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An Analytical Framework for Assessing the Interface among Information Systems, Technologies and Organizational Learning

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Abstract

Much of current research investigates the interface between organizational learning (OL) and various types of information systems and technologies (IST). Related literature has focused on the relationships in a rather narrow and piecemeal fashion. What is lacking is an integrated framework that provides a general coherence to IST-OL research. This paper seeks to remedy this situation by providing a holistic and analytical framework that is capable of grounding existing and future research in this area. This study also outlines a research agenda for the field of IST-OL using the developed framework as a foundation.

Key words / phrases: *Information systems, information technology, organizational learning, mental models, research frameworks.*

1. Introduction

The concept of organizational learning (OL) has interested researchers for several decades (Cangelosi and Dill, 1965; Crossan, Lane, and White, 1999), with that interest increasing over the last twenty years (Bhatt and Zaveri, 2002). The reasons for this interest spring from a recognition of the ability of OL to replenish knowledge stocks in the dynamic and ever-changing landscape of today's modern organizations. Directed and purposeful efforts at OL often cost organizations many millions or even billions of dollars. For example, IBM spent more than $US25 billion on research and development efforts between 1988 and 1992 (Boisot, 1998). Croasdell (2001) posits the necessity of rapid learning in organizations due to changes in technology and shifts in demand. The recognition of OL's importance is so sharp that many have begun to regard OL as a major antecedent of organizational success and survival (Achrol, 1991; Garvin, 1993; Slater and Narver, 1995; Lukas, Hult, and Ferrell, 1996). Of utmost importance is the possibility of impacting such organizational outcomes as competitive advantage and knowledge and technology exploitation (Templeton, Lewis, and Snyder, 2002) offered by OL.

As organizations of all types have increasingly come to rely on information systems and technologies (IST), it is little wonder that researchers have recognized the potential of IST to impact or be associated with OL. Much of the literature that specifically deals with IST-OL relationships has come from those interested in the support of OL by collaborative technologies such as group support systems and group decision support systems. Bhatt and Zaveri (2002) have posited the potential of many types of decision support systems to impact or support OL. But this leaves many other types of IST out of consideration. Many organizations, particularly firms that are larger and more geographically dispersed, have invested heavily in boundary-spanning, integrated information systems such as enterprise resource planning and customer relationship management systems. If and when various types of systems are considered in connection with OL, it is done so in an isolated fashion where only a few conceptual factors are considered. What is potentially beneficial for the field of IST-OL research is to understand extant research within a holistic framework and provide a conceptual foundation for future investigations.

This paper seeks to fill the extensive gap in the literature through two contributions. First, this study will provide a generalized, analytical IST-OL framework. Second, this study will outline a research agenda for further study. To this end the paper will be organized as follows. Section 2 will present a model of IST foundational concepts and connect this to OL. Section 3 will synthesize a suitable definition of OL. Section 4 will briefly outline the categories of IST systems and existing IST-OL literature and position them with respect to the desired model. Section 5 will bring together an existing information and knowledge model, and a novel organizational IST framework created by the author to develop a multidimensional IST-OL framework. Section 6 will outline an IST-OL research agenda based on the framework. Section 7 will conclude the contributions of the paper.

2. The IS Nomological Net

We will begin the development of the desired framework by first briefly examining the IS nomological net of Benbasat and Zmud (2003). Figure 1 shows the IS nomological net. Although the nomological net was originally designed to depict the set of phenomena of interest within the IS discipline and as a guide to IS research, we will regard it as a high-level representation of how information systems, and associated IT artifacts are situated within organizations. The various constructs within the net can be described as follows:

- The Information system and IT artifact – The IT artifact will usually consist of some kind of software deployed on one or more computers or servers. The IT artifact is potentially a part of larger Information system which can include people and processes.
- Usage – The IT artifact is designed to support or automate certain tasks that are performed in pursuit of the satisfaction of organizational goals. The performance of these tasks represents Usage.
- Impact – Certain results are expected to accrue as a result of the usage of the system and its artifact. These results could manifest in such outcomes as lower costs, increased efficiencies, or more generalized forms of outcomes such as better decisions or the production of new knowledge. As a result of usage there are direct and indirect as well as intended and unintended impacts on the organization's individuals as well as its teams, groups, work units and the larger organization. In our study this generalized construct can be replaced by OL, as we anticipate OL to be subsequent to Usage.
- Managerial, methodological, and operational practices – These practices are associated with the planning, designing, constructing, and implementation of IT artifacts (software). The practices also relate to directing and facilitating IT artifact usage and evolution.
- Managerial, methodological, and technological capabilities – The capabilities relate to abilities or aptitudes for managing, developing procedures, or leveraging technology and/or know-how.

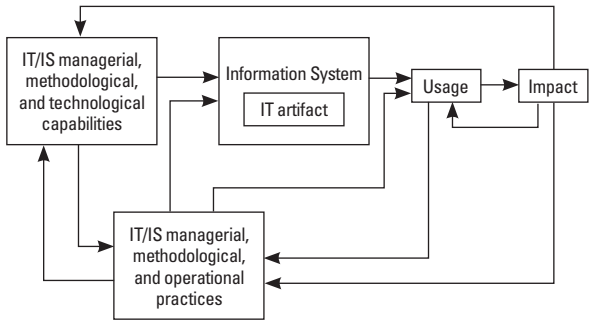

Figure 1 Information systems discipline nomological net (adapted from Benbasat and Zmud, 2003).

A useful way of summarizing the foregoing paper is that IST, the information system and the IT artifact collectively, are designed and developed to address certain needs within organizations. As a result of the usage of IST there are intended and unintended consequences of that use, which can impact the capabilities as well as the practices which influenced the design and development of the system. Thus, IST are embedded within the organization in a feedback loop within which the organizational contexts and structures influence and are influenced by IST.

The nomological net of Benbasat and Zmud (2003) is inadequate to serve as our ultimate model of the relationship between IST and OL, being originally designed as a framework for all types of IS research. Its utility in this study is to provide the notion of embeddedness. This term will be used here to connote the degree to which a technology or information system is an integral part of the social and technological infrastructure of the organization. The shortcoming of the net lies in its inability to relate the social reality of OL. This will become clearer after an adequate definition of OL has been provided.

3. Organizational Learning

Argyris and Schon (1978) identified two types of learning, single loop learning (SLL) and double loop learning (DLL). SLL is defined as the detection and correction of error. In essence, an individual (or organization) notices a discrepancy between

performance and desired goals with corrective action being taken. SLL can be seen as that type of limited learning that tends to maintain an organization relative to its environment. In DLL there is a questioning of the underlying assumptions and goals with a resultant change in both. DLL is of critical importance to organizations and individuals because it enables further learning. Moreover, DLL is transformative, changing informal and formal routines and processes, and sometimes yielding radical change in organizational design.

Ching, Holsapple, and Whinston (1992) argue that organizational learning subsumes learning by entities. Human or non-human entities learn when they adjust the contents of their knowledge systems. A knowledge system may consist of various types of knowledge such as descriptive, procedural, presentation, and linguistic. Organizational learning also involves trans-entity learning. The knowledge system of the organization is more than a simple union of the knowledge systems of its respective entities. This can be explained by the presence of various repositories as well as communication channels. Repositories serve as storehouses of various kinds of knowledge, separate from the organization's entities that can be made accessible for review and use. Communication channels are important for organizational learning because the opening and shifting of communication channels, if used effectively, can create new knowledge. Finally, what makes this characterization of OL important is that the patterns of interaction through communication and coordination give rise to organizational-level knowledge.

These characterizations establish that OL happens throughout the organization, but are not sufficient to provide an understanding of how OL actually occurs. Kim (1993) provides a natural mechanism for the translation of learning from the individual to the organizational level. That mechanism is mental model. A mental model is an internal, mental representation of an aspect of reality. For example, a mental model of a decision problem within a management team might involve the individual's understanding of the people involved and their relationships, the various parameters or variables involved in the choice, the possible set of outcomes, etc. Individuals form mental models in a variety of ways by direct work experience, through the incorporation of information conveyed by word of mouth, directed observation or study, or by intuiting connections between entities or causes and effects. The important point here is that when knowledge is specific to an individual, it has little chance of effecting changes within the organization until it becomes shared. Mental models become shared when they are communicated to other individuals via a process of surfacing and explanation within groups whose members may adopt all or portions of the models.

By integrating the work of Crossan, et. al. (1999) and that of Kim (1993), Balbastre and Moreno-Luzón (2003) have developed a model that integrates the individual, group, and organizational levels. Within this model are six types of learning. Individual single-loop learning occurs when deviations from a desired goal are detected and corrected (Kim, 1993). This is the same SLL as discussed by Argyris and Schon (1978). It is important to note here that there is no update in the mental model of the individual. Individual double-loop learning occurs when an established mental model is called into question and updated to accommodate changing situations or needs. Group single-loop learning occurs when group members improve their performance within their established mental models, that is, error detection and correction without a corresponding change in mental models. Group double loop learning occurs when there is a corresponding change in shared mental models (Balbastre and Moreno-Luzón, 2003). Organizational single-loop learning is similar to SLL by the individual. Deviations are detected and corrected with no corresponding changes in shared mental models. Organizational double-loop learning occurs when mental models become incorporated into the organization through shared mental models.

Against this broad background, we now state a suitable definition of OL. For purposes of this study we choose to frame OL as *the process of developing, refining, and sharing mental models across the levels of the organization; individual, group, and organization*. This definition agrees with the understanding of OL as an impact within the IS nomological net. Thus, OL, as an impact, is a multi-level construct that is influenced or supported through the use of IST. In turn, OL is anticipated to influence the IST-related capabilities and practices of the organization.

4. IST and OL

The literature connecting IST and OL has become, in some senses, moderately extensive. So space will not permit a comprehensive review of all of its various aspects and meanings. We seek only to demonstrate the aptness of the developing framework. The fact that some of the research is focused on some narrow categories of IST, while other areas have remained relatively untouched, and that some research seeks to cast a general and broad net at the IST-OL relationship (Goodman and Darr, 1998; Venugopal and Baets, 1995; Rein, Holsapple, and Whinston, 1993) is evidence of some immaturity of the research stream and evidence for the need of the framework contained in this study.

The early days of the information revolution were characterized by the explosive growth of new information technology and systems that increased individual worker productivity.

Subsequent developments in thin-client, client-server, and distributed, Web-based technologies have sought to make information systems and resources available to masses of individuals. As organizations have sought to harness the power of information and knowledge, many types of IST have been developed. One of the earliest manifestations of this effort were what have come to be known as knowledge-based systems; decision support systems, expert systems, and other supposedly artificially intelligent systems such as neural nets. These systems sought to capture expert, often rule-based knowledge, and make it available to individuals within the organization. As organizations have realized the benefits of the use of groups and teams as well as linking partners, suppliers, and customers together in a growing and efficient *value chain*, the emphasis has moved away from individual computing to collaborative systems and enterprise and distributed systems. Two examples of this are enterprise resource planning (ERP) and customer relationship management (CRM).

Much of the literature on IST and OL comes from the area of decision support systems. Zack (2007) suggests that the integration of computer-based decision support and human-centric approaches is necessary for organizational learning to occur. In particular, IT is better suited for managing uncertainty (not enough information) and complexity (having too much information), while the human-centric approaches are better suited for situations of ambiguity (lack of a conceptual framework) and equivocality (having competing or contradictory conceptual frameworks). IT can also aid in the latter situations by providing a means to make social connections and support face-to-face interactions.

Bhatt and Zaveri (2002) suggest nine general DSS attributes that enable OL. Their list includes efficient access of data, experimentation with variables, generation of alternate models, trend analysis, exploratory and confirmatory models, simulation, justification of solutions, exploration and exploitation of stored data, and idea generation. Although their work does not suggest precisely how these attributes facilitate learning above the individual level, they are in accord with other authors in declaring that a DSS should "be designed to facilitate an understanding among different decision-making participants." In particular they suggest the use of GDSS for information and knowledge sharing.

Group support, in particular, appears to be related to OL. Examination of case and field studies reveal that GDSS and GSS usage generally have a positive impact on such variables as information exchange, communication, number of ideas generated, knowledge, and knowledge sharing (Fjermestad and Hiltz, 2000). Hender, et. al. (2002) examine the relationship between GSS-incorporated idea generation techniques and creativity. Kwok, Ma, and Vogel (2002) investigate the effects of GSS and content facilitation on knowledge acquisition in a collaborative learning environment. Dennis, Tyran, Vogel, and Nunamaker (1997) find that process support and process structure have positive effects on such variables as the production and identification of information, as well as the communication and integration of information. Through integration the existing GSS-OL literature and data analysis, Tomblin (2005) suggests and demonstrates a positive relationship between content and *process support* dimensions of GSS and creation and maintenance of mental models at the individual, group, and organizational levels.

Other literature highlights additional systems such as executive information systems and various knowledge-based systems. Hines and Ghoul (1998) report success in the construction and validation of a knowledge-based organizational learning support system (OLS). Venugopal and Baets (1995) offer a conceptual framework for an integrated intelligent support system for learning. Linger and Burstein (1998) provide a general framework for the construction of an Organizational Memory System (OMS). In their framework, the OMS is not a simple repository. The OMS should support teams whose members are engaged in reflective activity aimed at improving their practice.

The extant literature thins considerably when we consider enterprise-level IST. Other than the research highlighting the necessity of learning during ERP implementation, the author was able to identify only one article associating ERP and OL. This situation provides further credence to the necessity of a more holistic framework for IST-OL relationships. Kidd and Richter (2001) contend that ERP can actually have a negative impact on OL by 'hollowing out' the workforce, through downsizing, thus decreasing organizational slack that can be devoted to generating organizational learning. This situation leaves the question of whether or not ERP has a positive impact on OL unaddressed.

This brief review provides us with the following insight and understanding. Relative to the nomological net, OL is an impact. IST of various forms are related to OL, but only certain IST have received any great attention. The IST-OL relationship manifests itself at the individual, group, and organizational levels. Finally, the mechanism which is aptly able to serve as a mechanism for the creation, transfer, and storage of what is learned, is the mental model. What we now need is a framework within which to understand and relate the various types of IST, levels of learning, and what is learned in the form of mental models and codified knowledge.

5. The Framework

Any framework which purports to fundamentally ground the research into the connection between IST and OL must have certain characteristics. First, it must be able to treat specifics of investigated relationships without being too narrow. It must be inclusive without being so broad as to be meaningless. It must also capture the essence of the constructs being related. Models dealing exclusively with OL certainly exist (Balbastre and Moreno-Luzón, 2003; Kim, 1993). While these are strong on the essence and mechanism of OL, they are weak or silent on the technological aspects. Other investigations that are strong on the technological side (Vandenbosch and Higgins, 1995; Tomblin, 2005) are weak or silent on the social aspects. This is not to say that people need represent a variable or construct within a framework or model.

One way to capture the essence of interaction is to properly frame, within the context of organizational social exchange and collaborative work, the 'object' that is passed between participants. According to the previous OL definition, we will regard the mental model as the fundamental unit of learning. Thus, the mental model serves as a unit of exchange between interacting organizational members. While it may be understood that interaction can occur without exchange, we will ignore those types of interactions and assume that the degree of exchange represents the degree of interaction.

Similar to Boisot (1998) in his treatment of knowledge assets, we will also recognize that mental models, the organization's most fundamental knowledge assets, can be categorized along the dimensions of *codification, abstraction,* and *diffusion*. Codification refers to the degree to which a mental model (knowledge asset) can be given form. That form could be verbal, written, or encoded in some digital medium for exchange, storage, or retrieval. Complete codification of knowledge makes automation of tasks possible. Abstraction refers to the number of categories that need to be drawn upon, when performing a task. The fewer the categories, more the abstraction present in a knowledge asset (mental model). Codification and abstraction give form and structure to mental models and have the joint effect of making knowledge more shareable. Diffusion refers to the proportion of the population of organizational agents (human or computer) that can be reached with information operating at different levels of codification and abstraction. One must take care not to confuse this with the notion of adoption. Diffusion simply refers to availability.

While Boisot (1998) offers some insight into the impact of information technology on knowledge assets, the treatment of technology speaks only to its utility and its use as medium of exchange. To characterize the technology that supports the exchange of mental models we will use the dimensions of *reach, transfer,* and *embeddedness*. Figure 2 shows a three-dimensional model of these constructs that can be used to categorize IST.

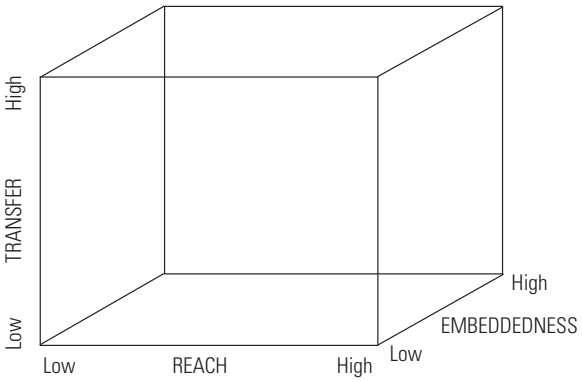

Figure 2 Three dimensional categorization of IST

Embeddedness was encountered earlier and refers to the degree to which a technology or information system is an integral part of the social and technological infrastructure of the organization. Reach refers to the number of people capable of being connected for the purposes of communication or information and knowledge exchange. Transfer refers to the ability or use of the technology to broadcast, exchange, or even store and retrieve information, data, and knowledge. Different types of IST could be realized as points in a three dimensional space along each of the given dimensions. For example, a decision support system utilized by a single individual would have low embeddedness, low reach, and low transfer. An ERP system, on the other hand, will have high reach, high transfer, and high embeddedness. It should also be noted that, with respect to usage, various systems may be able to occupy a multitude of points within the three-dimensional space. This would depend on the number of users for a particular task.

The choice of these particular dimensions for the characterization of IST with respect to mental models seems justified via the reviewed literature. Different technologies are produced or acquired to support a given number of users. Stand-alone decision support systems (DSS), for example, are typically designed for use by only a few users. Thus, they permit little, if any, connection to other users. That is, their reach is low. Stand-alone DSS can be used to store and retrieve information. That is, information can be transferred using these systems. In contrast, group support and group decision support systems, connecting several users assigned to the same task, have high reach. Since many of these systems are connected to various repositories of information

and permit (potentially) the sharing of mental models, their reach is potentially high. These systems would also differ with respect to the degree to which they are fundamental part of the social and technological infrastructure. For example, single-user DSS may represent an ad-hoc or specialized technology with intermittent use (low embeddedness), while group support may be the normal technological means by which groups or teams complete tasks and collaborate in general (moderate to high embeddedness).

Together, Boisot's (1998) knowledge characterization and the IST dimensions given above provide a useful framework with which to characterize IST used in support of OL. Refer to Figure 3. It captures the nature of what passes within organizational social exchanges and includes the technological aspects as well.

Social exchange	Technological
Codification	Embeddedness
Abstraction	Reach
Diffusion	Transfer

Figure 3 IST-OL Frameworks

6. An IST-OL Research Agenda

Given the multitude of possible combinations of constructs within the framework, there are a variety of investigations that could be conducted on IST support of OL. Although mental models give rise to the notion that all knowledge is contained entirely within individual heads, these models are capable of being elicited to one degree or another and subsequently encoded. Future research should focus on the characteristics that promote the technological dimensions with respect to OL. For example, how does high transfer ability support OL? What might inhibit OL support by a technology with high transfer? Future research should also focus on the characteristics of codification, abstraction, and diffusion of information and knowledge, within the context of IST use, that foster OL. For example, how does the use of ICT to enable abstraction support OL.

Another approach to research is to consider how the various dimensions promote or hinder one another during IST use. What is the interplay between the dimensions when a technology promotes abstraction and has high transfer? Still another is to fix the dimensions at some desirable points and then determine how the use of the technology is related to OL at each of the three OL levels, individual, group, and organizational. For example, does ERP with high reach foster individual learning? What is the strength of the relationship of ERP to organizational learning?

The foregoing paper could be regarded as a categorical or even combinatorial approach to the study of the IST-OL relationships. It is similar to the existing research on the selection of a limited mix of constructs for study. While this can yield results, it may still leave the field somewhat fragmented. A more systematic, and potentially more unifying approach, would be to create separate research streams characterized by application type. For example, if we confine our attention to group support systems (GSS), we could develop the following list of researchable propositions:

- (P1): GSS are positively related to individual OL.
- (P2): GSS are positively related to group-level OL.
- (P3): GSS are positively related to organizational-level OL.
- (P4): GSS with low embeddedness are not significantly related to organizational-level OL.
- (P5): GSS with high embeddedness are significantly related to organizational-level OL.
- (P6): There is no significant difference between the strength of the relationship of low-embeddedness GSS and high-embeddedness GSS on organizational-level OL.
- (P7): There is a positive relationship between codification and transfer at the individual, group, and organizational levels during GSS use.
- (P8): At fixed levels of transfer ability, diminishing returns on OL are experienced with increased levels of codification of the mental models.

With such a systematic approach it may be possible to reach certain generalizations, which are the hallmark of empirical and scientific investigations. For example, what can be said, in general, about high reach systems with regard to their ability to support OL at each of the learning levels via the social exchange dimensions?

Given that we have grounded our understanding of IST within the organization using the nomological net (Benbasat and Zmud, 2003), it will also be important to understand the feed-forward and feedback relationships between the Usage and Impact constructs via the framework. For example, the dimensions of embeddedness, reach, and transfer will be experienced within the Usage construct. These will have some relationship to learning at each of the levels of the organization. Will the resultant learning influence the experience of embeddedness, reach, and transfer over time. Answering this question could possibly be approached through the lens of "structuration" (Giddens, 1984).

These are but a few of the research questions that could eas-

ily be turned into testable hypotheses. The current list is by no means exhaustive and others may wish to add to it.

7. Conclusions

The contribution of this paper is twofold. First, the paper has presented the development of a research framework useful for the study of the relationship of IST to OL. The framework was developed using IST foundational concepts, existing OL research, and characterizations of technology and the fundamental units of OL. It is felt that the framework is holistic enough to be useful as a guide for future research. This paper has also offered a brief sketch of a possible research agenda which can be used by other researchers or added to by the same. An empirical assessment should be made that confirms the suitability of the chosen dimensions. This is left for a future investigation.

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The changing structure of Karnataka's Five-year Plans-1985 through 2007: A Markov Chain approach*

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Abstract

Outlays and expenditure on the ten five year plans have been reviewed and their impact on the principal sectors have been analysed. Results reveal that irrigation sector and social welfare sector have been receiving consistent spending. Housing and Urban and Rural development also received a substantial outlay. Government's spending on infrastructure and transportation, which includes road development and education, has continued to receive government patronage right through the past four five year plans. Funds for agriculture and spending on rural development appear to be inadequate. The power sector is not receiving its due share corresponding to its priority in the state's economy. Budgetary allocation to a particular sector has not followed a consistent path due to ad hocism. The overall economy of the state has been growing in most of the plans. However, the rate of growth has not been uniform. The growth in real terms has shown a stellar performance during the VIII and X plan, recording high rates of growth in all sectors, primary, secondary and tertiary. Lack of consistency in budgetary support to the various sectors might have been one of the contributory factors to this erratic growth. The Tenth plan has taken cognizance of the changed global scenario brought by WTO, and has targeted relevant sectors of the economy.

Key words / phrases: *Changing structure, Markov Chain, Budgetary support, Consistency.*

1. Introduction

Planning in India started in the 1950's after India secured its independence which was implemented through a series of Five year plans. The process of liberalization of the Indian economy began in the year 1985-86 when the Government of India adopted the philosophy of "supply side economics" in its planning. Many of the stringent restrictions in the economy were reviewed and selectively relaxed in a phased manner. It has since gathered momentum and in subsequent plans the process of liberalization has been heading towards its logical end. The various plans attempted to identify the strengths and weaknesses in the economy, thus leading to the identification of critical needs of achieving growth with development. The primary objections of planning have been a) development of infrastructure like irrigation and power, b) reducing the fiscal deficit, c) improving the education standards and literacy, and d) strengthening the Research and Development. All these put together are the keying redients for sustainable economic development.

The call for a ten percent growth rate of the economy to become an economic super power and eradicate poverty was given by our honorable President Dr.A.P.J.Abdul Kalam during 2005. This has served as an eye-opener to the policy makers who now feel this rate of growth is eminently achievable and desirable from the standpoint of economy. In fact during the last year of the Xth Five year plan, the rate of growth has come very close to it. This has been achieved to a large extent by the Indian political system agreeing on a broad consensus about the direction of reform. This high rate of growth has to be sustained in order to perform well in the context

**This paper is a part of the doctoral research work of the first author.*

of globalization, where India will have a much bigger role to play in future. Growth targets have been scaled up in successive plans to over 5% per annum and reduction in poverty to below 25% of the population. In addition, generating additional employment opportunities as well as improving the status of housing health education and water supply, development of irrigation facilities and augmenting power generation constitutes the critical resources for both agriculture and industrial development. Thus, irrigation and power has been receiving highest priority in all the plans in order to harness the state's potential. It is widely recognized that the lack of these critical resources could effect the development of the economy of the state.

This study is a modest attempt to see how the expenditure in the last four plans have allocated resources and what shifts have taken place in the budget allocations and to determine whether these shifts are in line with the long term goals of planned economic growth.

2. Methodology

Data on plan expenditure under major heads during the various plans has been collected from Five Year plan documents of the Government of Karnataka. Selectively the data has been regrouped aggregated and analyzed using Markov chain analysis. The major heads of accounts includes irrigation, power and energy, transportation that includes roads, education, sports and culture, water supply, agriculture and allied activities which includes livestock, rural and urban development, industries and minerals and welfare expenditure. All other items of expenditure have been clubbed under others. The data of shifts of shares of expenditure shares has been analyzed using Markov chain analysis.

Markov chain analysis: A Markov chain is a stochastic process which describe the finite number of possible outcomes s_i = (i = 1,2,…r) which a discrete random variable at († = 1, 2,….T) can take during a number of time periods. The assumptions that underlie a model are:

a) The probability of an outcome on the trial depends only on outcome of the preceding trial, and

b) The probability is constant for all time periods (Lee et al, 1970).

In the current application the average area under a particular jth size group is considered to be a random variable following a first order Markov process.

$a_{jt} = a_{it-1} P_{ij} + e_{jt}$……..(1)

where, ajt is the share of share of expenditure in the ith sector during the year t.

ait-1 is the budget share of sector i in the state budget.

Pij is the probability that expenditure will shift from state i to state j.

et is the error term which is statistically independent of ait-1, and

r is the number of states or budget heads.

The transitional probabilities Pij which are arranged in a (r x r) matrix, have the following properties.

$1>P_{ij} > 0$ and $\sum P_{ij} = 1$, for all j's.

The diagonal elements of the transitional probability matrix indicate the probability of expenditure shares being retained in a particular head and the off diagonal elements reveal the probability that expenditure from a particular budget head would shift from one budget head to another with the passage of time, i.e from i to j. The coefficient read along the row indicates the probability of loss of share and read along the column shows the probability of gain to the head of expenditure in the column. The transition probability matrix was estimated using the Minimization of Absolute Deviation (MAD) technique which is estimated in the Linear Programming framework. For details see Lee et. al, 1970.

Growth Rate: The compound growth rate of expenditure has been calculated planwise using the equation of the form:

$Y_i = a\, e^{bt+u}$

Where

Yi is the budgeted expenditure under each of the 9 heads of accounts defined earlier.

t is time

e is the constant 2.71828

a and b are the constants to be estimated.

u is the disturbance parameter.

The parameters of the equation are estimated by the method of Ordinary Least Squares (OLS) and the growth rate gi of each series is computed using the formula

gi = (1-b) *100

3. Results

In order to study the sectoral shifts in Government spending during the plans, Markov chain analysis was carried out and the estimated transition probability matrix for the first period, i.e., II to the VI Plans is presented in Table 1. Perusal of the table indicates that during the first six plans, rural development has received consistent outlay evidenced by a transitional probability of 0.4697 and so also agriculture with a retention probability of 0.09. The outlay in the other sectors has

not been consistent over the 1st to 6th Plan. The most striking feature of the outlays of this period is the strong tendency to shift from most of the sectors to the energy sector, which is indeed a consistent policy in line with the need for power. Specifically shifts in outlay were noticed from Agriculture, Irrigation and flood control and Transport to the Energy sector. The other sector to gain over the plans was Education, which gained from Irrigation, Industries and Social services. During this period the Social sector was a big casualty receiving very little from the other sectors and not able to retain its share from the previous plans. But the Energy sector did not receive the continuity of funding it requires, as evidenced by the retention probability of zero. The tendency to shift form other heads of accounts constantly appears to be adhoc and continuity in power spending would have been in order for the full realization of the potential. This is perhaps the reason for the power crisis that is hindering industrial development in the State.

about less than 10 percent. The decline in the allocation to Agriculture and Rural development is indeed a cause for concern as the problems of agriculture are plenty and there are cases of farmer destitution leading to suicides. As a policy, the Government should increase the allocation to agriculture and create yield and income, enhancing infrastructure.

Many policies in India, including economic reform policies, are officially intended to alleviate poverty. Mooij and Dev, 2004. A widened concept of poverty and a shift away from income and employment programmes to human development. They contend that the budget-making process is not very participatory, and the role of the Finance Ministry has increased. Although the widening of the concept of poverty has positive aspects, within the overall context of structural adjustment, it has facilitated the politically convenient neglect of other dimensions of income and employment.

A heartening feature of the state's budget is the increased

	Agriculture and Allied	Rural Development	Irrigation & Flood Control	Energy	Industry & Minerals	Transport	Education and Urban Development	Social Services
Agriculture and Allied	0.0909	0.0000	0.6191	0.2900	0.0000	0.0000	0.0000	0.0000
Rural Development	0.4117	0.4697	0.0000	0.0000	0.1185	0.0000	0.0000	0.0000
Irrigation & Flood Control	0.0000	0.0696	0.0000	0.3325	0.1075	0.0507	0.2803	0.1593
Energy	0.4178	0.0000	0.4880	0.0000	0.0000	0.0943	0.0000	0.0000
Industry & Minerals	0.0000	0.0000	0.0000	0.2115	0.0000	0.0000	0.7885	0.0000
Transport	0.0802	0.0000	0.9198	0.0000	0.0000	0.0000	0.0000	0.0000
Education and Urban Development	0.0000	0.0000	0.0000	0.7917	0.0940	0.1143	0.0000	0.0000
Social Services	0.0000	0.0582	0.0000	0.0000	0.2093	0.0000	0.7325	0.0000

Table 1 Transition Probability Matrix of five-year outlays II to VI Plans

The break up of plan expenditure is presented in Table 2. Perusal of the table reveals the noteworthy fact that the outlay on the Economic services, which was as high as 70 to 86 percent in the first six plans, showed a decline in the subsequent plans to a little over 50 percent in the Xth Plan. In this shift, irrigation and flood control held its own of about 30 percent. The casualties were Agriculture and Energy and Power, which showed a decline. Agriculture from about 8 percent to around 4 percent and Energy and Power from 19 percent to

allocation to the Social sector. Spending in this sector from a paltry 4 percent in the II Five plan, it has progressively increased to around 30 percent which has mostly been appropriated by housing and urban development. The rapid urbanization that is taking place in the state due to Karnataka becoming the preferred destination of a number of corporate entities, the pressure on urban infrastructure and housing is growing. The government is seized of this problem, which is reflected in the budget.

	II Plan	III Plan	An-nual I Plan	Annual Plan	Annual Plan	IV Paln	V Plan	VI Plan	VII Plan	VIII Plan	IX Plan	X Plan
	(1956-61)	(1961-66)	(1966-67)	(1967-68)	(1968-69)	(1969-74)	(1975-80)	(1981-85)	(1985-90)	(1992-97)	(1997-02)	(2002-07)
A. Economic Services	–	–	–	–	–	–	–	–	–	–	–	–
Agriculture and Allied	8.91	12.87	16.62	15.19	16.47	21.66	11.18	8.23	7.94	7.13	5.91	4.93
Rural Development	7.44	6.69	4.50	2.89	1.95	0.50	2.26	4.84	4.45	3.42	4.74	0.47
Special Area Programmes	1.54	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.00	4.54	2.24	1.35
Irrigation & Flood Control	25.50	20.96	22.52	28.30	28.39	31.71	27.92	23.51	19.63	18.84	24.89	29.79
Energy	18.70	28.02	29.60	29.96	29.23	23.46	26.66	25.47	21.06	24.04	15.11	4.76
Industry & Minerals	8.08	6.39	3.41	5.29	3.22	4.83	5.14	6.89	6.34	7.78	4.14	3.05
Transport	6.87	5.24	8.76	5.66	4.77	3.35	5.10	6.15	6.39	3.54	7.02	10.20
Science & Environment	–	–	–	–	–	–	–	0.8	4	11	40	0.05
General Economic Services	–	–	–	–	–	–	0.13	0.00	0.76	0.87	0.42	1.88
Total Economic Service	77.05	80.17	85.42	87.29	84.02	86.50	78.80	75.11	58.75	63.12	58.72	51.56
B. Social Services	–	–	–	–	–	–	–	–	–	–	–	–
Education Sports Art Culture	7.88	15.25	3.83	3.73	5.07	3.22	2.76	2.44	2.74	8.11	6.91	3.89
Health	–	–	–	–	–	–	42.04	65.53	118	342	1100	3.22
Water Supply	8.50	0.00	7.73	6.21	7.29	2.14	4.69	5.59	9.60	4.94	5.54	0.00
Housing	0.00	0.00	0.00	0.00	0.00	0.00	4.46	8.69	4.24	5.52	3.78	6.42
Urban Development	2.87	2.03	0.85	0.73	0.88	5.36	1.37	1.27	0.79	0.66	3.03	5.43
TOTAL WS, H UD	19.26	17.29	12.40	10.67	13.23	10.72	14.93	20.76	14.63	11.12	12.26	18.64
Information and Publicity	0.74	0.22	0.45	0.40	0.49	0.09	0.24	0.22	0.18	0.11	0.12	0.11
Welfare of SC, ST, OBC	2.03	1.79	1.13	1.00	1.36	0.80	1.23	1.78	1.97	1.98	3.23	2.46
Labour Welfare	0.54	0.41	0.45	0.50	0.68	0.54	3.69	0.87	0.74	0.29	0.26	0.15
Social Security & Nutrition	0.38	0.12	0.15	0.15	0.21	1.34	1.12	1.25	3.25	1.45	1.82	1.34
TOTAL Social Services	3.69	2.55	2.19	2.04	2.75	2.77	6.28	4.12	26.62	25.76	29.03	29.80
GRAND TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Table 2 Distribution of budget outlay allotted to sectors in the various plans

In order to study the sectoral shifts in Government spending during the last 4 plans, a period that is characterized as a period of liberalization, a second transition probability matrix is estimated and presented in Table 3.

Examination of the transition probabilities presented in the table reveals that budgetary allocation of Irrigation and Flood control have a high retention probability of 0.3835 which is matched only by industry and minerals with a retention of 0.4724. This is in line with the stated philosophy of the planning process. The continuity in spending displayed is indeed remarkable considering irrigation is the most pressing need of Karnataka with a very small area under assured irrigation. The other sectors had practically no retention in budget outlays. This is perhaps a sign of a lack of consistency in expenditure to a particular sector. The results reveal that the expenditure on irrigation and flood control has a tendency to shift to transport infrastructure and urban and rural development. These shifts are driven by the need to readjust the limited resources to other sectors and in line with the plan objectives. In contrast to the transitions of the first period, expenditures on energy, education and others showed a strong tendency to shift to irrigation and flood control. The sectoral allocation to the energy sector showed a strong tendency to shift to water supply and urban and rural development.

The lack of a consistent expenditure on energy is indeed a cause for concern as energy development in the state is inadequate to meet the power requirements of the state and to cope with the rapid industrial development. The tendency of budget outlays to shift from energy and power to urban and rural development, may have been dictated by the exigencies of social and economic justice. In the long run, power will be the critical resource as far as industrial and tertiary sector development are concerned. In fact budgetary support of power and energy should receive continued support of the Government as a long term solution of the states' energy problems. Thus, the Government should show a far greater consistency in budgetary support to the energy sector. The shift that is visible in the spending on energy is that it is at the cost of agriculture. The slow pace of expenditure in agriculture is evident. The outlay to agriculture is affected due to the shift of expenditure to urban and rural development programmes and welfare. Welfare is an area that the government should not neglect especially in an era of accelerated economic development as the vulnerable sections are likely to be hit hardest. Hence, welfare expenditure should be considered as priority. The Government should not be complacent to expect the gains of accelerated development to the trickle down, rather it is more likely to create a skewed distribution of wealth. Widening of this gap between the haves and have-nots can harm development die to social tensions.

The foregoing results suggest that the budgetary allocation to a particular sector has not followed a consistent path as there is degree of ad hocism. This could affect the long term interests of a sector which requires long and continuous funding. This is particularly evident in the case of plan expenditure on energy and agriculture and also welfare. Irrigation development however has been receiving the priority attention of the Government, and that is a healthy sign.

	Irrigation & Flood Control	**Energy**	**Transport**	**Education Sports Art Culture**	**Water Supply**	**Agriculture & Allied**	**Housing Urban & Rural Dev**	**Industry & Minerals**	**Welfare**	**Others**
Irrigation	0.3835	0.0000	0.3605	0.0000	0.0000	0.0097	0.1177	0.0000	0.0229	0.1058
Energy	0.5340	0.0653	0.0000	0.0000	0.2412	0.0000	0.0000	0.0805	0.0790	0.0000
Transport†	0.0000	0.0000	0.0000	0.3333	0.0000	0.0000	0.3465	0.0000	0.0000	0.3203
Education Sports Art Culture	0.7341	0.0000	0.0000	0.0000	0.2659	0.0000	0.0000	0.0000	0.0000	0.0000
Water Supply	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	1.0000	0.0000	0.0000	0.0000
Agriculture & Allied	0.0000	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Urban Rural Devp.	0.0000	0.0000	0.0000	0.4570	0.0000	0.2036	0.0313	0.0000	0.3081	0.0000
Industry & Minerals	0.0000	0.4385	0.0000	0.0000	0.0000	0.0000	0.0000	0.4724	0.0305	0.0586
Welfare	0.0000	0.6174	0.0000	0.0000	0.0000	0.3826	0.0000	0.0000	0.0000	0.0000
others	1.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 3 Transition Probability Matrix of Budgetary Expenditure from VII Plan to X Plan of Karnataka

The State domestic product in real terms in the state has been growing sequentially from plan to plan at an average rate of between 35.09 and 109 percent, in the secondary and tertiary sectors, respectively (Table 4). The agriculture sector has grown at 64 percent per plan. In real terms the outlay on agriculture has increased from Rs. 1802 at 1993-94 prices to Rs. 13901 crores in a span of over 45 years from 1960 to date. During the corresponding period, secondary sector growth has increased from Rs.1224 crores to Rs.16,159 crores and Services from Rs. 2,372 crores to Rs. 38,826 crores. If one were to examine the pace of growth of the State's economy, an inflection point can be seen during the VII plan, which has reached maturity in the X plan period wherein agricultural growth and tertiary sector growth, have reached a plateau while the service sector continued to grow.

The plan wise real rate of growth has been analysed and the results are presented in the table. Scrutiny of the table reveals that the highest rate of growth was witnessed in the III plan where the rates of growth varied between 1.07 for the tertiary sector to 16.61 for the agriculture sector. The high growth of the agriculture SDP could be attributed to the low base effect. During this plan period industry grew at 5.32 percent per annum. This was the highest growth recorded by the agriculture sector ever and thereafter the growth of the primary sector oscillated between -5.84 to 8.18 percent. The fastest growing sector was the tertiary sector. From the IV plan onwards the growth of the tertiary sector accelerated and touched a high of 18.55 percent per annum during the VIII plan. The growth of the agriculture sector picked up after the VI plan perhaps due to green revolution and recorded rates of growth of over 5 percent per annum in all the plans except during the IX plan where the growth was negative. In recent years the highest growth of the primary sector was in the 10th plan with an annual growth rate of 8.18 percent.

Plan Period	Primary	Secondary	Tertiary	All Sectors
III (1961-67)	16.61	5.32	1.07	7.29
Annual (1967-69)	6.87	–1.29	3.24	4.83
IV (1969-74)	5.89	14.91	–1.22	4.98
V (1975-80)	1.47	3.43	3.72	2.71
VI (1981-85)	7.40	2.65	12.69	7.68
VII (1985-90)	7.04	13.24	6.41	8.18
VIII (1991-96)	7.33	13.86	22.17	14.51
IX (1997-2002)	–5.84	–4.28	7.60	0.94
X (2002-07)	8.18	6.62	7.74	7.54

(Real Percent)

Table 4 Growth rates of State Net domestic product during the various plans.

4. Per Capital Income

The growth of per capital income in real terms is a true indicator of the growth of an economy in a developing region. The results presented in table 5 show that the growth has been erratic. It varied from –1.45 in the first plan to 11.63 in the VIII plan. The growth was year dismal in the IX plan when the growth had stagnated. However, growth picked up in the X plan and registered a decent growth of 6.45 percent per annum. As a policy, the state should aim at achieving a steady and high rate of growth of economy. The state has moved into a high growth era since the VII plan and has performed well in all the plans but in the IX plan, the growth rate stagnated during the entire plan.

Plan	Growth Rate
III	–1.45
A	6.40
IV	0.19
V	–1.09
VI	2.61
VII	10.99
VIII	11.63
IX	–0.06
X	6.45

Table 5 Growth of per capital income in the various plans

5. Summary

The objective of planning in Karnataka has been fairy consistent, centering on accelerated economic growth, reduction of poverty, improvement in the quality of education and eradication of illiteracy, development of infrastructure like irrigation and power. These objectives have been reflected in the various plans effectively; However, what is needed is a consistency in spending and that appears to be missing. There appears to be a degree of adhocism is earmarking funds to various sectors of economy. This is perhaps one of the reasons why a consistent growth in the economy has not been achieved. This is evident in the case of power and energy, agriculture and welfare. This imbalance should be made well with greater public-private partnership in some sectors and through direct intervention in sectors such as welfare. Agriculture and welfare spending have widespread welfare ramifications and hence these two sectors should not be neglected.

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Wellness Positioning: Rationale for Promoting Brand India

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Abstract

Wellness is a relatively new concept. It is a mind set with a predisposition to adopt a series of key principles in varied life areas which lead to high levels of well-being and life satisfaction. As travelers seek different experiences from different destinations, it is essential for destinations to create unique travel experiences on an emotional, physical and intellectual plane and even a spiritual plane. This paper provides a rationale for promoting Brand India through wellness positioning. This paper also discusses destination positioning strategies adopted by various countries, travelers' expectations, and current wellness services provided in India.

Key words / phrases: *Wellness, Destination Positioning, and Branding India, Strategic Thinking.*

1. Wellness: Conceptual Framework

(Dona dell Living Well Center)[1] "Wellness is first and foremost a choice to assume responsibility for the quality of your life. It begins with a conscious decision to shape a healthy lifestyle. Wellness is a mind set, a predisposition to adopt a series of key principles in varied life areas that lead to high levels of well-being and life satisfaction".

Bouchard et al (1990)[2] "Wellness is a multi dimensional state of being describing the existence of positive health in an individual as exemplified as quality of life and sense of well being".

Schafer (1996)[3] defined wellness as the "process of living at one's highest possible level as a whole person and promoting the same for others a continuing challenge, rather than something attained and then forgotten."

Dunn (1977)[4] defined wellness as "an integrated method of functioning which is oriented toward maximizing the potential of which the individual is capable. It requires that the individual maintain a continuum of balance and purposeful direction with the environment in which he is functioning".

Dr. Bill Hettler, Cofounder and President of the Board of Directors of the National Wellness Institute, propounded this interdependent model, commonly referred to as the 6 Dimensions of Wellness, given in figure 1.

Figure 1 Six Dimensional Wellness Model©

Wellness is a new concept, which is emerging as the positive component of health; The concept is holistic and aims at bettering the quality of lives.

2. Positioning: Conceptual framework

"Positioning is what you do to the mind of the prospect"[5]. The concept evolved by the seventies and today it is one of the links between manufacturing, brand building and advertising

strategies. Positioning as a concept has been accepted and practiced widely because it acts as an effective tool to focus the communication; it gives ample leads for the provider to zero in on particular aspect or variable in the service provision, which can give the needed differentiation touch. "Positioning plays a pivotal role in marketing strategy because it links market analysis and competitive analysis to internal corporate analysis. From these three, a position statement can be developed that enables the service organization to answer the questions- what is our service concept, what do we want it to become, and what actions must we take to get it there"[6].

Positioning addresses certain aspects pertaining to how the targets perceive services and what attributes in the service need to be highlighted. The media clutter is so high that the target audience may not have a clear brand association and brand identity if the services are not positioned. "Three main reasons for positioning: human perceptual process, intensified competition and sheer volume of advertising to which people are exposed every day"[7]. "The most successful service firms separate themselves from the pack to achieve a distinctive position in relation to their competition. They differentiate themselves by altering typical characteristics of their respective industries to their competitive advantage"[8].

The next important conceptual understanding on positioning is that it is constantly evolving and it is different to different target segments. "Positioning is rarely static: They need to evolve over time in response to changing market structure, technologies, competitive activities, and the evolution of the firm itself"[9]. "A brand may establish different positions for different market segments"[10]. The change of position is termed repositioning. "Repositioning may require rethinking the benefits offered to consumers through the marketing mix"[11]. The consumers tastes and preferences are so varied and wide, the market environment and the competitive activities are so vibrant, that positioning needs to be re-examined from time to time. Hence to sum it all, positioning consists of the following major principles.

1. "A company must establish a position in the minds of its targeted customers.
2. The position should be singular, providing one simple & consistent message.
3. The position must set a company apart from its competitors.
4. A company cannot be all things to all people- it must focus its efforts"[12].

Positioning is the basic theme with which brands are built. The theme is the platform around which services are designed, communications are planned and brand identity is built.

3. Literature review on Branding Nations

Live case studies have been compiled and given in Table 1. This table gives an idea as to how destinations have positioned themselves and how it has affected tourist inflow into destinations.

Sl. No.	Destination	Positioning	Implementation
1.	Positioning Virginia -USA http://www.vatc.org/advertising/positionresearch/positionresearch_files/frame.htm	Visiting Virginia is a genuine and enriching experience by demonstrating that people will experience a genuine good time–Virginia is welcoming, fun, interesting, wholesome, relaxing.	Virginia tourism corporation. To increase revenue from $13 billion to $26 billion by 2007. Qualitative research through consumer focus group, brain storming, focus groups.
2.	Branding Wales._ Article by Peter van Ham, Foreign Affairs, October 2000. .http://aei.detya.gov.au/activities/branding/branding.htm www.visitwales	Unique Destination Proposition (UDP) The tagline would be along the lines of 'natural revival' or 'naturally reviving'. Wales would be 'unspoiled, down to earth, with traditional values, genuine, green and beautiful, providing physical and spiritual revival'. In the communications brief developed for potential advertising agencies to bring this positioning to life, the shorthand for this idea was 'Wales puts back into your life what life takes out - the antidote to every day life'. The strapline was: 'Wales two hours and a million miles away'.	To date, the campaign has won fifteen national and international awards including ones from the Chartered Institute of Marketing and Travel Industry Groups and Multi Media Campaign of the Year Award in 1998, beating recognized brands such as Virgin Atlantic, British Airways and Thomson Holidays Wales' share of trips and spend increased. Brochure enquiries rose from 140,000 in 1998 to 240,000 in 1999. Monitoring research revealed increases in awareness and ranking.

3.	Positioning Thailand as Quality Tourism Destination. Ministerial conference on partnership in tourism development 2003 Bahrain. Tourism authority of Thailand.	Positioning Thai to the middle east population.	Thai has 10% Muslim population. Of various target groups the middle east is the one, which is most attractive. The campaign was specially designed to attract the Middle East Muslim tourists highlighting the books, culture etc.
4.	Western Australian Brand positioning. www.world-tourism.org / regional / europe / PDF / SPEECHES / 2004 / moscow / 23_march_04.htm - 6k	Unique selling points were evolved. Fresh, carefree natural & alive were the identified attributes. Five core iconic experiences were identified. The Real thing Campaign was evolved. Marine, Outback adventure, Wine, Forest & family People & lifestyle were the five core experience areas.	"Win a real thing" campaign.
5.	Tourism New Zealand www.nzherald.co.nz/index. cfm?c_ id=14&ObjectID=10328378 - 32k -	Campaign cultivated an image of quality and freshness with the "100% Pure New Zealand" positioning.	Tourist numbers rose by 11.2 per cent last year. Time magazine has said the campaign is a prime example of good national branding and a United Nations agency said the campaign had boosted exports and tourism.
6.	Destination marketing techniques the case of Germany WTO seminar on destination marketing for the 21century – Moskow 2004	Mega trend Health Mega trend Culture	Wellness Scenic Cycling Natural falls Families Mice City tour shopping UNESCO Young people.
7.	``Malaysia Sales Mission 2005,'' for the Korean market. http://times.hankooki.com/lpage/culture/200505/kt2005052015554152970.htm	``Malaysia is economically and politically stable, and is a multi-racial, multi-cultural society with travel programs that give sightseers a value for their money. Visa waivers and direct flight connections by Asian Airlines and Korean Air will also attract Korean tourists,'' Malaysia truly Asia.	In 2003, Malaysia received 46,200 Korean tourists while in 2004, the number increased by 97.4 percent to 91,200. For the first quarter of 2005, 35,000 Korean visited the country.
8.	Turkey tourism boardhttp://goturkey.kultur.gov.tr/turizm_en.asp?belgeno=9274	DIVERSIFYING TOURISM Congress and Incentive Tourism Alternative Tourism Types (Golf, Wellness, Spa & Thermal, Sports and Yacht Tourism) Eco-Tourism Satellite Tourism Zone Projects	From 1980 to 2002 the tourist arrivals increased from 1.2 million to 13. 3 million which is an increase of 11%.

9.	Destination Marketing technique: the case study of France. WTO seminar on destination marketing for the 21century – Moscow 2004	Two major marketing themes Market based approach Focus on 10 priority markets & pioneering spirit on emerging markets. 1.Product based approach 2.Theme based marketing through clubs & task forces	Theme products organized into 4 Departments Business Department. Business Conventions & Industrial Tourism. Nature Department. Nature, sea Lakes & mountains, Seaside resorts, French overseas territories. Cultural Department: Monuments, castles, museums, city breaks, pilgrimage, wine. Specific leisure activity department: Youth Tourism, golf, spa wellness, naturism, holiday villages. Strengthen the position of France in priority market and: Position France as high quality destination in terms of products and services.
10.	Branding Rio http://www.imc.org.za/documents/ brazil_mexico.ppt	Rio's positioning as Gate to foreign tourism to Brazil. Care free, fun loving and easy going environment, capitalizing on natural beauty and plenty of opportunities. Vibrant coastal city where busienss people walk side by side with the ones in shorts, sandals, T shirts and sandals. Diversified culture and artistic manifestation.	Getting over the image of drugs and vandalism.
11.	Dubai the golden city. http://www.imc.org. za/main/resources.stm	Dubai Shopping festival is of international fame.	Positioned as city of gold.

Table 1 Case on Branding Nations

3. Wellness and India - An overview

A major trend in the tourism industry is that travelers are demanding new, engaging, highly unique experiences from travel. The National Tour Association's educational seminar (March 2003) identified experiences as the "next generation" of tourism products to grow tourism businesses.

"Travel consumers want to be "emotionally moved," educated, challenged, involved, entertained, and even surprised. They are selecting travel destinations based on the delivery of "experiences" rather than the physical attributes of a resort, a city, a province, a country. At the heart of this demand are people who are willing to pay to participate in travel that offers something different, engaging experiences that go beyond traditional goods and services representing opportunities for new travel programs, alliances, and packages"[13].

No longer can you compete in the global travel industry with a bigger hotel, a new chairlift, and improved roads. Destinations have to create and cultivate truly unique travel experiences, on an emotional, physical, intellectual, and even spiritual level.

James Gilmore, author of "The Experience Economy, Work is a Theatre and Every Business a Stage", at the 2004 Travel Alberta Industry Conference Fairmont Banff Springs identified seven experience areas which includes

- Cuisine
- Ski
- Winter outdoor adventure
- Summer outdoor adventure
- Luxury/Spa
- Culture/Heritage
- Family Reconnecting/Togethering.

Experiencing gives the tourists an involvement and a true purpose, that is unique and sacred. Any amount of physical excellence will only make the place more monotonous and luxurious but the experiential component will have to be built in by meshing the local culture, tourist's perceptions and their expected levels of comfort, which is rather complicated.

In tourism, while factors such as cost of travel, convenience, and quality of facilities are important, the strongest motivator is "image". Image puts a destination on the consumer's "shopping list". It creates an emotional appeal, which en-

hances that destination's chances of being chosen over others. This image is created in the minds of the audience by positioning the services.

"7500 respondents from 134 countries took part in the Lonely Planet's online survey. The top nominated countries were Thailand, Italy, Australia, India, and New Zealand. The participants were predominately European, North American & Australian"[14].

India to the westerns is a land of old civilization, holistic knowledge, spirituality, enlightenment, mysticism and poverty. This is the core and the crux even today. The basic ethos of the culture of the land can be well established in the concept of wellness.

A traveler seeks different things from his travel. The place he travels to should cater to his needs. If this happens then the destination has filled a lacuna in his life. "Tourism means different things to different people".

"Recreational: One of the commonest forms; objectives of travel here is to relieve the tensions and strain of work.

Diversionary: When the visit is a true escape from the boredom and routine of home life.

Experiential: Where the tourist here is a modern pilgrim looking for authenticity in the life of other societies because he has seemingly lost it in his own.

Experimental: where the tourist wants to experiment with lifestyles other than his own.

Existential: the tourist who actually acquires a new spiritual center as a result of the travel experience"[15].

The traveler to India will seek either an experiential, experimental, or existential meaning to his travel. India in the mind of the westerners exuberates spiritual experiences. "The references to spirituality were meant to strike a chord with the target segment, as their perception of India is largely from the '60s. India has a built-in fundamental spiritual basis at heart. Travelers are still looking for spirituality, but they don't want to rough it out now. Instead, they want that experience alongside the comforts of a good hotel. It's spirituality without the struggle,"[16]. Such perceptions of India as a place of discovery (self discovery) and spirituality, continue to inform contemporary travel discourse and patterns of consumptions"[17].

As an extension to these existing perceptions positioning India as a Wellness destination will be an ideal choice. This will give a distinct advantage and Image compared to the other Asian countries. "The "health and wellness segment" and the "incentive travel segment", though two market segments with lower volume at present, had been recommended to extend support by taking advantage for positive exposure. The WTO has pointed out that the first segment has been identified as the main theme for the Pacific Asia Travel Agents (PATA) meet and this fits well with the Ayurvedic medicine and treatment component of Kerala's tourism product"[18]. This positioning reiterates the already existing perception. The concept of Wellness is holistic and like total quality management concept, there is no point beyond which progression cannot be made. Hence any human residing in any corner of the world adopting any life style has a scope to improve and cherish from the Indian Wellness concept.

Distinct positioning has emerged for the various Asian destinations. For example, in a survey in 1998 commissioned by the Malaysian Tourism Promotion Board, Singapore was seen – by a broad selection of travelers and tourist agents from the US, Japan, India, Germany, Australia, UK and Sweden – as "clean, modern and safe". China's dominant image and attraction was "culture". Malaysia was seen as "multicultural with many beaches". Thailand had a brand image of "exotic, fun, and friendly people". On the same lines positioning India for wellness will be apt, as it would positively reinforce the existing perceptions of the target segment. Kerala is one of the destinations with Ayurvedic treatment centers as its tradition. Like Kerala, other regions in India have their own bounty of treasures, that is rich, and exotic. "Health Breaks for body and soul- Ayurveda in Kerala. Yoga in the foothills of Kumaon, Alternative therapies in Auroville, Luxury spa in Goa, - "Indian Wellness Holiday"[19] was the cover page report from Outlook traveler. This showcasing is apt as it brings out the entire range of wellness that India can offer.

In fact the various ashrams like the Sri Sri Ravi Shankar's "Art of Living"[20] and Maharishi Mahesh Yogi's "Transcendental Meditation"[21] offer holistic wellness in all walks of life. "The TM movement has referenced many medical and sociological studies to strengthen the scientific acceptability of its claims. A number of these studies have been published in leading journals such as Hypertension (the journal of the American Heart Association) and The Journal of Conflict Resolution (published at Yale University), The Hans Selye examined the changes measured in TM-practitioners, and found that the therapeutic effect was clearest in conditions caused by wrong ways of adapting and reacting to stress"[22]. So the positioning of wellness can have not only an aspirational platform of creative rendering in the advertising campaigns but also a scientific authentification or rationale for Indian Wellness Platform.

4. Conclusions

Positioning is very important to differentiate a destination from other neighboring designations. If a tourist from United States is planning to visit Asia, he needs to first appreciate the difference and aura that is unique with each destination. The experience that an American would take back after traveling to Singapore will be totally different from the experiences that he will have in India. Presenting the crux of the experience is the sole purpose of positioning statement. This is a herculean task as a destination is a potpourri of many integrated aspects. One needs a thorough understanding of a particular destination, the aura of the other destinations under the same geographic considerations, an eye on the perceptions of the clientele, and ability to synchronize the whole and cull out a unique positioning statement. The rationale to position a destination is very important and this is where the strategic thinking of the integrated communication starts.

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CRM - Scope and Challenges in B-To-B Markets

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Abstract

The new era of business marketing is built on effective relationship management. Relationship management centers on all activities directed towards establishing, developing and maintaining successful exchanges with customers and other constituents. Nurturing and management of customer relationships has emerged as an important strategic activity in most firms. This is because loyal customers are far more profitable to keep than those customers who are price sensitive and perceive little difference among alternative offerings. Secondly a firm that is successful in developing strong relationships with customers secures important and lasting advantages that are hard for competitors to understand or copy. This paper is an attempt to understand buyer behavior, concepts of CRM and the application software used in implementing CRM.

Key words / phrases: *Always-a-share Behavior, Lost-for-good Behavior, Customer facing applications, Customer touching applications, Customer Centric applications.*

1. Introduction

Buyers and sellers craft different types of relationships in response to market conditions and characteristics of the purchase situation. CRM investments have to be made keeping the type of customers in mind. It is obvious that relationship building involves cost. The seller has to understand the life time value of the customer before investing in relationship building activities. CRM is not just about technology. Technology is only an aid to implement fundamental relationship marketing principles. Technology by it self cannot bring in relationship value to both sellers and buyers.

2. Scope & Objectives

The scope of this study is limited to conceptual understanding only and it is not based on any empirical evaluation. The objectives are

1. To understand the two continuum of buyer's behavior
2. To understand the principles of relationship marketing
3. To understand application software packages that implement CRM.

3. Types of Buyers' Behavior

Customers are more likely to prefer transactional relationship (Always –a-share behavior) when there is a competitive supply market featuring many alternatives, the purchase decision is not complex, and the supply market is stable. This profile fits some buyers of office supplies, commodity chemicals, and shipping services. In turn, customers emphasize a transactional orientation when the purchase is viewed as less important to the organization's objectives. Such relationships are characterized by lower levels of information exchange and are less likely to involve operational linkages between the buying and selling firms.

Buying firms prefer a more collaborative relationship (Lost-for-good behavior) when there are few alternatives, market is dynamic (for example rapidly changing technology), and when complexity of purchase is high. In particular, customers seek close relationships with suppliers when the purchase is deemed to be important and strategically significant to the buying organization. This behavior fits some purchasers of manufacturing equipment, enterprise software, or critical component parts embodied in the firm's products.

4. Literature Review

ICICLE Report (2001) outlines "Indian CRM Markets". Conceptual studies to understand the scope of CRM usage in different sectors are analyzed. CRM market size, the drivers and inhibitors and the challenges of implementing CRM are analyzed.

Vikas Saraf (2003) has discussed CRM implementation issues. He concludes long-term successes of an organization depend on how successfully it implements CRM strategies.

Thompson and Maklonhave (2003) have discussed "How to develop relationship marketing strategies by implementing CRM technology in industrial markets"? Recommendations for implementing CRM in B-to-B Markets are given.

Sheen Leek and Turn bell (2004) have discussed "a conceptual model for suppliers and buyers management of relationships". Formal documented systems, personnel judgments and meetings are considered as strategic aspects of measurement of relationships. It is found that both buyers and suppliers do have their own methods for managing relationships. The methods are a combination of both formal and informal systems.

Payne and Frow (2005) have discussed a "strategic frame work for Customer Relationship Management". They have developed a conceptual framework for Customer Relationship Management strategy. They have identified strategy development process, value creation process, multichannel integration process & performance assessment process as key variables in the framework.

Cao and Gruca (2005) have discussed the issue of reducing adverse selections through CRM. The authors have developed a model for adverse selection and costly screening process. They conclude the goal of CRM is to acquire right customers by reducing adverse selection.

Lynette Ryals (2005) have examined the importance of lifetime value of customer in making CRM work. The research demonstrates that CRM delivers better firm performance through measurement and management of customer relationships.

Rajagopal and others (2005) have examined customer portfolio theories and their implications in reference to marketing and purchasing perspectives. The major conceptual contributions in the area of customer portfolio and relationship management have been categorically analyzed in this paper.

Claudia Rebolledo (2005) and others have explored the role of information technologies in facilitating a relationship-marketing orientation. On the basis of conceptual and empirical contributions, it is proposed that use of IT could improve customer knowledge. However it does not facilitate the acquisition of the other elements required for developing long-term relationships with customers and clients (i.e., trust commitment and personalization).

Based on the review of literature, a few of the principles in implementing CRM are discussed below.

5. Principles

5.1 Acquiring the right customers

Customer selection requires a clear understanding of customer needs, a tight grasp on the costs that will be incurred in serving different groups of customers, and an accurate data about potential profit opportunities. The choice of potential customers is defined by, how different customers define value.

The customer selection process should also consider profit potential. Because the product is critical to their operations, some customers place a high value on support services (for example technical services and training) and are willing to pay a premium for this support. Other customers are most costly to serve, do not value service support, and are extremely price sensitive in making product selection decisions. Because customers have different needs and represent different levels of current and potential opportunities, the "customer base should be divided into groups ranging from the most profitable, to whom the marketer wishes to develop a broader and deeper relationship, to the less profitable, to whom the firm might assign a low priority". Customer selection, therefore, must be explicit about which demands the seller can meet and leverage in dealings with other customers. Otherwise, the seller risks in serving unprofitable customers and wasting resources that might be allocated to other customer groups".

5.2 Crafting the right value proposition

A value proposition represents the product, services, ideas, and solutions that a business marketer offers to advance the performance goals of the customer organization. To develop customer specific product offerings, the business marketer should next examine the nature of buyer-seller relationships that characterize the industry. "The strategies perused by competing firms in an industry fall into a range referred to as the industry bandwidth". Business marketers either attempt to span the bandwidth with portfolio of relationship marketing strategies or concentrate on a single strategy, thereby having a narrower range of relationships as compared to the industry bandwidth.

5.3 Instituting the best practices

The sales force assumes a central relationship management role in the business market. Technical service and customer service personnel also assume implementation roles that are important and visible within the buying organizations. Successful relationship strategies are shaped by an effective organization and deployment of the personnel selling effort and close co-ordination with supporting units, such as logistics and technical service. Some firms divide the sales organization into units that each serves a distinct relationship category such as transaction accounts or relationship accounts. Through a careful screening process, promising transaction accounts are periodically upgraded to partnership accounts.

5.4 Motivating employees

Dedicated employees are the cornerstones of a successful customer relationship management strategy. Frederick F.Reichheld notes, "Leaders who are dedicated to treating people right, drive them to deliver superior value, which allows them to attract and retain the best employees. That is partly because higher profits results from customer retention, but more important, it is because providing excellent service and value, generates pride and sense of purpose among employees".

5.5 Learning to retain customers

Business marketers track customer loyalty and retention because the cost of serving a long-standing customer is often far less than the cost of acquiring a new customer, Why? Established customers often buy more products and services from a trusted supplier, and as they do, the cost of serving them declines. The firm learns how to serve them in more efficient manner and also spots opportunities for expanding the relationship. So the customer profit rate tends to increase over the life of a relationship. Business marketers earn customer loyalty by providing superior value that ensures high satisfaction and by nurturing trust and mutual commitments.

5.6 Evaluating relationships

Some relationship building efforts will fail because expectations of the parties do not get Example, when the business marketer follows a relationship approach and the customer responds in a transaction mode. By isolating customer needs and associated costs of augmented service features, the marketer is better equipped to match profitably the appropriate product offering to the needs of a particular customer. The goal of relationship is to enable the buyer and the seller to maximize joint value. This requires formal evaluation of relationship outcomes.

5.7 Demonstrating commitment

Relationships with customers can also be damaged by product quality problems, late deliveries, or inadequate service support. Each can pose serious threat to the relationship and signal a lack of commitment on the part of the marketer. In turn, the customer's definition of value changes over the course of relationship. As Frederick E Webster Jr.notes, "If quality is defined as meeting and exceeding customer expectations, and if the customer expectation keeps increasing as the company improves its performance and competitor's promises of superior value, continuous improvement is an inevitable requirement for survival in the customer relationship".

Business marketers should also continually update the value of their product and relationship offering. Attention here should center on particular new services that might be incorporated into the offering as well as on existing service elements that might be unbundled or curtailed. Working relationships with customer firms are among the most important marketing assets of the firm. They deserve delicate care and continual nurturing.

5.8 Gaining a customer relationship advantage

A customer relating capability is best nurtured in a market driven organization and is exercised through a complex process of knowledge acquisition, sharing, and application.

5.9 Bench Marking

Bench marking is a process of identifying the best in the class and adopting the best practices. Benchmarking provides superior services to customers and helps in creating value to the customers. Relationships improve and sustainable advantages will be derived.

5.10 Regaining Lost Customers

In Business to Business markets, once a customer is lost for what so ever reason it is very difficult to regain the customer. The expenses involved in regaining a lost customer will be much more than acquiring a new customer. Hence losing custome is highly unaffordable to any business organization. In order to regain the lost customer extra efforts in relationship building activities have to be undertaken. Delivery and quality may have to be renegotiated from the beginning.

The above principles in implementing CRM in organisations can be effectively met by understanding and using right application soft wares.

6. CRM Applications

A wide range of applications implements the three direct CRM processes-sales, marketing, and services. The applications that implement these business processes are considered "operational" applications. They are the applications

that "do" business, delivering offers, generating orders, and responding to customer requests. CRM also has analytic or decision support dimension. These applications are called customer centric intelligence applications.

6.1 Customer facing applications

The Key customer-facing CRM applications are contact center, sales force automation, and the field services. These are known as customer facing, because sales, field service, and contact center representatives actually interact with the customers. Customer facing CRM applications support those staff members.

Customer-facing applications have been around for many years. For example sales force and field service automation applications were there even before we thought about CRM. Those products that do implement these applications predate CRM, but now have been repositioned to take advantage of CRM trend. For example, many of the products that implement tele-service were developed as help desk products dating back to the late 1980s. SFA applications, originally known as contact management applications have been around even longer.

Because the implementation of these applications predates CRM, they need to be upgraded to reflect a customer focus. These upgrades should give them that single and consistent view of customers and company and integrate them with the business processes that support their marketing, sales and service functions.

6.2 Customer touching applications

The Key customer-touching CRM applications are campaign management, e-commerce, and self-service customer support. These are called "customer touching" because customers interact directly rather than through a company representative.

Customer-touching applications are relatively new-certainly much newer than customer-facing applications. Most date from mid to late 1990s. Campaign management was the first attempt to automate the marketing business process, allowing companies to deliver offers to more markets more cost efficiently, more effectively and more frequently. Electronic commerce was a break through application. It gave companies a new touch point and a way to expand their market reach and presence, automating completely the online marketing, sales and service processes. Electronic commerce also gave us automated personalization, a customer centric approach to treating each customer as a market of one. Self-service customer support was the next step for customer service. While contact center applications brought help desk capabilities to customers, self-service customer support applications put this functionality online, enabling customers to access it 24/7.

All customer touching applications let customers help themselves-one of the basic principles of customers.com philosophy. Customers may prefer to interact in this self service way. We can also improve the quality of the experience that we provide by balancing functions between touching and facing touch points, allocating skilled marketing, sales, and service staff to perform the highest pay back tasks or to support best customers, supporting basic tasks and less than best customers through customer self -service interactions.

However, customer-touching applications must have excellent performance and provide a great customer experience. This is not as vital for customer facing CRM applications because great sales people can insulate customers from not so great applications.

6.3 Customer centric intelligence applications

Customer-centric intelligence applications are analytic applications that analyze the results of operational processing. Their results can be used to improve the efficiency and effectiveness of operational CRM applications. Customer -centric intelligence is the term we use to describe the customer focused analytic functions, but we might be calling these same applications business intelligence, decision support systems (DSS), or analytic CRM applications. The names are less important than their capabilities. This includes these high level functions.

- Data warehousing
- Reporting
- Analytic applications

6.4 Data warehousing and Data Mining

Customer-centric intelligence applications depend on a data warehouse for input. The data model required for customer -centric intelligence applications is likely to differ from existing data ware house schemes in the areas of customer information, customer behavior information, and information about marketing, sales and service initiatives.

6.5 Reporting

Reporting is the tried and true approach for understanding customers. We may probably have our own reports in our own favorite formats. These differences and different approaches to analysis may no longer work when we become a customer centric company. We must have a single view of our customers and provide a consistent experience to all of them. Thus we must be generating and reviewing reports on a consistent set of information through out the organization.

6.6 Analytic applications

Analytic applications should reflect the way in which our organizations approach analysis. Some organizations rely on statistical analysis and data mining approaches such as clustering or neural networks. Other organizations distrust everything except the empirical information in the data warehouse. We should look at analytical applications as the tool set for understanding customers.

7. Conclusions

CRM is not just about technology but it involves a through understanding of the customer requirements as discussed above. Technology only supports the system but by itself it will not provide any answers.

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Asset–Liability Linkages in Managing Bank Funds: An Empirical Analysis

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Abstract

Funds management is an integrated approach to match liabilities (sources) and assets (uses). Each source of funding uniquely influences the employment of funds and the overall profitability of banks. Capital funds determine the risk absorption capacity as well as the type of asset(s) to be held by banks. The size and composition of deposits determine the volume of funds to be employed in investments and advances. Efficient management of funds requires mobilization and utilization of funds in a manner that minimizes costs, generates revenue, recovers operational and financial costs, and contributes towards reasonable returns. A mismatch between sources and uses would be imminent with increased linkage of banking operations to market dynamics. Therefore, it is necessary to trace the interrelationship between sources and usage of funds, and make an appropriate design that has a high degree of customer orientation.

Key words / phrases: *Sources, Uses, Fund Management, banks' capital base, Asset-Liability Management.*

1. Introduction

Commercial banks deal with acquisition and utilization of funds in different forms. The sources consist of capital funds, deposits and borrowings. Capital funds are the owned funds that guard banks against losses and the impending failure. Similarly, deposits constitute nearly 85% of the total funds and hence the survival of banks greatly depends upon their ability to manage them. In addition, banks also borrow from Reserve Bank of India (RBI) and other financial institutions. Banks utilize these funds for liquidity management, as well as for investment in securities, loans and advances. Liquidity management includes maintaining sufficient liquid funds for day-to-day business, meeting the statutory obligations and catering to emergency needs. For this purpose, banks hold funds in the form of cash in hand and with other banks as well as invest some portion in money markets. The return on these funds is almost zero except money at call and short notice. Investments in government and other approved securities shares and debentures are the second largest use of funds. The rate of return on such investments is adequate enough to cover financial and operational costs. Thirdly, credit deployment is a significant area of employment of funds in terms of size of funds involved as well as revenue generated. However, it carries a high degree of credit risk which necessitates banks to adhere to prudent lending principles. Last but not least, banks also use a portion of their funds for creating their business infrastructure which, of course, does not directly generate income, but facilitates an enabling environment.

Efficient management of funds includes both raising of funds as well as using them in the manner that minimizes costs, generates revenues, recovers the operational and financial costs and finally, contributes a reasonable return. Thus, the objective of earning profits shall be fulfilled by an appropriate

design of sources and uses of funds on business principles with an intimate customer orientation. This thinking necessitated to pursue a study on linking liabilities (sources) with assets (uses) in Public Sector Banks (PSBs) in India with the following objectives:

1. To examine the interrelationship between long-term sources and long-term uses of funds;
2. To study the linkage between short-term sources and short- term uses of funds;
3. To measure liquid gap in funds management and
4. To evaluate the consistency in performance facets of asset-liability linkages;

2. Scope and Methodology

12 PSBs are covered for the purpose of analysis. The study is based on the data drawn from the annual reports of the selected banks spanning over a period of ten years from 1994-1995 to 2003-2004. The sources and uses of funds are represented by various items of liabilities and assets contained in balance sheets of the respective banks.

The data are presented through tables and analyzed with the help of ratios, percentages, arithmetic mean, and coefficient of variation (C.V.). The analysis of each point is done from the point of view of banking industry as a whole as well as the segments vis-à-vis, High profile Banks (HPB), Medium profile Banks (MPB) and Low profile Banks (LPB).

The selection of the banks is based on the Report of Working Group (1999) constituted under the chairmanship of Shri. M. S. Verma. This Group classified the banks on the basis of capital adequacy, coverage ratio, return on investment, net interest margin, ratio of operating profit to average working funds, ratio of cost to income, ratio of staff cost to the net interest income plus all other income. The banks are reclassified for our purpose of sampling as High Profile Banks (HPBs), Medium Profile Banks (MPBs) and Low Profile Banks (LPBs). In each category, four banks are randomly selected : Oriental Bank of Commerce, State Bank of Patiala, Punjab National Bank and Corporation Bank in HPB segment ; Andhra Bank, Bank of India, Bank of Maharashtra and State Bank of India in MPB segment and UCO Bank, United Bank of India, Indian Bank and Indian Overseas Bank in LPB segment. The data of these banks have been aggregated for the purpose of analysis.

This study adopts a quantitative approach, and the inferences are drawn from the information contained in financial statements of the selected banks. The size of the sample is adequate (12 out of 27 PSBs). In addition, these selected banks represent the cross-section of the public sector banking industry as a whole belonging to high, medium and low profile segments. The period covered under the study is one decade. Therefore, the findings can be generalized for the entire banking industry in the sphere of asset-liability linkages.

The study is organized into three parts namely analysis and discussion, consistency in asset-liability linkages and suggestions.

3. Analysis and Discussion

The scope of the term capital for the purpose of our study does not restrict itself to the amount of capital funds as disclosed in the balance sheets of the selected banks. It is calculated on the basis of capital adequacy norms as laid down by Reserve Bank of India giving due weightage to the risk weighted assets {Capital = (capital base + Risk Weighted assets) X 100}.

The interrelationship between sources and uses of funds is examined with the help of the following ratios:

1. Ratio of capital to fixed assets
2. Ratio of capital to loans and advances
3. Ratio of capital to investments
4. Ratio of capital to assets
5. Ratio of cash and near cash assets to deposits
6. Ratio of liquid assets to deposits
7. Ratio of investments to deposits
8. Ratio of credit to deposits
9. Ratio of non-deposit liabilities to loans and advances and
10. Liquid gap analysis

1. Ratio of capital to fixed assets: One of the functions of the capital is to finance the fixed assets required for banks. These assets are illiquid as well as non-profit generating in nature. As a result, investment in fixed assets affects the liquidity as well as profitability of funds. Since the depositors do not supply their funds (deposits) for fixed assets, the relationship between capital and fixed assets is logical and well established. For banks there is no standard ratio of capital to fixed assets. But the amount of capital adequacy of banks to finance the fixed assets depends on the amount to be invested in creating infrastructure like premises, furniture and fixtures, equipments and vehicles. It is therefore, necessary to examine whether or not the capital fund is sufficient to finance the fixed assets. A ratio of capital to fixed assets is constructed for this purpose.

The information relating to ratio of capital to fixed assets of the industry and segments is presented in Table 1.

Year	Segments			Industry
	HPB	MPB	LPB	
1995	NA	NA	NA	NA
1996	8.60	9.76	2.03	6.87
1997	9.58	11.39	3.47	8.20
1998	10.31	11.26	3.82	8.47
1999	11.82	10.05	4.46	8.72
2000	12.81	11.16	4.66	9.21
2001	13.21	13.60	5.39	10.80
2002	15.14	15.56	7.25	13.08
2003	17.04	17.71	10.89	16.04
2004	20.55	18.81	12.90	17.77
Mean	13.23	13.26	6.10	11.02
SD	3.83	3.36	3.61	3.80
CV	28.93	25.37	59.27	34.46

Table 1 Ratio of capital to fixed assets (Times covered)

Source: Computations are based on annual reports.

The ratio of capital funds to fixed assets for the industry (Table1) is ranging from 6.87 times to 17.77 times representing an average of 11 times over a period of nine years. The ratio has maintained a steady increase across study period. The capital funds are adequate enough in financing fixed assets required for banks. Consequently, there is no room for using other external costly funds to finance the fixed assets. In other words, the illiquid and non-earning fixed assets are not financed out of costly deposits and borrowing. It is also observed that the average ratio of capital to fixed assets is relatively high in HPBs (13.23 times} and MPBs (13.26 times] as compared to LPBs (6.01 time]. From the above it is evident that HPBs and LPBs have maintained sufficient amount of capital funds to finance their fixed assets. Further, the HPBs and MPBs have maintained a greater consistency than LPBs in maintaining adequate coverage of capital to their fixed assets. This is amply demonstrated in their C.V. values.

2. Ratio of capital to loans and advances: A major portion of bank funds are used for lending activities with varying risk–return profiles. Since risk of non–payment is inherent in lending operations, a mis-match between inflow and outflow is inevitable unless an adequate support system is developed. One way of developing a support system is strengthening the banks' base of capital vis-à-vis their lending operations. Capital strengthens the risk absorbing capacity of banks that arises from loan losses (bad debts) which are inherent in lending business. Inadequacy of capital coupled with loan losses subsequently restricts the lending operations of the banks. Therefore, banks with a strong capital base can assume higher risk in lending business. Hence, it is necessary to examine the ratio of capital to loans and advances with a view to measure the amount of capital used for building the loan portfolio of the banks.

The ratio capital to loans and advances of the industry and segments is presented in Table 2.

Year	Segments			Industry
	HPB	MPB	LPB	
1995	NA	NA	NA	NA
1996	29.96	18.00	10.93	18.17
1997	32.07	23.82	19.52	23.32
1998	28.78	25.54	19.83	23.95
1999	28.82	26.59	21.02	25.46
2000	28.61	28.03	19.21	24.81
2001	26.33	30.38	19.03	25.70
2002	26.51	29.76	21.28	26.62
2003	29.94	30.33	26.26	29.42
2004	31.41	30.21	28.96	30.63
Mean	29.16	26.96	20.67	25.34
SD	1.95	4.11	5.03	3.61
CV	6.68	15.23	24.32	14.24

Table 2 Ratio of capital to loans and advances (percentages)

Source: Computations are based on annual reports.

The ratio of capital to loans and advances for the industry [Table 2] is ranging from 18.17% to 30.63% representing an average of 25.34% over a period of nine years. This ratio of capital to loans and advances has maintained an increasing trend during the period under study. It may be inferred that the banks' capacity to assume higher lending risks has improved over the years. Further, the average ratio of capital to loans and advances is higher in case of HPBs (29.16%) and MPBs (26.96%) as compared with LPBs (20.67%). In addition, the HPBs have maintained relatively higher consistency (CV=6.68) in keeping up their capital vis-à-vis the loans and advances as compared to MPBs (CV=15.23) and LPBs (CV=24.32). Thus, the ability of LPBs to lend more and assume lending risks is hampered due to inadequate and inconsistent capital base.

3. Ratio of capital to investments: Among the various uses of bank funds, investments in various financial assets offer relatively attractive rates of return. The prices of such investments are, however, subject to fluctuations. As a result, the banks are compelled to consider various types of invest-

ments that involve varying intensity of risk. It is imperative that the banks should have adequate capital base that would absorb the loss on securities, if any, due to fall in their market prices. Therefore, it is necessary to examine the ratio of capital to investments to understand the adequacy of capital for absorbing the risk of losses in investment portfolio.

The information relating to capital to investments of the industry and its segments is presented in Table 3.

Year	Segments			Industry
	HPB	MPB	LPB	
1995	NA	NA	NA	NA
1996	31.42	24.56	12.18	23.11
1997	30.48	31.96	17.55	27.64
1998	29.62	34.23	19.49	27.83
1999	28.73	30.99	16.64	26.79
2000	28.90	30.57	15.74	25.36
2001	29.63	30.38	16.60	25.75
2002	32.46	28.39	18.90	26.46
2003	34.85	27.88	23.11	28.24
2004	36.54	29.10	26.67	30.56
Mean	31.40	29.78	18.54	26.86
SD	2.74	2.74	4.25	2.09
CV	8.72	9.21	22.93	7.77

Table 3 Ratio of capital to investments (percentages)

Source: Computations are based on annual reports.

The ratio of capital to investment for the industry [Table 3] is fluctuating from 23.11% to 30.56%. The capital funds on an average provide a cushion for about 26.86% of investments. Any risk on investments exceeding this cushion limit would disturb the flow of bank funds. The gratification is that the support of capital to investment over the years is improving. The segmental analysis reveals that the average ratio of capital to investments is higher in case of HPBs (31.4%) and MPBs (29.7%) as compared with LPBs (18.54%). The HPBs and MPBs have demonstrated a consistent performance (CV=8.72 and 9.71) in maintaining their capital funds for investments. However, a marked variation is found with LPBs. The poor and inconsistent performance of LPBs affects their risk absorption capacity and incapacitates them from assuming higher investment stakes.

4. Ratio of capital to total assets: Capital supports the overall assets of the banks. These assets influence the size of business, profits and growth by generating adequate revenue. The composition and size of each asset class have an impact on the amount of capital adequacy fulfilled by the banks. Thus an improvement in capital base is a prerequisite of the banks' solvency as well as their growth. A sound capital base enables banks to offset the decline, if any, in the value of their assets. The ratio of capital to total assets reflects the support of capital to total assets and indicates the banks' ability to absorb the risk of losses caused by the reduction in value of assets.

The information relating to the ratio of capital to assets of the industry and segments is presented in Table 4.

Year	Segments			Industry
	HPB	MPB	LPB	
1995	NA	NA	NA	NA
1996	11.50	8.40	4.32	8.07
1997	12.30	10.89	7.15	10.11
1998	12.30	11.74	7.05	10.38
1999	12.63	10.83	7.34	10.26
2000	12.10	11.77	6.97	10.28
2001	12.15	12.29	7.47	10.62
2002	12.97	11.94	8.58	11.16
2003	14.53	12.72	10.95	12.73
2004	15.31	13.03	12.38	13.57
Mean	12.87	11.51	8.02	10.80
SD	1.25	1.38	2.38	1.59
CV	9.68	11.98	29.61	14.73

Table 4 Ratio of capital to assets (percentages)

Source: Computations are based on annual reports.

The ratio of capital to assets of the industry (Table 4) is ranging from 8.07% to 13.57% representing an average of 10.8% over the study period. Capital support to overall assets is gradually improving and thereby improving capacity of banks to assume business risks. Though each segment in the industry has maintained an increasing trend over the years, the average ratio of capital to total assets is higher in case of HPBs (12.87%} and MPBs (11.51%) as compared with LPBs (8.02%). This reveals that the HPBs and MPBs have maintained the statutory norm of capital adequacy (10%), whereas LPBs are operating below the statutory norm of capital adequacy. In addition, the HPBs and MPBs segment has maintained greater consistency in their ratio of capital to total assets (CV=9.68 and 11.96 respectively) than LPBs segment (CV=29.61).

5. Ratio of cash and near cash assets to deposits: Banks are required to hold sufficient funds in hand to meet short-term commitments arising from demand deposits. Their in-

ability in this regard would cause loss of public confidence. Since the commitment is of short-term in nature, the assets held against deposits should also be of similar size, duration and nature. Therefore, it is necessary to examine whether banks are able to meet their short-term commitments out of their short-term resources, such as cash and near cash assets including cash in hand and balance with RBI, balance with other banks in current account, and money at call and short notice. Hence, the ratio of cash and near cash assets to deposits is constructed. A higher ratio reflects increased safety to depositors. It also avoids banks' resorting to costly borrowings to meet their short-term and unforeseen commitments.

The information relating to ratio of cash and near cash assets to deposits of the industry and its segments is presented in Table 5.

Year	Segments			Industry
	HPB	MPB	LPB	
1995	19.44	19.24	14.71	18.33
1996	20.82	21.63	16.40	20.37
1997	15.52	20.37	12.57	17.80
1998	15.39	19.99	12.24	17.52
1999	12.82	25.89	12.73	20.81
2000	11.31	19.11	12.21	16.24
2001	10.95	19.88	10.05	16.37
2002	8.88	18.49	8.24	14.70
2003	9.98	15.23	10.92	13.33
2004	10.46	14.42	11.70	13.03
Mean	13.56	19.43	12.18	16.85
SD	4.10	3.19	2.27	2.66
CV	30.24	16.44	18.68	15.80

Table 5 Ratio of cash and near cash assets to deposits (percentages)

Source: Computations are based on annual reports

The ratio of cash and near cash assets to deposits [Table 5] of the industry is showing a declining trend ranging from 20.80% to 13.30%. As a result, the banks would find it difficult to honor demand deposits owing to inadequacy of cash and near cash assets. It may even compel banks to resort to costly borrowings. Table 5 also reveals that MPBs segment holds relatively higher cash and near cash assets to deposits (19.43%) than HPBs (13.56%) and LPBs (12.18%). The LPBs holding of lower cash and near cash assets to deposits could disturb the management of funds during sporadic withdrawals. It is interesting to note a greater variation of this ratio with HPBs (CV=30.24) as compared with LPBs (CV=18.68%) and MPBs (CV=16.44). It appears that the HPBs segment is assuming risky stakes in deploying its funds

6. Ratio of liquid assets to deposits: Liquidity is necessary to facilitate deposit withdrawals as well as sporadic loan demands of the bank customers. In addition, liquidity ensures banks' credibility and integrity. Hence the measurement of liquidity assumes an important aspect of asset liability management in banks. However, there are no universally accepted liquidity ratios as the deposit liabilities are payable on demand and hence their withdrawals are non predictable. As a result, banks are required to maintain adequate liquidity considering their past experience without sacrificing their earnings. For this purpose, a ratio of liquid assets to deposits is constructed to measure the liquidity position of the banks in meeting their short-term liabilities. Liquid assets for the purpose of this ratio include cash, money at call and short notice, investment in treasury bills, government and other approved securities.

The information relating to ratio of liquid assets to deposits of the industry and its segments is presented in Table 6.

Year	Segments			Industry
	HPB	HPB	HPB	
1995	57.25	61.47	53.08	58.82
1996	57.85	60.89	56.51	59.36
1997	52.74	58.79	55.63	56.90
1998	50.47	55.85	56.21	54.80
1999	48.30	61.55	54.54	57.54
2000	48.99	57.97	53.60	55.30
2001	47.15	61.58	50.75	56.77
2002	44.75	61.97	49.92	56.27
2003	47.34	59.41	52.59	55.59
2004	49.67	59.68	53.74	56.33
Mean	50.45	59.92	53.66	56.77
SD	4.30	1.97	2.19	1.47
CV	8.53	3.29	4.08	2.59

Table 6 Ratio of liquid assets to deposits (percentages)

Source: Computations are based on annual reports

Table 6 reveals that more than 50% of deposits are supported by liquid assets for the industry as whole. In addition, there is a consistency in this ratio across the study period. However, a sizeable amount of bank funds (56.77%) in liquid assets reveals that the banks emphasis is more on liquidity of funds. Table 6 also reveals that MPBs segment holds the maximum amount of liquid assets vis-à-vis deposits (59.92%) followed by LPBs (53.66%) and HPBs (50.45%) respectively. Whereas HPBs segments are concerned with profitability, the MPBs and LPBs segments are concerned with liquidity. A higher consistency is found with MPBs (CV=3.29) and LPBs

(CV=4.08) than with HPBs (CV=8.53) in maintaining liquid assets on par with deposits.

7. Ratio of investments to deposits: Banks invest their funds in government and other approved securities. While investing they are expected not only to consider income and liquidity but also strike a reasonable balance between them. So long as the maturity pattern of investments synchronizes with the period of deposits, banks' ability to honor deposit withdrawals would be intact. However, these investments relatively earn less than the costs incurred by banks on their deposits. Therefore, banks should restrict their investments to norms laid down under CRR/SLR requirements. Investments exceeding these limits would affect the banks profitability. Therefore, it is necessary to examine the ratio of investments to deposits.

The information relating to ratio of investments to deposits for the industry and the segments is presented in Table 7.

Year	Segments			Industry
	HPB	HPB	LPB	
1995	44.15	46.42	41.90	44.99
1996	41.48	43.57	43.27	43.08
1997	44.38	41.08	46.04	42.76
1998	45.77	41.06	48.74	43.54
1999	48.05	42.12	50.08	44.79
2000	47.85	45.52	49.65	46.74
2001	44.54	48.46	49.34	47.80
2002	44.38	50.44	50.28	49.13
2003	46.55	54.26	51.87	52.16
2004	47.69	54.01	51.07	52.04
Mean	45.48	46.69	48.22	46.70
SD	2.09	4.98	3.37	3.51
CV	4.60	10.67	6.98	7.51

Table 7 Ratio of investments to deposits (percentages)

Source: Computations are based on annual reports

It is clear [Table 7] that about 43% of deposits of the industry are channalized into investments during the first five years. Subsequently, it has increased to 52%. The rise in this ratio is the reflection of banking industry's preference to invest more in risk free securities than to provide credit. This rise in investments tends to affect the banks' overall profitability, because of their low yielding characteristics when compared to loans and advances. Moreover the cost of deposits would outweigh the return from the investments. Table 7 also reflects that the average ratio of investments to deposits is the highest with LPBs (48.22%) followed by MPBs (46.69%) and HPBs (45.48%). The increased preference of LPBs to put more funds in SLR/CRR investments reflects their concern for safety than profitability of funds. The HPBs segment has shown greater consistency in this ratio (CV=4.60) than LPBs (CV=6.98) and MPBs (CV=10.67) segment.

8. Ratio of credit to deposits: The deposits are channelised for lending after meeting liquidity requirements. A major portion of the deposits go into the credit stream which is exposed to a grater degree of credit risk. This risk exposure is potential enough to disturb the matching of recoveries with deposit withdrawals of banks. Banks, however, cannot keep themselves away from lending, to avoid credit risk exposure. The present norm of credit deposit ratio is 60% in rural and semi-urban areas. Higher credit deposit ratio indicates the profitable utilization of deposits as well as higher risk exposure. The information relating to ratio of credit to deposits for the industry and the segments is presented in Table 8.

Year	Segments			Industry
	HPB	MPB	LPB	
1995	46.94	54.46	50.67	52.1
1996	48.35	59.40	48.22	54.80
1997	47.03	55.11	41.38	50.68
1998	47.11	55.03	40.67	50.58
1999	47.90	49.09	39.64	47.12
2000	48.33	49.65	40.68	47.79
2001	50.12	48.47	43.04	47.89
2002	54.34	48.13	44.67	48.84
2003	54.18	49.88	45.65	50.08
2004	55.47	52.03	47.05	51.91
Mean	49.98	52.13	44.17	50.18
SD	3.38	3.73	3.70	2.37
CV	6.76	7.16	8.38	4.72

Table 8 Ratio of credit to deposits (percentages)

Source: Computations are based on annual reports

The share of credit to deposits for the industry [Table 8] has steadily declined during the first seven years. The percentage of credit to deposits fell short of the standard (60%) by 10% to 13%. This reflects the banks' overcautious approach in lending. It appears that they prefer to hold deposits idle instead of lending and recovery botherations. This 'ready to pay deposit money' situation enables smooth withdrawals at the cost of income in the form of interest on advances. As a result, banks would be incapacitated to pay interest on deposits. This situation diverts revenues generated from other sources to paying interest on deposits. The improve-

ment in credit deposit ratio during the latter years has come as a relief to banks in linking interest cost and interest revenue. From table 8 it is also observed that the average credit deposit ratio is relatively high in case of MPBs (52.13%) as compared to HPBs (49.98%) and LPBs (44.17%). In all these segments, however, the ratio of credit to deposits falls short of the standard (60%). The HPBs have maintained a consistency in their ratio of credit to deposits (CV=6.76) as compared to and MPBs (CV=7.16) and LPBs (CV=8.38).

9. Ratio of non-deposit liabilities to loans and advances: Banks resort to borrowings from RBI and other banks in meeting their temporary requirements. These borrowings are essential for striking a balance between inflows and outflows. If the ratio of borrowings to loans is high, it indicates the banks' increased dependence on non-deposit funds and also their keenness in taking advantage of short-term lending prospects. These sources of funds are, however, costlier.

The information relating to ratio of non-deposit to loans and advances of the industry and its segments is presented in Table 9.

Year	Segments			Industry
	HPB	MPB	LPB	
1995	8.74	16.12	8.67	13.21
1996	10.96	18.59	19.28	17.33
1997	3.35	10.03	6.24	8.13
1998	1.49	9.68	4.02	7.21
1999	1.76	10.72	4.44	7.88
2000	3.38	8.65	4.07	6.83
2001	2.77	8.14	2.23	6.09
2002	3.83	7.51	2.20	5.81
2003	3.39	7.27	2.40	5.58
2004	3.64	8.43	2.29	6.26
Mean	4.33	10.51	5.58	8.43
SD	3.05	3.81	5.24	3.82
CV	70.53	36.23	93.87	45.36

Table 9 Ratio of non-deposits to loan (percetntage)

Source: Computations are based on annual reports

The ratio of non-deposit liabilities to loans and advances of the industry [Table 9] exhibits a decline during the initial years of the study. This is indicative of banks reducing their dependence on costly non-deposit liabilities, which tends to create a positive impact on the banks overall profitability. Table 9 also reveals that the average ratio of non deposit liabilities to loans and advances, is more in case of MPBs (10.51%) than LPBs (5.58%) and HPBs (4.33%). Whereas HPBs and LPBs segment has reduced their dependence on costly borrowings, the MPBs segment has increased its dependent on borrowings. In spite of its increased dependence on borrowings, the MPBs have maintained a greater consistency in their maintenance of deposits vis-à-vis loans and advances as compared is HPBs and MPBs. The increased variability of this ratio with HPBs and LPBs indicates that their profits are going to be affected because of their dependence on borrowings of varying proportions.

10. Liquid gap analysis: A close and intricate interrelationship exists between the liability management and credit management. If credit disbursements exceed the resources available with the banks, it indicates banks' dependence on money market and other external borrowings. The technique of ascertaining the gap between the available resources and the outstanding credit is known as liquid gap analysis. This analysis has come as a powerful technique of establishing interrelationship between the key components of sources and uses of funds.

Say, Deposits of the bank = D
Credit outstanding = C
Refinance and float funds = L
Reserve rate = R
Therefore gap G = C - [(1-R) D+L] ⟶

(This gap is generally expressed as 'X')

If 'X' is a positive factor, it implies banks' dependence on market borrowings to meet the credit needs of the borrowers. If 'X' in equation is a negative factor, it indicates that the banks are flush with funds. Therefore, banks have essentially to manage their deposits (D) and other liabilities (L) in an optimum manner with a view to reduce the gap as well as cost of funds (Sen. Gupta, A.K., 1994-95).

(Rupees in crores)

Year	Segments			Industry
	HPB	MPB	LPB	
1995	-4780.74	-10005.26	-3381.56	-18167.55
1996	-5351.96	-8007.61	-7378.21	-20737.77
1997	-6185.19	-11264.81	-9558.48	-27008.48
1998	-12147.67	-28676.95	-15905.49	-56730.11
1999	-13784.61	-48556.76	-18594.25	-80935.62
2000	-17681.16	-54874.21	-20800.59	-93355.96
2001	-19629.58	-73316.17	-21989.86	-114935.61
2002	-20057.49	-87329.76	-25133.08	-132520.33
2003	-24910.31	-93874.06	-28955.08	-147739.45
2004	-28864.35	-100365.43	-32853.81	-162083.58
Mean	-15339.31	-51627.10	-18455.04	-85421.45

Table 10 Liquid gap analysis

Source: Computations are based on annual reports

There is a negative gap (Table 10) for all the years under study for the entire industry as well as the segments. Further, these gaps are increasing from year to year. This indicates that banks are flush with funds and the costly resources of banks are not fully utilized for earning higher returns. The flush of funds puts a strain on servicing if they are not converted into earning assets by employing these deposits in higher earning assets like loans and advances. Thus, there is a need to manage the deposits and other liabilities in an optimum manner. Table 10 also reveals that the average liquid gap is highest with MPBs followed by LPBs and HPBs. Thus, a major portion of funds of MPBs are not fully utilized. The underutilization of costly sources affects the profitability of these banks.

4. Consistency in asset-liability linkages: Overall assessment

The industry as a whole has shown consistent performance in keeping liquid assets vis-à-vis its deposit obligations (CV=2.59). The ability of banks in managing the liquidity function in a consistent manner, enhances their integrity and credibility. Similarly, these banks have maintained a consistent performance in providing capital support to loans and advances (CV=14.24). With the increasing emphasis on capital adequacy ratio, the commercial banks have built-up a strong and steady capital base that would absorb credit risk arising from their loans and advances. A similar consistency in performance is observed in providing the support of capital to total assets (CV=14.73). However, the ratios of capital to fixed assets as well as investments have shown relatively greater variability. (CV = 34.46 and 7.77 respectively). Of late, banks are keener to put their money into investments which are exposed to greater market risks on account of increasing market volatility. As a result, they need to build up strong capital base vis-à-vis the investments. But there is a greater variation in this area of performance as evidenced by higher CV values. It is interesting to note that the banks' performance in maintaining liquid assets to deposits is consistent (CV=2.59), whereas the ratio of cash and near cash assets to deposits show a greater variation (CV=15.8). It appears that the banks have prudently invested in treasury bills, government and other approved securities, instead of holding excess cash. A high CV value of cash and near cash assets to deposits could be disturbing in the event of unforeseen and sporadic demands for loans and advances as well as deposit withdrawals. Consequently the banks would be compelled to resort to costly borrowings. Similarly the banks' performance in borrowings vis-à-vis loans and advances also does not show a consistent performance.

5. Suggestions

- There is a need to strengthen a bank's capital base for ensuring the quality of assets as well as expanding the cushion to withstand the risk of loss. These together harmonize the source and use of funds.
- Bank's have to arrest wider fluctuations in borrowings by matching the short-term assets with short term liabilities.
- Efforts are required to reduce the cash holding to a minimum level (the standard norm being 1% of deposits) that is sufficient to meet daily requirements. Otherwise holding excess cash deprives the banks of investing in profitable opportunities.
- There is also a need to channelise the excess investments from SLR securities to profitable avenues. For this purpose, banks have to design separate portfolios for liquidity and income. The portfolio management shall be entrusted to the qualified and experienced staff.
- The CDR maintained by the banks falls short of the standard norm. Therefore, banks need to expand their non-credit product portfolio including merchant banking, depository services, mutual funds, leasing, housing finance, and forex loans.
- With the increasing linkage of banking operations to market forces, a mismatch in size, rate and maturity pattern between sources and uses would be more imminent. In view of this risk exposure, the much talked about Asset Liability Management (ALM) technique needs to be meticulously adopted at all levels of banking operations. It is also desirable to setup a risk management group with experts and skilled personnel for scientifically managing risks, inherent in banking business.

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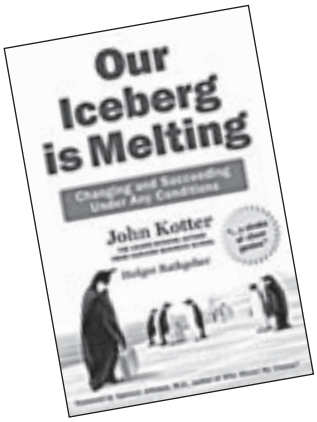

Our Iceberg Is Melting

John Kotter, 2006, St. Martin's Press

Reviewer: N.S. Srinivasan, *Management Consultant, Redmond, USA*

Prof. John Kotter says "Management books are read only by a limited number of senior people in any organization, including B-schools, whereas Leadership has to go deep in the system to secure the best transformation change.

"Our iceberg is melting" has been acknowledged as a book to be read by everyone from CEOs to high school students. This is a gem, US defense department ordered five hundred for the staff distribution.

The book tells the story, as to how the beautiful emperor penguins, living in Antarctic Penguin colony for ages, take the road to change from the secure iceberg, firmly believed "Not To Melt" at any time, to safer place before the disaster strikes and how they come to accept a nomadic life. This fable has a totally positive approach.

Our age old panchtantra tales bring out series of morals, but mostly from negative instances. Kotter's fable deals with all problems faced in any organization in a sea of change and how step by step positive approach solves, ultimately leading to success.

Let us see how the eight-stage process of creating change is brought out in the penguin fable.

The truly beautiful Emperor Penguins, the largest of the seventeen types, were living for ages in the iceberg that will never melt, surrounded by a sea rich in fish and food... Secure in their safe haven, they lived together as a family, in management terminology, as an excellent team. Any change in their living style was just beyond their imagination.

While all penguins were busy collecting and stocking fish for the severe Antarctic winter, one unique penguin, Fred, was behaving differently-curious and unusually observant. Every day, he observed the iceberg behavior and over a period, sometimes swimming into the crevices, noticing a canal filled with water, and observing freezing and expanding so as to break. He analysed the data he collected and came to the conclusion that the iceberg of ages is melting and might break and would threaten the existence of the penguin family. Fred, a penguin of the largest group of two hundred sixty eight, seems to be a born leader, at his level, intuitive and curious.

Here it would be appropriate to ask a question-"Is Leader born or made?" Let us ask Jack. Jack says it is both but the basics-IQ and energy is inborn; the other, confidence can be experienced and learnt. Shall we say it is 80% inborn and 20% acquired? In our case, Fred is really a born leader, as he has all the three.

Fred felt he has to take the initiative to establish a SENSE of URGENCY. He talked to one close to the Head of penguins, Alice, a member of the ten member leadership council and known for her aggressive, practical, "make things happen" and "cuts across status" to achieve the impossible. Alice was not easily convinced but agreed to go with Fred into the heart of the iceberg. Fred pointed out the fissures, the clear symptoms of deterioration, caused by melting; then through a canal that led into a spacious cave filled with water. In the cold Antarctic winter, the canal and cave water will freeze, dramatically expanding in volume, leading to iceberg breaking to pieces overnight without any warning. This unexpected phenomenon will drown the penguins in a flash, destroying the whole community. Alice grasped the gravity of the problem, more so with the dreadful Antarctic winter just

two months away and the enormity of the task of moving the whole community to a safe abode and that too to be found expeditiously.

Alice met Louis, the head and Leader and apprised him of Fred's findings and how she got convinced by personal visits and persuaded him to call the leadership council. At the request of Louis, Fred made a presentation through a model of the iceberg, removed the top structure, created a cave, filled with water and Left it to the cold winds after closing the top. The next day Fred showed how the water had frozen, expanded and broken the walls of the cave. Still the council members were not convinced. Louis asked Fred to come up with something more convincing. Fred collected a glass bottle that had washed ashore, filled it water, sealed it with fish bone and dug it inside the real ice crate. The next day, another enthusiastic Penguin, Buddy, was given the task of retrieving the bottle. The bottle had broken under the weight of the water frozen to hard ice and expanded. The council was now convinced and the Sense of Urgency sank deep.

What next? Louis thought about "Creating a Guiding Coalition", comprising himself with Leadership skills and credibility, Alice for her authoritative approach, Professor with his logical communication, Fred analytical and Buddy trustworthy and not ambitious. It now behooves Louis, the leader, to decide what to do - develop the change vision and strategy. Leadership council is now convinced, but to arrive at a solution with consensus, all the elder penguins are to be taken into confidence. Alice advised Louis to call the general assembly to communicate the change vision. Louis called the general assembly with no agenda. All adults showed up. Alice and Fred showed the model and Buddy presented the experiment of broken bottle. All were stunned. Many couldn't believe. Louis, Alice, Fred are not professional change experts but at the end succeeded in infusing the Sense of Urgency and the need to give up complacence.

Mere communication is not the end. Louis, the leader, has to "Make It Happen". He cannot act alone. He took the next step- Empowering a broad based action. He named the guiding coalition members as the team and ensured that this five pulled together to work on the needed change.

What is this needed change? Where to begin? Alice came up with the idea of talking to others, other than penguins in the colony. Here again reservations. Whom to? Can they identify the perfect iceberg, no melting, no exposed caves, no fissures, and no need to move out again? Only a dream. Rethinking. The ice berg melts, others also will in course of time. Look for the others who can give a way out. As usual, the ever observant Fred suggests talking to seagulls, flying from one place to another, but not forever. Means, seagulls change their abode as and when needed. Louis responded, saying "We are thinking about the possibility of a new and very different way of life.

Finally, all went In search of a seagull. Fred noted one. The seagull was scared. Louis allayed his fears. Then the seagull said "I am a scout; I fly ahead of the clan, looking for where we might live next; highlighting their nomadic existence. The concept of nomadic existence, as the way out, dawned upon the five.

Penguins are different. They cannot fly. They need delicious fish. They enjoy all the time. Their family ties are very strong. Professor realized 'if melting and degradation is taking place for a long time and manifests itself all of a sudden, what do we do. He came to the conclusion that penguins will have to change their age old habits and accept what is there. He shared his views with the other four and they came to the final conclusion that nomadic life is the way out. Thus the team succeeded in creating a VISION of A NEW Future, a nomad colony, with no fixed home. We can learn from the seagulls.

It is all ok with the five. How to get this vision accepted by all as the entire community has to willingly accept, cooperate and move out-really a daunting task. Communicating the change vision is the task of the leader. Louis realized and took up the challenge. He called the general assembly, talked about penguins' unity, brotherhood, strong responsibility, and love for the young. Then, he asked Buddy to explain the scouting, to explore to find good territory, free to move to anywhere to live a good life. Keep moving and the only aim is to live comfortably and educate the young how to live comfortably through change.

To propagate and to get this vision sink in the minds of everyone and secure total acceptance, conceived creating posters all over. This attracted the attention of everyone, the young, the old, women and children. Teaching in the school was directed to portrait the coming change with the cooperation of the teachers, so that the total change of life becomes something not taking anyone by surprise. Thus communicating the new vision of a nomadic life, of a very different future was remarkably successful. This vision became the talk of the town.

The next step was empowering broad based action. Enthusiasm was high but where to find enough fish, that too constantly moving like a nomad, calling for all time scouting. There was the attendant danger of killer whales, lurking around in new surrounding, which itself is not the end, from the present safe haven, thus germinating reluctance

to accept the change. Louis came up with the idea 'first scouting'. He invited fifty young penguins. The school children, now oriented to the change, gave a fitting sendoff to the team. The community that always practiced to providing for its own family was persuaded to provide the food for the scouts, a change in the life style. Children joined in persuading their reluctant parents to accept the change. Louis, then, conceived 'celebrating Heroes day' to welcome the scouts, with games, band, raffle and events of great fun. The broken bottle was given to Sally Ann, an enthusiastic youngster. The scouts were garlanded with Hero medals. Fred and his scouts thus succeeded in creating a short term vision on a long term project. Scouting went full swing.

The first wave of scouts brought back some information. More birds volunteered and the second wave went in search of a single iceberg. With the tempo going up and down among the penguins, the second wave came up with the finding of an iceberg, equipped with a tall strong snow wall to protect them from icy storms, a safe home with no evidence of melting or water filling the caves and close to fishing sites. Also located on a route with small icebergs or ice plateaus along the way to give the youngest and the oldest penguins some rest during the tiresome long journey.

On May 12, just before the start of dreadful Antarctic winter, the birds began their move to their new home, not a moment too soon. At one point, some penguins lost the trail but they made up. Louis's leadership was so effective; he was admired and respected by one and all. The new home had problems but the penguins got used to face problems. The next season, scouts found a better, larger iceberg, with richer fishing grounds. The penguins, thus, learnt to keep moving, not becoming complacent and not letting up.

Louis was persuaded by Alice to shake up the leadership council and pack it with young, energetic and enthusiastic. With a strong imaginative scout selection, the search for new and safer iceberg to carry on the nomadic life became a regular feature. Louis asked for retirement. Alice was unanimously elected as the Head, with Fred in the council and the professor as consultant for constant vigil for weather changes.

Louis, the grand father figure, taught the new little ones the great adventures and prepared their young minds to accept and adapt to the constant change. He told them:

1. Found the sensible vision of a better future, in the midst of insurmountable obstacles.
2. How they created a sense of urgency in the colony to deal with difficult problems
3. How he put a carefully selected group in charge of guiding change.
4. Communicated that vision to everyone through novel methods so as to secure complete understanding and acceptance.
5. Removed all obstacles that came in the way and took the right practical action.
6. To keep alive the need for constant action and securing subscription of everyone, how he created some sort short term success quickly.
7. Never let up until the new way of life was firmly established.
8. Finally, ensured that changes shall not be overcome by stubborn hard- to-die traditions.

So ends the Fable on Leadership to bring change.

What is the key lesson we learn from this seemingly simple FABLE, apart from the practical application of the eight process of successful change. It is the fusion of Leadership and Management; Leadership, establishing direction, aligning people, motivating, and inspiring, producing change (like new products, customers' wants, new approach to labour relations to ensure competitiveness) and Management functioning as the executive arm of the leadership.

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Understanding Emerging Markets Building Business B R I C by Brick

Stefano Pelle, 2007, Response Books

Reviewer: R. Deepak, *Bhavan-Marshall MBA Programme, Bangalore*

World has really found its axis at the right point and now is the time to frame and understand the rules of governance. It is now the time to revisit the places that were once in the lime light for their power, intelligence, and much significantly for their tradition and rich culture.

Understanding Emerging Markets – Building Business BRIC by Brick is truly a book which keeps up its promise to give up the right insights into the countries which are gaining prominence. Brazil, Russia, India and China are the countries taking the world by stride but doing business in these countries may be lot more difficult, confusing and some-times beyond the norms of the text book rules. The book gives compelling insights for the entrepreneurs and companies wanting to venture into these countries and to succeed with the local resources. The author makes it clear from the beginning that the organizations have to spend a little more time intially in assessing the markets before they can come up with thier final decision on the business plan and proceed further. The author makes keen observations on the legal and technical difficulties faced by the organizations in initially setting up the business in these countries. Stefano Pelle describes the revolution happening in terms of economic activity in the BRIC countries and points out that this surge is being provoked by the corporate activities in the emerging markets. The author enumerates forces that are driving this transformation in the economic relations between developed nations and their emerging-market counterparts. In the later part of the book, author shares his detailed research into the factors that make emerging-market companies notable and successful.

An effort is made not to bypass some of the important things that need to be considered by the companies in making a choice between local resources and external forces. The author catalogues market details only on the basis of few companies mainly FMCG companies and thus this book may have been more informative if the research had interwoven with few other industries of relevance like IT, STEEL, TELECOM etc

The purview in which people act ethically in different countries varies and there may be several reasons that can be attributed to it. In a country like India, which is rich and diverse in its heritage. One should consider culture and ethics along with terminologies like spirituality. Then, Stefano Pelle would have found a real meaning for "ethics" in emerging markets, if he could have related education, spiritual behavior and ethics of the people in the emerging markets.

Throughout the book one can make out that Stefano Pelle has been a keen observer and is right in pointing out some loopholes. Nations are built on values, beliefs and several other basics which can be complex for an expatriate to understand and comprehend. Yet, the very foundation of business needs to be built by carefully choosing every brick. But the brick of choice cannot be replicated as a cornerstone in the success of every business in every BRIC nation.

The book has been neatly wrapped up into a few relevant topics. Stefano Pelle has really made an effort to comprehend the diverse issues of emerging markets in a few pages.

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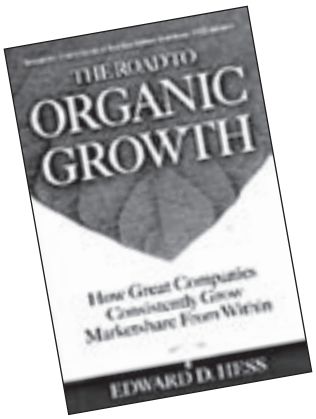

The Road to Organic Growth

Edward Hess, 2007, Tata McGraw-Hill

Reviewer: Basanna Patagundi, *Bhavan-Marshall MBA Programme, Bangalore*

The concept of Organic Growth Index (OGI) has been coined through this research. OGI measures the performance of a company based on the contribution of core activities in the total earnings other than investments and other revenues. However, the process of mergers and acquisition is included as a part of earnings from core activities. The study aims at identifying the progression steps for organic growth.

Six tests were conducted on 1000+ companies and only twenty two companies could complete all the six tests successfully. These tests were aimed at classifying the companies based on the earnings from core activities. Test 1 identified top 300 performers for the period of three years based on the economic value added (EVA) per capital invested. Test 2 focused on Compound Annual Growth Rate (CAGR) of sales and cash flow from operations. The industry-normalized statistics for both sales and Cash Flow from Operations (CFFO) growth and average of the two was calculated. The companies with positive average (z-statistics) were qualified for the next test. Test 3 used Standard & Poor's (S&P) core earnings test. Sensitivity analysis was used in identifying the companies which have minimum of 90% of core earnings. Test 4 compared accounts receivables to sales. The growth rate of sales and the accounts receivable was evaluated, if the total amount receivable is greater than 5% of the sales, then this test was administered. Test 5 emphasized on comparison of cash flow operations with net income. Merrill Lynch's cash realization test was used in identifying the companies which reported financial net incomes that exceeded cash flow from operations, by 10% or more. Test 6 considered the market capitalization for the period of three years. Based on the increase in market capitalization, the companies were short listed. Based on these tests, twenty two companies were identified which would be included in the organic growth index.

The research identified the organically grown companies and then tried to find the factors that helped the companies to grow that way. Few of the key interesting factors were,

- Location
- Size
- Global Presence
- Financing Organic growth
- Stake of CEOs

The research resulted in identification of six major keys for organic growth.

- An elevator-pitch business model: The OGI companies have simple, easy-to-understand strategy and business model.
- Instill a "Small-Company Soul" into a "Big Company Body": The OGI companies made the employees more responsible, accountable and were provided with necessary authority.
- Measure Everything: The OGI companies maintained matrics for all operations which helped in developing effective control system.
- Build a People Pipeline: The OGI provided better work environment which made the employees more productive.
- Leaders: Humble, Passionate, Focused operators
- Be an Execution and technology champion: Execution is the key area where all OGI companies are focused.

The information for the research was gathered from primary as well as secondary resources. As part of secondary data collection the annual reports, proxy statements, press releases, business articles, portals etc were used. Based on this information, 6 hypotheses were identified these were tested against the OGI companies using primary research methods like telephonic interviews and onsite visits, personal interviews etc.

The organic growth of any company depends on both endogenous and exogenous variables. These variables vary across all the industries. Hence the organic growth cannot be really measured by putting all the companies in one basket and examining using the tools that focus more on earnings from core activities. The organic growth can be more accurately measured based on the industry than bunch of companies. Once the strategies for industry specific organic growth are identified, the common strategies which will be applicable to all the companies are identified.

The hypotheses tested in this research, focus more on endogenous variables like work environment, leadership, business model and execution. One of the important variables considered is consumer/customer satisfaction. The primary data were collected through personal and telephonic interviews of the employees of the organization. However, the voice of customer is as important as internal factors.

The result of the research is really applaudable since it has explored the strategies of the companies which were able to achieve organic growth. These strategies resulted in the consistent growth. On the whole, this research is an excellent work on measuring the performance of the organization based on core activities.

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