organizational subculture of information security for managing the people factor concerned with information security.

- Make it clear that strategy (management perspective) and tactics (technology perspective) work in synchronized coordination and are complementary to each other.

- Promote the use of Information Security Management System in an organization.

- Support the use of Maturity Model in Information Security Management System for bridging the gap between the theoretical and practical aspects of security standards.

Areas That Need Further Investigations

Some of the key areas that need further investigation by the research community include the following:

- The information security standards, maturity models and methods need to be improved and revised to include active role and acceptance of medium and small organizations.

- A coordinated and synchronized approach need to develop between the various standards, maturity models and methods dedicated to information security keeping in mind all sizes of organization.

- The time and efforts invested for the implementation of information security and its management needs to be reduced.

- The impacts of the shifting organization culture due to its implementation needs to be addressed with one-to-one mapping of the process areas as per organizational requirements.

- Some metrics should be developed to measure the behavioral aspect of an organization.

- Active participation of aspects like product-centric method of assessment; control-centric and risk-assessment-centric features while designing and developing ISMM models is needed.

- The ISMM model can be improvised for addressing threat issues like human error, incompetence, fraud and corruption by means of organizational security culture.

- The management aspects of various information security methods needs to be explored and addressed in future.

Conclusion and Future Work

It is evident from the research findings that although a number of information security standards, maturity models and methods are available, still there are reported incidents of security breaches targeted by outsiders as well as insiders worldwide. The paper tried to present the importance of information security from technology and management perspective. It also showed critical review of various information security standards, maturity model and methods and their related role in implementation of security in an organization with their limitations. At the same time, a number of noteworthy research areas are also identified for further investigations in the concerned area. The paper will help the researchers who want to pursue their research in information security management by providing a brief but complete review on the existing literature along with the current research topics. The paper will serve as a base paper for other researchers who will choose the research topics through our paper.

Future work may include design and development of a concrete security standard which will aid in a more coordinated, synchronized and secure maturity model. This model in turn will help in aligning the security and business needs with the allied security methods for balancing the technology and management perspective of security of an organization. This work will surely help the industry to have a more holistic, coordinated, consistent and synchronized approach to technology and management aspect which drive the organizations to achieve optimum security in the field of Information Technology.

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SUBMISSION TO THE EDITOR
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St. Xavier's College, Jaipur

About the College

The Jesuits came to Jaipur in 1941, the 400th anniversary year of St Francis Xavier's arrival to India, at the invitation of the Ajmer Bishop and Mirza Ismail, the then prime minister of Jaipur, to start a school. The school started in 1945 is today known as St Xavier's School, to give organizational support to the school. The Jaipur Xavier Educational Association (JXEA), a trust managed by the Jesuits, was established in 1950. To carry forward the venture of promoting education and training in Rajasthan, in 2006 the Xavier Vocational Institute (XVI) was started in Jaipur. Its aim was to give vocational training to the economically poorer sections of society. The next step in this direction was the launching of the Higher Education Program. In 2010 the JXEA, in collaboration with the Xavier Alumnae and the well wishers of Jaipur, started the St Xavier's College, Jaipur, affiliated to the University of Rajasthan. It is established and maintained by the members of the Delhi Province of the Society of Jesus.

St Xavier's College envisions the formation of the whole person. It aims to train young men and women who would grow up as creative leaders and responsible citizens, committed to the service of the people. Every effort is made to see that the students become intellectually equipped, morally upright, socially committed and spiritually awakened to God's presence in the world.

St Xavier's College reaches out to all without any distinction of caste or creed. Situated in an ancient city, rooted in tradition and resistant to any radical change in the existing socio-cultural structures, it feels called to work for the transformation of society so as to bring about a cultural emancipation of the youth by means of higher education. The college's vision prompts it to enter into a creative dialogue with the local culture in order to bring about social and cultural liberation. It seeks to form young men and women who are committed to the establishment of a just and caring social order.

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This journal is dedicated to the cause of research that is interdisciplinary in nature. All knowledge needs to contribute to a confluence of new and innovative thought. A multi-disciplinary approach has many advantages as it offers a holistic view and together all disciplines facilitate a more comprehensive understanding. *Impetus* is an endeavor to develop such a composite image.