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6.1. Foundations of KM

6.1.1. Definition

Even among the practitioners, there is no consensus about the definition of "knowledge management". The term is used loosely to refer to a broad collection of organizational practices and approaches pertaining to generating, capturing and disseminating know-how, and other content relevant to the organization’s business. Some would argue that “KM” is a contradiction in terms, being a hangover from an industrial era when control modes of thinking were dominant. According to Mr. Steve Fuller, the knowledge is not just an explicit tangible “thing” like information, but information combined with experience, context, interpretation and reflection. Knowledge involves the full person integrating the elements of both thinking and feeling. Many practitioners increasingly see “knowledge sharing” as a better description of what they are about than “KM”. Others would prefer to emphasize “learning”, since the real challenge in implementing KM is less in the “sending” and more in the “receiving”, particularly the processes of sense making, understanding, and being able to act upon the information while KM is often facilitated by IT, and technology by itself is not KM.

6.1.2. Constituents of Intellectual or Knowledge-based Assets

Not all information is valuable. Therefore, it's up to individual companies to determine what information qualifies as intellectual and knowledge-based assets. Mr. S. Heiner categorises intellectual and knowledge-based assets into one of the two categories viz., explicit or tacit. Included among the former are
assets such as patents, trademarks, business plans, marketing research and customer lists, while tacit category includes subjective insights, intuitions and hunches.

6.1.3. Benefits expected from KM

Some of the benefits of KM correlate directly to bottom-line savings, while others are more difficult to quantify. In today's information-driven economy, companies uncover the most opportunities (ultimately derive the most value) from intellectual rather than physical assets. To get the most value from a company's intellectual assets, knowledge must be shared and serve as the foundation for collaboration. Prof. Harry Scarbroughin suggests that an effective KM program should help a company do one or more of the following:

- Foster innovation by encouraging the free flow of ideas,
- Improve customer service by streamlining response time,
- Boost revenues by getting products and services to market faster,
- Enhance employee retention rates by recognizing the value of employees' knowledge and rewarding them for it, and
- Streamline operations and reduce costs by eliminating redundant or unnecessary processes.

6.1.4. Challenges of KM

A creative approach to KM can result in improved efficiency, higher productivity and increased revenues in all business functions. However, some of the challenges encountered in bringing effective KM awareness as envisaged by Mr. Jungpil and Mani R. Subramani, are presented below.

a. Getting Employees on Board: The major problems that occur in KM usually result because of companies ignoring the people and cultural
issues. In an environment where an individual's knowledge is valued and rewarded, establishing a culture that recognizes tacit knowledge and encourages employees to share it is critical.

b. Allowing Technology to Dictate KM: KM is not a technology-based concept. While technology can support KM, it's not the starting point of a KM program. Make KM decisions based on who (people), what (knowledge) and why (business objectives), and reserve the 'how' (technology) for last.

c. Not Having a Specific Business Goal: A KM program should not be divorced from a business goal. While sharing the best practices is a commendable idea, there must be an underlying business reason to do so. Because, without a solid business case, KM is a futile exercise.

d. KM not Static: As with many physical assets, the value of knowledge can erode over time. Since knowledge can get stale fast, the content in a KM program should be constantly updated, amended and deleted. What's more, the relevance of knowledge at any given time changes, as do the skills of employees. Therefore, there is no end point to a KM program. Like product development, marketing and R&D, KM is a constantly evolving business practice on a continuous basis.

e. Not all Information is Knowledge: Companies diligently need to be on the lookout for information overload. Quantity rarely equals quality, and KM is no exception.

6.1.5. Can Knowledge be Managed?

Whatever the term employed to describe it, KM is increasingly seen, not merely as the latest management fashion, but signaling the development of a
more organic and holistic way of understanding and exploiting the role of knowledge in the processes of managing and doing work, and an authentic guide for individuals and organizations in coping with the increasingly complex and shifting environment of the modern economy. Comprehensive and organization-wide programs for sharing knowledge typically emerge when the organization's know-how is perceived as critical to its mission, where the value of the organization's knowledge is high, and where the enterprise is geographically dispersed.

6.1.6. Deciding how to share

Knowledge management programs may be seen as having both a collecting and a connecting dimension. The connecting dimension involves linking people who need to know with those who do know, and so developing new capabilities for nurturing knowledge and acting knowledgeably. Connecting is necessary as knowledge is embodied in people, and in the relationships. The collecting dimension relates to the capturing and disseminating of know-how through information and communication technologies aimed at codifying, storing and retrieving content, which in principle is continuously updated through computer networks. Through such collections of content, what is learned is made readily accessible to future users. Even where comprehensive collections of materials exist, effective use may still need knowledgeable and skilled interpretation and subsequent alignment with the local context to get effective results, just as reading a newspaper article on brain surgery which does not qualify or enable a reader to conduct brain surgery. Mr. S. Heiner⁵ indicates that most of the technological tools now available tend to help dissemination of know-how, but appear to offer less assistance for knowledge use. Even if the organization has a clear vision that includes the answers to the questions — with whom, what and how to share its knowledge management efforts will flounder if they are not backed up by management
commitment. A real commitment to sharing usually requires substantial changes in resource allocation and organizational procedures. First, formal knowledge programs require a substantial commitment of financial resources to be successful. Second, the organization's incentive structure can significantly affect the pace of knowledge sharing. An open sharing culture will promote the success of KM programs, and incentives can help in turn to make this culture possible.

6.1.7. Key Dimensions of KM Programmes and the Role of Knowledge in Corporate Success

Prof Harry Scar Brough enlists the clear distinction between information, knowledge, wisdom and truth as follows:

- A collection of data isn't information.
- A collection of information isn't knowledge.
- A collection of knowledge isn't wisdom.
- A collection of wisdom isn't truth.

There is a major shift at the strategic level of KM which involves rethinking value to include both monetary value and intangible value. At the tactical level of KM, the new thinking revolves around communities of practice and the social dynamics and process of creating, sharing and applying knowledge. Of late, one tends to realise that no matter what the business is, success depends on the ability to create and apply knowledge more effectively than its competitors. However, knowledge is a very different kind of resource than oil or timber - making the old rules of production obsolete. The unit of production for organizational knowledge is not so much the individual as it is the community of practice. At the operational level of KM, new technologies allow the codification and delivery of learning and just-in-time knowledge to
individual workers. An extract, as presented below, gives more insight into the fundamentals at different levels.

### New KM Fundamentals

<table>
<thead>
<tr>
<th>Levels</th>
<th>Strategic</th>
<th>Tactical</th>
<th>Operational</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key Question</td>
<td>How do we create value?</td>
<td>How can we better create, use and apply our knowledge?</td>
<td>How can we codify and share knowledge of routine tasks, etc.?</td>
</tr>
<tr>
<td>New thinking involves ...</td>
<td>Intangibles Value Networks</td>
<td>Communities of practice</td>
<td>Self-guided learning tools and job-aid databases</td>
</tr>
<tr>
<td>Supporting Technologies</td>
<td>Business Modeling</td>
<td>Collaborative tools after action reviews</td>
<td>e-learning tools workflow software</td>
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<td></td>
<td>Systems Mapping</td>
<td>Knowledge mapping</td>
<td>Knowledge repositories</td>
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<td></td>
<td>Intangible scorecards</td>
<td>Project histories</td>
<td>Best practice databases</td>
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<tr>
<td></td>
<td>Dialogue</td>
<td>Social Network analysis</td>
<td>Imaging technologies</td>
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<td></td>
<td>Ethics and values work</td>
<td>Virtual team tools</td>
<td>Search engines</td>
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<td></td>
<td>Metrics software</td>
<td>Group processes</td>
<td>News feeds</td>
</tr>
<tr>
<td></td>
<td>b2b software</td>
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Source: www.outsights.com/systems/welcome.htm
6.1.8. Future of Knowledge Management

To consider the future of KM, we need to look more closely at the past and present. In the past, many organizations were practicing KM in some form or other, but did not call it that. Other pioneers took a more strategic approach and created formal knowledge initiatives. Today, many organizations have formal KM programmes. Mr. Grant, Robert M\textsuperscript{7} argues that few, if any, have completely institutionalized it as a widespread practice or fully integrated it into their main business processes and management decisions. The future, therefore, will still see many organizations in what knowledge pioneers regard as the past and present, with many unfinished agendas. Beyond that, innovative opportunities will be created through continuously improving technologies and software solutions. Knowledge will be more portable and packaged, and knowledge worker support aids carried around in hand-held devices. Artificial intelligence will allow computers to act as symbiotic partners with knowledge workers, adapting their actions to user behaviour by predicting and collecting in advance information they are likely to need.

6.2. Business Process Re-Engineering

Mr. Donald MacLean and Mr. Robert MacIntosh\textsuperscript{8} defined the Business Process Redesign as "the analysis and design of workflows and processes within and between organisations" or as "the critical analysis and radical redesign of existing business processes to achieve breakthrough improvements in performance measures." In other words, the processes have two important characteristics viz., customers (internal or external) and cross-organizational boundaries as they occur across or between organisational sub-units. One technique for identifying business processes in an organisation is the value chain method. Processes are generally identified in terms of beginning and end points,
interfaces, and organisation units involved, particularly the customer unit. Processes may be defined based on the following three dimensions:

- **Entities**: Processes take place between organisational entities,
- **Objects**: Processes result in manipulation of objects. These objects could be Physical or Informational, and
- **Activities**: Processes could involve two types of activities viz., Managerial (e.g., develop a budget) and Operational.

### 6.2.1. Process Improvement (TQM) Vs Process Innovation (BPR)

In the recent years, increased attention to business processes is largely due to the TQM and BPR share a cross functional orientation as is evident from the following comparative statement.

<table>
<thead>
<tr>
<th>Function</th>
<th>Improvement (TQM)</th>
<th>Innovation (BPR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of Change</td>
<td>Incremental</td>
<td>Radical</td>
</tr>
<tr>
<td>Starting Point</td>
<td>Existing Process</td>
<td>Clean Slate</td>
</tr>
<tr>
<td>Frequency of Change</td>
<td>Continuous</td>
<td>One-time</td>
</tr>
<tr>
<td>Time Required</td>
<td>Short</td>
<td>Long</td>
</tr>
<tr>
<td>Participation</td>
<td>Bottom-Up</td>
<td>Top-Down</td>
</tr>
<tr>
<td>Typical Scope</td>
<td>Narrow, within functions</td>
<td>Broad, cross-functional</td>
</tr>
<tr>
<td>Risk</td>
<td>Moderate</td>
<td>High</td>
</tr>
<tr>
<td>Primar</td>
<td>Statistical Control</td>
<td>Information Technology</td>
</tr>
<tr>
<td>Type of Change</td>
<td>Cultural</td>
<td>Cultural/Structural</td>
</tr>
</tbody>
</table>

Source: Dr. Harry Scarbrough, "Business Process Re-design: The Knowledge Dimension"
From the table, it may observed that BPR is revolutionary and radical to TQM which is primarily evolutionary and methodical approach. The command and control still considered as primary executorial driver in BPR, while TQM looks more at centering over people.

In between the transitions mentioned earlier, information strategy executives participated in another significant transition over the last few years that from Total Quality Management (TQM) to Business Process Reengineering (BPR). In contrast to the traditional emphasis on continuous marginal improvements in existing processes, the proponents of BPR emphasized IT-intensive radical redesign of business processes. The ERP functionality, with its internal focus, complements the external focus of CRM and SCM to provide a base for creating seamless e-business applications. The continued challenge remains in terms of ensuring adaptability and flexibility of information interfaces and information flows — both internally and externally — required for coping with dynamically changing business and competitive environments. Mr. Donald MacLean and Robert MacIntosh trace the evolution of the information-processing paradigm over the last four decades to build intelligence and manage change in business functions and processes and it has generally progressed over three phases as indicated below:

a. **Automation**: Increased efficiency of operations;

b. **Rationalization of Procedures**: Streamlining of procedures and eliminating obvious bottlenecks that are revealed by automation for enhanced efficiency of operations; and

c. **Re-engineering**: Radical redesign of business processes that depends upon information technology, intensive radical redesign of workflows and work processes.
The deployment of information technologies in all the three phases was based on a relatively predictable view of products and services as well as contributory organizational and industrial structures.

6.2.2. Relationship between BPR and Information Technology

Dr. Harry Scarbrough describes IT as the key enabler of BPR as "radical change and the use of IT to challenge the assumptions inherent in the work processes that have existed since long before the advent of modern computer and communications technology. Heart of re-engineering is the notion of "discontinuous thinking or recognising and breaking away from the outdated rules and fundamental assumptions underlying operations. These rules of work design are based on assumptions about technology, people and organisational goals that no longer hold."

6.2.3. BPR to e-business Model Innovation

In this new world of business, success or failure for most enterprises depends upon their ability to incessantly question and adapt their programmed logic of the way things are done. According to Mr. Jungpil Hahn and Mani R. Subramani, the 'old world' of pre-determined and pre-defined recipes of success would still exist side-by-side with the world of re-everything in most business enterprises. However, companies' competitive survival and ongoing sustenance would primarily depend on their ability to continuously redefine and adapt organizational goals, purposes, and the organization's way of doing things. The new world of business puts less premium on playing by pre-defined rules and more on understanding and adapting as the rules of the game as well as the game itself keep changing. The corporate world is now encountering not only unprecedented pace of change but also radical discontinuities in such change that make yesterday's best practices tomorrow's core rigidities. In the
new world of e-business, literally "everything is up for grabs" including traditional concepts of industries, organizations, products, services and channels of marketing, sales and distribution. Organizations operating in the new business environment, therefore, need to be adept at creation and application of new knowledge as well as ongoing renewal of existing knowledge archived in company databases.

6.2.4. BPR Methodology

- Develop the Business Vision and Process Objectives: BPR is driven by a business vision, which implies specific business objectives such as Cost Reduction, Time Reduction, Output Quality Improvement, QWL/Learning/Empowerment.

- Identify the Processes to be Redesigned: Most firms use the High-Impact approach which focuses on the most important processes or those that conflict most with the business vision. Lesser number of firms use the Exhaustive approach that attempts to identify all the processes within an organisation and then prioritise them in order of redesign urgency.

- Understand and Measure the Existing Processes: For avoiding the repeating of old mistakes and for providing a baseline for future improvements.

- Identify IT Levers: Awareness of IT capabilities can and should influence process design.

- Design and Build a Prototype of the New Process: The actual design should not be viewed as the end of the BPR process.

6.2.5. Why BPR Projects Fail? What Can be Done about it?

70% of the BPR projects fail. Biggest obstacles that reengineering faces are:

- Lack of sustained management commitment and leadership;
- Unrealistic scope and expectations; and
- Resistance to change.
Based on the BPR consultants' interviews, the positive preconditions for BPR success are:

- Senior Management Commitment and Sponsorship;
- Realistic Expectations; Empowered and Collaborative Workers;
- Strategic Context of Growth and Expansion; Shared Vision;
- Sound Management Practices;
- Appropriate People Participating; and
- Full-Time and Sufficient Budget.

The primary reason for BPR failure is the overemphasis on the tactical aspects and the strategic dimensions that are being compromised. Most failures of reengineering are attributable to the process being viewed and applied at tactical, rather than strategic levels. There are important strategic dimensions to BPR, and notable things are:

- Developing and Prioritising Objectives;
- Defining the Process Structure and Assumptions;
- Identifying Trade-Offs between Processes;
- Identifying New Product and Market Opportunities;
- Co-ordinating the Reengineering Effort; and
- Developing a Human Resources Strategy.

Thus, the ultimate success of BPR depends on the people who do it and on how well they can be motivated to be creative and to apply their detailed knowledge to the redesign of business processes.
6.3. Business Process Re-design: The Knowledge Dimension

Although business process are sometimes presented in a naturalistic way - as something which is 'discovered' rather than constructed - it is clear that business process approaches draw on a distinct, if not very discrete, body of knowledge. This is not knowledge in its dry, specialised, academic form, but knowledge which is arguably more ideological, and certainly more rhetorical and which speaks to the concerns and uncertainties of managers confronted by globalised and competitive markets. Thus, BPR overtly ignores conventional distinctions and categories, as for instance between the technical and social components of change, in moving towards a unified, highly synthetic approach.

6.3.1. BPR and Organisational Knowledge

Many studies have sought to identify and locate key features of organisational knowledge. Mr. Donald MacLean and Robert MacIntosh have brought out following five significant features of organizational knowledge.

a. Strategic Knowledge: Strategic knowledge encompasses the knowledge of top management.

b. Structural Knowledge: This is the knowledge embedded within the structure of the organisation. It includes the templates and repertoires, which guide the co-ordination of different activities. Although structure is often seen as a constraint on learning and adaptation, it can equally be seen as the repository for accumulated and codified experience. The learning, which is embedded in structural knowledge reflects the firm’s own evolution and draws on the experience of others.

c. Systems Knowledge: This is the knowledge which is encoded in the major systems of the organisation; for example, the design of information systems, control systems or human resource systems. Such
knowledge is closely linked to structural features and to specific role definitions. Again, systems knowledge can be transferred across organisations as well as within them. Particularly important in this context is the need to integrate systems with another organisation.

d. Cultural Knowledge: Encultured knowledge represents the cumulative learning of values and norms which underpins individual and group behaviour. Such knowledge is communicated through social groups in the form of narrative knowledge, i.e., symbols and stories, rather than through objective facts or data. The need to change the culture is frequently cited as an important parallelism of effective re-engineering and change.

e. Routines and Embodied Knowledge: Much of the knowledge, which lubricates the systems and practices of organisations is tacit knowledge. Such knowledge evolves from the learning-by-doing of ‘communities of practice’. It is embedded in ‘routines’ and embodied in individual employees. ‘Communities of practice’ are groups which share knowledge and experience of a particular task.

6.3.2. BPR and Diffusion of Knowledge

Viewing BPR in terms of the creation and codification of knowledge suggests that its adoption within firms depends on a wider process of diffusion. Such processes are the subjects of an extensive literature which offers many insights into the conditions under which organisations adopt or reject innovations. The important preconditions for adoption are:

- Relative Advantage: The degree to which an innovation is superior to the ideas it supersedes.
• **Compatibility**: The degree to which an innovation is consistent with existing values and past experience.

• **Complexity**: The degree to which an innovation is difficult to understand or use.

• **Divisibility**: The degree to which an innovation may be tried on a limited basis.

• **Communicability**: The degree to which the results of an innovation may be communicated to others.

It is clear from a variety of studies that the pre-existing distribution of organisational knowledge can act as a break on innovation. Certain ideas are filtered out or distorted by the existing knowledge base where knowledge is deeply embedded and institutionalised as with the specialist expertise of functional groupings. It is often resistant to new ideas which challenge the status quo. Whatever knowledge is mobilised in arriving at a process-based organisation, one of the major effects of re-design is likely to be a re-distribution of skills and expertise among different groups. Tasks which were once the prerogative of specialist groups are incorporated within mainstream business processes extending the job design of individuals and groups. There is a wider concern about BPR's effect on the competitive skills and capabilities of the organisation. The knowledge base of the firm is increasingly seen as a critical source of competitive advantage.

The organisational knowledge base can be seen as an important sub-set of those endogenous resources of the firm which provide and sustain competitive advantage. Some aspects of BPR may be complementary to the core competence analysis of the firm, notably the emphasis on the out-sourcing of non-core activities. However, attention to core competencies also highlights the danger of BPR initiatives steamrolling tacit but competitively important skills and expertise. This danger is accentuated by many firms' lack of strategic awareness
as to the scope and character of their most critical knowledge-assets. There are already indications, indeed, that BPR (re)creates important tensions between long-run and short-run objectives in expertise deployment and between the advantages of specialism and generalism.

6.3.3. Lessons from BPR

The implications of BPR for the knowledge base are not confined to individual organisations. There are also wider lessons to be learned from the implementation of business process approaches. In challenging the view that organisational change is essentially a slow, tortuous affair, business process approaches shed some light on the way in which certain kinds of knowledge can catalyse change processes. BPR’s popularity contrasts markedly with widespread dissatisfaction at change methodologies focusing on abstractions such as ‘culture’ rather than real business problems.

6.4. Evolution of Management Accounting

The demand for information for internal planning and control apparently arose in the first half of the 19th century when firms such as textile mills and railroads had to devise internal administrative procedures to coordinate the multiple processes involved in the performance of the basic activity. Mr. Robert S. Kaplan while tracing the evolution of Management Accounting mentions that Mr. Johnson [1972] described the Cost Accounting system of Lyman Mills which enabled the managers to monitor the efficiency of the mill's conversion of raw materials into a variety of finished goods. The system was based on the company's double-entry book of accounts and provided information on the cost of finished goods, on the productivity of workers, on the impact of changes in plant layout, and as a control on the receipt and use of raw cotton. Later, the newly evolved mass distribution and mass production enterprises adapted the
internal accounting reporting systems. The nationwide wholesale and retail distributors produced highly detailed data on sales turnover by department and by geographic area, generating performance reports very similar to those that would be used 100 years later to monitor the performance of revenue centers in the firm.

Johnson [1980] proposed that because firms relied almost exclusively on internal sources of capital to finance new investments, because firms were basically in only one line of business, the choice was only to invest more in this line of business or not to invest further in this business. For this decision, the effect of the new investment on reducing prime costs or in improving the operating ratio was deemed sufficient to guide the investment decisions. The scientific management movement in American Industry provided a major impetus to the further development of Cost Accounting practices. The major figures in this movement were engineers who, by detailed job analysis and time and motion studies, determined "scientific" standards for the amount of labor and material required to produce a given unit of output. These standards were used to provide a basis for paying workers on a piece-work basis and to determine bonuses for workers who were highly productive. This approach included not only the development of work standards but also a new form of organization, supplementing the traditional operating or line functions with staff function designed "not to accomplish work, but to set up standards and ideals, so that the line may work more efficiently". The DuPont Company devised an accounting measure, Return on Investment (RoI), to serve both as an indicator of the efficiency of its diverse operating departments and as a measure of financial performance of the company as a whole. A commodity requiring an inexpensive plant might, when sold only 10% above its cost, show a higher rate of return on the investment than another commodity sold at double its cost, but manufactured in an expensive plant. The true test of whether the profit is too
high or too small is the rate of return on the money invested in the business and not the per cent of profit on the cost. The RoI measure\(^\text{16}\) was used to evaluate new proposals for building manufacturing facilities and thereby facilitated the allocation of funds among competing product lines. And the capital was allocated to those products and mills that were earning the highest returns.

6.5. Foundations of Management Accounting

The traditional Cost Accounting model, developed for the mass production of a few standardised products, updated to accommodate the realities of the manufacturing environment of the 1980s. According to Robert W.\(^\text{17}\) companies started making fundamental changes in their organisation of manufacturing operations. These include Just-in-Time scheduling, zero defect and zero inventory production systems, and cooperative and flexible work-force management policies. The Cost Accounting implications of these more advanced production control systems have barely been investigated and, as a result, our Cost Accounting textbooks continue to describe production processes. Mr. Wayne J.\(^\text{18}\) opines that by using extremely simplified models, such as the single product, deterministic EOQ formula, etc., the future manufacturing processes will be even more unfamiliar as firms invest in computer-controlled machinery including Flexible Manufacturing Systems, CAD/CAM, and robots for their production processes. This trend to computer-integrated manufacturing facilities, permitting efficient production of small batches of customized products, introduces a new setting for cost estimation, planning and control. While RoI control and the profit center organization have contributed greatly to the success of large corporations during the past 60 years, problems have begun to emerge with the excessive focus on short-term financial performance. Initially, and perhaps for many years after profit centers and RoI centers were introduced, managers attempted to achieve good performance by making operating and
investment decisions to develop new and better products, to increase sales, and to reduce operating costs.

Over time, however, it probably occurred to some managers that during difficult times, when sales were decreasing and operating costs were increasing, profits could be "earned" not just by selling more or producing for less, but by engaging in containing variety of non-productive and typically non-value-creating activities. The profit center concept, according to Mr. RoyDodge, has seemingly become distorted into treating each division as a mini-company, attempting to allocate all corporate expenses, common and traceable, to divisions. The immediate effect of such expenditure reductions is to improve the reported profitability of the division. However, this is achieved by risking the long-term competitive position of the enterprise. The ability of the firm and the division to increase reported profits while sacrificing the long-term economic health of the firm, is a fundamental weakness in the accounting model. But at a deeper level, the opportunity to increase reported income by foregoing both tangible and intangible investments, yielding long-term economic benefits to the division, illustrates a flaw in the basic goal of using short-term profit as an indicator of improvement in the economic wealth of the firm. Financial measures such as operating cash flows will undoubtedly continue to be among the measures used to evaluate the performance of decentralized units. But we should acknowledge the difficulties associated with attempting to measure economic profits in periods as short as a year. Even granting that the objective of a division should be to maximize long-term profits, this does not imply that an annual profit is the best short-term indicator of how well the division is proceeding along a long-term profit-maximizing path.

Mr. Jackson spells out other measures, such as product innovation, product leadership, employee skills and morale, or customer loyalty, which may
be much better indicators of future profitability than annual profits. It is unlikely that any single measure can both summarize the economic events affecting a firm or division during a period and serve as a basis for motivating and evaluating managers. Therefore, multiple performance indicators may improve the motivation and evaluation of divisional performance. Management Accounting must serve the strategic objectives of the firm. It cannot exist as a separate discipline, developing its own set of procedures and measurement systems and applying these universally to all firms without regard to the underlying values, goals and strategies of particular firms.

The Management Accounting Practices Committee of the National Association of Accountants envisages the domain of Management Accounting as the process of identification, measurement, accumulation, analysis, preparation, interpretation and communication of financial information used by management to plan, evaluate and control within an organisation. Presumably, if a firm's managers felt that measurements of product quality, productivity, product innovation, employee morale, or customer satisfaction were relevant for their planning and control decisions, then these measurements would need to be supplied by persons other than Management Accountants. Thus, a fundamental choice does need to be made. Management Accountants may feel that their own area of comparative advantage is to measure, collect, aggregate and communicate financial information. This will remain a valuable mission. But it is not likely a goal that will be decisive to the success of their own organisations, and if senior managers place too much emphasis on managing by the financial numbers, the organization's long-term viability may become threatened. The option to include non-financial measures in the firm's planning and control system will be more unfamiliar, more uncertain, and consequently, less comfortable for Managerial Accountants. It will require them to understand those factors that are most critical to the company's long-term success. Financial
goals will be among these but they will not be the only critical success factors, and probably, will not be the most important short-term indicators of long-term success. It will not be easy to develop non-financial performance measures to support long-term corporate objectives.

In summary, financial performance measures such as divisional profit, give an illusion of objectivity and precision. But these measures are relatively easy to manipulate in ways that do not enhance the long-term competitive position of the firm, and they become the focus of opportunistic behavior by divisional managers. By de-emphasizing financial performance measures and relying more on multiple measures of performance, including subjective evaluation based on personal communication and observation by superiors, divisional managers will not have a clear target for short-run optimizing behavior. Thus, there is probably a need for more unambiguous performance evaluation systems.

6.6. Findings of the Survey conducted by the Researcher

6.6.1. Role of Management Accountant in KM Environment

96% of the Respondents feel that cost-benefits on qualitative conformance is critical where Management Accounting needs to develop dynamic models. This is significant in the context of 45% of the Respondents giving their nods for implementation of KM practices. The essence being the elimination of waste to move towards zero defect culture and strategic performance evaluation with the co-existence of Management Accounting and KM practice. In other words, the role Management Accountants becomes more relevant in future in view of shift in focus from operational cost determination to strategic cost forecasting and evaluation.
6.6.2. Other Benefits of KM Programme

Organisations which have implemented, or are planning to implement, a KM programme expect KM to lead them to new ways of doing business and increased market share to generate enormous future prospects for the businesses. Most of the Respondents expected a KM programme to lead them to revenue growth (94%), improving competitive advantage (94%) and overall employee development (83%). They see short-term gains from the strategy like cost reduction and improved marketing but are unsuccessful in linking them to external, longer-term benefits, such as intellectual capital growth. Thus, the role of Management Accountants is invaluable as business advisors in short term as well as in long term perspectives.

6.6.3. KM and Potential Cause of Failure

Respondents rated the potential causes for failure in implementing a KM programme as indicated below:

- Lack of user uptake due to insufficient communication (56.1%),
- Integration of KM activities into everyday working processes (55.5%),
- Users unable to identify personal benefits (40.3%),
- No focus on implementing KM programme by top management (35.1%),
- Lack of training for promoting KM activities (30.4%), and
- Technical issues towards implementation (11.5%).

General problems with companies implementing a KM programme are:

- The difficulty in capturing tacit knowledge (75%), and
- Lack of knowledge sharing (70%)
6.6.4. Status of KM Initiative

Respondents were asked to specify the extent of their organization's KM programme and the results are presented below (Table - 6.1).

Table - 6.1: Status of KM Initiative

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Criteria</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>KM procedure integral, value of knowledge reported to stakeholders</td>
<td>12.5</td>
</tr>
<tr>
<td>02.</td>
<td>Integrated KM framework, some technical/cultural issues</td>
<td>31.3</td>
</tr>
<tr>
<td>03.</td>
<td>Utilise KM procedures/recognised benefits</td>
<td>37.5</td>
</tr>
<tr>
<td>04.</td>
<td>KM not uniform/pilot project in place</td>
<td>50.0</td>
</tr>
<tr>
<td>05.</td>
<td>No demonstration of knowledge Vs achievement of goals</td>
<td>31.3</td>
</tr>
</tbody>
</table>

12.5% said, their organization had KM as an integral part of their business process and the value of organizational knowledge is reported to their stakeholders. 31.5% have integrated the KM strategy with some technical or cultural issues. 37.5% of the Respondents are utilising KM procedures to achieve known benefits and 50% have initiated KM in a non-uniform manner with pilot approaches in place. 50% of the Respondents have no KM strategy in place for achieving overall organizational goals.*

Note: *Percentages do not sum up as the Respondents were allowed to select any or all of the five categories above, and were asked how applicable they were to their organization.
6.6.5. KM Driver

Respondents from organizations that had, or were considering, a KM programme were asked to specify at the level in the organization it is most suitable to implement a KM strategy. The result is presented below (Table - 6.2).

Table - 6.2: Organisational Level for KM Implementation

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>01.</td>
<td>Company Level</td>
<td>6.3</td>
</tr>
<tr>
<td>02.</td>
<td>Business Unit/Division Level</td>
<td>12.5</td>
</tr>
<tr>
<td>03.</td>
<td>Departmental Level</td>
<td>37.5</td>
</tr>
<tr>
<td>04.</td>
<td>At all Levels</td>
<td>50.0</td>
</tr>
</tbody>
</table>

50% said, KM implementation is most suitable if implemented at all levels simultaneously and a further 37.5% identified the departmental level to be the
most suitable. This indicates that the drivers of the concept visualize KM activities to spread across the organization in a phased manner so that the implementation of KM is hassle free.

**Organisational Level for KM Implementation**

![Organisational Level for KM Implementation](image)

Figure - 6.2

Another important aspect recognized was that, unlike the Total Quality Management (TQM) and Business Process Re-engineering (BPR), the cost of implementation was not budgeted by the IT function. Although the organisations acknowledge the major role IT plays in the practical implementation of KM, nevertheless, KM strategy is not regarded solely an IT-centric activity.

6.7. Future Focus of Management Accountants to Support KM Implementation

The new business model of the Information Age, however, is marked by fundamental, not incremental, change. Businesses can’t plan long-term; instead, they must shift to a more flexible “anticipation-of-surprise” model. Thus, for most significant decisions, it’s impossible to build a system that can pre-define and predict who is the right person, what is the right time, and what constitutes the right information. The analysis of information (being dynamic) needs the
assistance from Management Accountant to continuously develop Decision Support System.

The new world of business imposes the need for variety and complexity of interpretations of information outputs generated by computer systems. Instead of long-term prediction, the emphasis is on understanding the multiple future worldviews by using techniques such as scenario planning by the Management Accountants.

With increasing computerization in organizations, organizational routines originally embedded in standard operating procedures and policies often become embedded in the firm’s programmed logic which is subject to continuous modifications in the context of revolutionary changes taking place at the global market which could be triggered by the Management Accountant in view of his awareness of the industry at the macro level.

Increasingly fast-paced and dynamic business environment that creates disconnects between the process of decision-making at the top and implementation of such decisions at the grassroots need for linkage, which is undoubtedly filled up by the presence of the Management Accountants through MIS.

Increasing dynamics of the business environment mandate greater emphasis on ensuring doing the right thing than on doing the thing right. With ongoing reassessment of key assumptions, the emphasis is more on ongoing renewal of existing knowledge, creation of new knowledge and its application in business practices. The traditional information-processing model for the 'old world of business' assumes a problem as given and the solution based upon pre-specified understanding of business environment. In contrast, the proposed
model constructs the definition of the problem from the knowledge available at a
certain point in time based upon its context. This is where KM adds value
independently since the problem of today cannot be solved by the experience of
yesterday's knowledge.

The information-processing model of KM is constrained by its
overemphasis on consistency institutionalized in the form of 'best practices.' The
proposed model of KM is expected to break this cycle of reinforcement of
institutionalized knowledge. While the traditional business logic was based on a
high level of structure and control, the dynamics of the new business
environment demand a different model of organization design.

In an intensely competitive global environment where timely and proper
information provision can mean the difference between success and failure,
Management Accountants assist organizations in delivering timely value-added
products and services.

Instead of drawing attention on counter-productive efforts to reduce unit
product costs, there is a shift in focus on activities that would increase profits and
help their organizations to remain on a path of continuous development and
growth. Financial control is no longer required to minimize the cost of achieving
a given output — the focus has shifted to maximizing value of output from given
resources.

The real and the wider role of Accounting is value creation and the same
can be achieved through the design of Management Accounting systems that
provide information, creating managerial value. This in turn contributes to
customer value creation, contributes to profitability, and ultimately enhances
organizational value. Once this is achieved, the organization can reward shareholders, thus creating shareholder value.\textsuperscript{22}

At the outset, this new perspective will portray the dominant role of Management Accounting in organizational functioning. The uniqueness of integrating various organizational actions and processes, visualizing abstract concepts and turn them into hard facts, have enabled as conduits through which economic discourse enters the world of practice. All these contribute into Management Accounting becoming a common language through which organizational members understand the impact of organizational activities. Thus providing a potent weapon to create organizational values.

6.8. Conclusion

The most important decisions that an organization must make in establishing its KM system is to decide with whom to share, what to share, how to share and when to share. The main shift will be a move from a predominantly inward looking perspective of better KM within organizations to an external focus in which organizations seek better ways to productionise and commercialise it. Manufacturing companies may well earn more from licensing intellectual property and providing advisory services such as training and design. Knowledgeable individuals, as well as consultancies, will make more of their knowledge explicit for wider distribution. BPR's popularity contrasts\textsuperscript{23} markedly with widespread dissatisfaction at change methodologies focusing on abstractions such as 'culture' rather than real business problems. The ultimate success of BPR depends on the people who do it and on how well they can be motivated to be creative and to apply their detailed knowledge to the redesign of business processes. Financial performance measures, such as divisional profit, give an illusion of objectivity and precision. But these measures are relatively easy to manipulate in ways that do not enhance the long-term competitive
position of the firm, and they become the focus of opportunistic behavior by divisional managers. By de-emphasizing financial performance measures and relying more on multiple measures of performance, including subjective evaluation based on personal communication and observation by superiors, divisional managers will not have a clear target for short-run optimizing behavior. Companies are responding to changes in their environment by introducing new organizational arrangements and new technology for producing their outputs.

Notes and References


2. S. Heiner, “Securing and Sharing What We Know”, Nathaniel Chief Knowledge Officer, US Coast Guard Association for Computing Machinery, Association for Information Systems, Atlanta, GA, USA, p. 32.


6. OP. cit, Prof. Harry Scarbrough.


9. Ibid.


14. Ibid.


