Knowledge Management: For New Times With New Technologies

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INTRODUCTION

Knowledge Management (KM) comprises of a range of practices used in an organisation to identify, create, represent, distribute and enable adoption of insights and experiences. Such insights and experiences comprise of knowledge, either embodied in individuals or embedded in organizational processes or practices. An established discipline since 1995, KM includes courses taught in the fields of business administration, information systems, management, and library and information sciences. More recently, other fields, to include those focused on information and media, computer science, public health, and public policy have also started contributing to KM research. Many large companies and non-profit organisations have resources dedicated to internal KM efforts, often as a part of their 'Business Strategy', 'Information Technology', or 'Human Resource Management' departments. Several consulting companies also exist that provide strategy and advice regarding KM to these organisations.

KM efforts typically focus on organisational objectives such as improved performance, competitive advantage, innovation, the sharing of lessons learned, and continuous improvement of the organisation. KM efforts overlap with Organisational Learning and may be distinguished from it by a greater focus on the management of knowledge as a strategic asset and a focus on encouraging the exchange of knowledge. KM efforts can help individuals and groups to share valuable organizational insights to reduce redundant work, to avoid reinventing the wheel per se, to reduce training time for new employees, to retain intellectual capital as employees' turnover in an organisation, and to adapt to changing environments and markets.

"Knowledge Management" is an evolving technology area and it's very difficult to find a standard definition of what it is. Here are two possible definitions:

"Knowledge management is the strategy and processes to enable the creation and flow of relevant knowledge throughout the business to create organizational, customer and consumer value."

According to American Productivity and Quality Center, "Knowledge Management is the broad process of locating, organizing, transferring, and using the information and expertise within an organization. The overall knowledge management process is supported by four key enablers: leadership, culture, technology, and measurement."

KNOWLEDGE MANAGEMENT & INFORMATION MANAGEMENT

Knowledge Management and Information Management is not the same thing. Information Management is focused on data; knowledge is data put into a context that has meaning and includes other forms of "information" that wouldn't be found in an information system such as tacit knowledge that exists in the minds of employees in the company. The "people" dimension of knowledge management is very important and naturally includes learning and growth initiatives and cultural initiatives to promote sharing of information. Knowledge management is more of a way of thinking about how to manage a company in terms of its knowledge as a strategic asset.

Information management provides the "infrastructure" to support knowledge management. Without information management, knowledge management would be impossible; but information management, in itself, doesn't go far enough. What has really fueled the interest in knowledge management is the internet and corporate intranets. There is such a huge amount of raw "information" out there; that it's overwhelming...there needs to be some intelligent way to make some sense out of it. Knowledge Management provides that higher level context.

EVOLUTION OF QUALITY SYSTEMS

Over the years, quality and quality systems have evolved through a number of generations:

- **Quality Control**- Emphasizes on the reduction of defects through inspection and correction.

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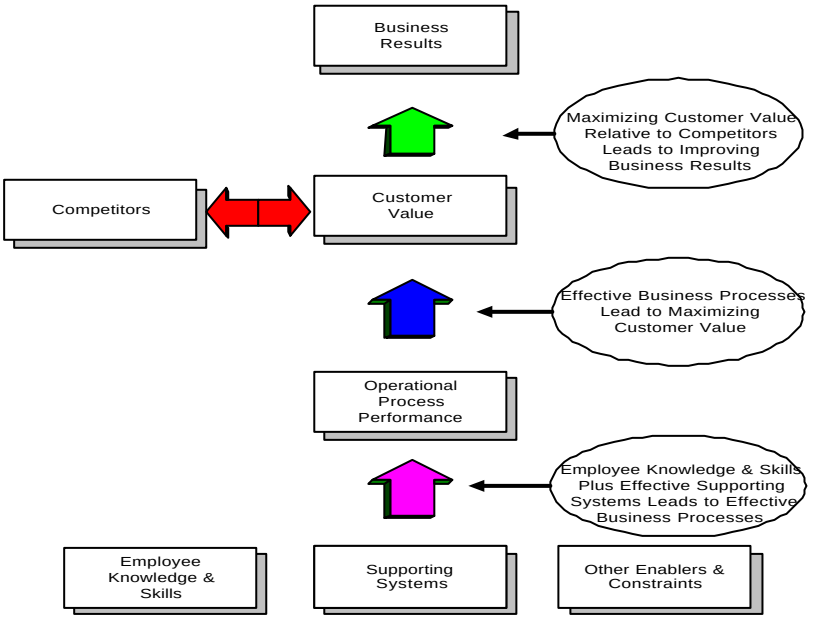
➢ **Quality Assurance**- Emphasizes on designing and developing processes that are oriented towards prevention of defects.
➢ **Quality Systems** - Emphasizes on quality assurance approach plus management system to provide corrective action designed for continuous improvement.
➢ **Fully Integrated Business Systems** - Emphasizes on the notion of quality, takes on a broader context of maximizing customer value to drive business results and is an integral part of the way the business is managed. The 1994 version of the ISO 9000 standard is an example of a "quality system" and is primarily oriented towards prevention of defects. QS-9000 and the Malcolm Baldrige National Quality Award standard are examples of more complete business systems that link the essential elements of process quality with the broader notion of maximizing customer value and business results. The year 2000 version of the ISO 9000 standard will further close this gap with a much stronger emphasis on areas such as continuous improvement, customer satisfaction, information management, and strategic business planning.
A number of significant changes have been identified in the direction of quality:
➢ Quality has gone from emphasis on the reduction of things gone wrong to emphasis on the increase in things gone right for the customer and subsequent improvement in company sales and revenue growth.
➢ Quality has moved from the past focus on management of quality to emphasis on the quality of managing, operating, and integrating the marketing, technology, production, information, and finance areas throughout a company's quality value chain with the subsequent favorable impact on manufacturing and service effectiveness.
➢ Buyers are no longer expressing their concept of quality as primarily some dimension of a product or attribute of a service. They are instead approaching quality as a fundamental buying discipline with expectations for complete customer satisfaction measured in terms of their demands for affordability, for a product or service that is essentially perfect, and for an offering whose quality is determined by the user.
➢ Quality is no longer primarily a technical subject. It is instead the handle by which management leadership makes a business more effective.

INTEGRATED BUSINESS SYSTEM

BUSINESS SYSTEM MODEL

The key to understanding how both Knowledge Management and Quality Systems fit together is to see the operation of the business as a "system". The value of treating a business organization as a system is that it helps to break down the complexity and provides a framework for understanding cause-and-effect relationships within the system. The following is a simplified model of a business system:

Figure 1 : Business "System" Model



This model is based on the "balanced scorecard" approach. The idea behind it is that a combination of financial and non-financial metrics are essential for effective business management.

Financial measures are inadequate for guiding and evaluating organizations' trajectories through competitive environments. They are lagging indicators that fail to capture much of the value that has been created or destroyed by managers' actions in the most recent accounting period. The financial measures tell some, but not all of the story about past actions and they fail to provide adequate guidance for the actions to be taken today and the day after to create future financial value.

Understanding the cause-and-effect relationships within the business as a system allows developing a more proactive and planned approach designed for prevention of problems and anticipation of customer and market requirements as opposed to the constant "fire-fighting" mode - reacting to problems and taking corrective action. Many businesses react to changes in financial results without a complete understanding of what caused the financial results to change. For example, a company might experience a decline in revenue and profitability that may have been caused by poor customer satisfaction that took place months prior to seeing the financial impact. If the cause-and-effect relationships are not well understood, the corrective action may be too late to resolve the problem or prevent it from happening, or even worse, it may not be effective at all if it attempts to "fix" the wrong problem.

Managing an organization structure that is process-oriented and in which all processes work together to provide superior customer value requires developing a **"systems thinking"** approach. Peter Senge describes systems thinking as: "A discipline for seeing wholes ... a framework for seeing interrelationships rather than things, for seeing patterns of change rather than static snapshots ... [and] for seeing the structures that underlie complex situations."

George and Weimershirch have also accurately described the role of systems thinking in business performance in their book, **Total Quality Management:**

The new management model is nothing more than a discipline for seeing your entire organization, the interrelationships among people and processes that determine success and the patterns of change that demand vigilance. In an increasingly competitive marketplace, you cannot hope to survive in a system that is out of control. And it is out of control if you do not:

- Know exactly what your customers require.
- Have well-defined processes for translating those requirements into internal actions.
- Align all of your tasks and processes along common goals and objectives.
- Use key measures to manage by fact.
- Involve everyone in continuous improvement.
- Understand and improve all your critical processes.
- Satisfy your customers.

The notion of viewing a business unit and its processes as a system seems intuitive if you accept the view that those processes have to work together as an integrated whole to achieve a common goal of maximizing customer value. However, very few businesses have really adopted systems thinking in the way they manage their business. Most people are not used to thinking about their organizations in this way. We are dealing with complex structures here, from the operation of a company to the dynamics of a changing marketplace. People struggle to understand how it all fits together. They puzzle over where to begin. They lack the discipline for seeing wholes. 'Systems thinking is the antidote to feeling overwhelmed and helpless,' Senge writes. 'It offers a language that begins by restructuring how we think.

The new management model accomplishes all this by focusing the entire company on the customer, then identifying and improving the processes that lead to customer satisfaction. The new model is directed toward results, which provide the link between customer requirements and the company's system.

The idea of applying systems thinking to business systems gained significant attention with the original publication of Peter Senge's book *The Fifth Discipline* in 1990. Peter Senge's ideas were right on the mark…Why then are people not applying them in actual practice on a more widespread basis? George and Weimerskirch express a possible explanation:

Responding to intense competition in a rapidly changing world, they [managers] have been forced to seek other

ways to be competitive. Many devour the closest meals first; laying people off, selling businesses, demanding more from those who remain. Eventually, these sources run dry. At this point, leaders and managers turn their full attention to their companies, to the system they lead and manage, and while many notice the "hoof prints" of inefficiencies, errors, dissatisfaction, high costs, slow responses, and defecting customers, they cannot see the sources of these problems… They know their companies could do significantly better if they could only focus everybody's attention on what was important, but what is important? Where do we look first? How do we make sense of this complex, confusing system we call our company? How do we attack something we cannot see? Managers have been looking for an easy way out, but as Peter Senge points out, "the easy way out usually leads back in" and there is obviously a limit to what can be gained without investing the time and effort to develop a more systemic approach.

In reality, some companies simply downsize their existing organizations, call it reengineering, and force fewer people to do the same work they did before. While we understand that market realities will sometimes force businesses to take drastic steps, we question this approach. Companies who simply slash staff without re-thinking how they operate will sacrifice customer service at a time when the marketplace demands ever-higher service levels.

PRINCIPLES OF SYSTEMS THINKING APPROACH

Seven principles that very crisply sum up what a "systems thinking" approach means are:

I. The organization, like the human body, is a system; to make it healthy you must consider the whole, as well as the parts.
II. The organization, as a system, exists within a larger system, which also must be understood.
III. Organizational leaders must adopt systems thinking to effectively manage an organization in today's environment.
IV. Systems' thinking is more than a conceptual framework; it is a set of techniques, derived over the past fifty or so years from the physical and social science, management and engineering.
V. Organizational leaders must understand the "dynamics of change" from a systems perspective.
VI. A systems based approach helps us to avoid "paradigm paralysis." (One of the biggest benefits of adopting a systems approach is that it enables us to see beyond the prevailing organizational paradigm).
VII. Total Quality Management works when processes are improved with reference to the system, as a whole.

Systems' thinking is not something that only applies to the top-level managers, it needs to permeate the whole company at all levels to have maximum impact. Processes are implemented and managed by people on a day-to-day basis and the effectiveness of those people in many cases is one of the most important elements of overall process performance and it's often overlooked.

CHARACTERISTICS OF A "LEARNING ORGANIZATION" THAT EMBODIES THE SYSTEMS THINKING APPROACH

"Systems thinking" is only one component of the culture needed to create a "Learning Organization". Rapidly assimilating information and acting on it to learn how to achieve higher levels of competitive customer value requires an environment where people thrive on continuous learning and improvement. Peter Senge has identified five fundamental characteristics of a "learning organization" that embodies the systems thinking approach:

1. Systems Thinking – "is a conceptual framework, a body of knowledge and tools that have been developed over the past fifty years, to make the full patterns clearer, and to help us see how to change them effectively. Business and other human endeavors are also systems. They, too, are bound by invisible fabrics of interrelated actions, which often take years to play out their effects on each other. Since we are part of the lacework ourselves, it's doubly hard to see the whole pattern of change."

2. Personal Mastery "is the discipline of continually clarifying and deepening our personal vision, of focusing our energies, of developing patience, and of seeing reality objectively. People with a high level of personal mastery are able to consistently realize the benefits that matter most deeply to them – in effect, they approach their life as an artist would approach a work of art. They do that by becoming committed to their own lifelong learning… An organization's commitment to and capacity for learning can be no greater than of its members."

3. Mental Models " are deeply engrained assumptions, generalizations, or even pictures or images that influence

how we understand the world and how to take action. The discipline of working with mental models starts with turning the mirror inward; learning to unearth our internal pictures of the world, to bring them to the surface and hold them rigorously to scrutiny. Continuous adaptation and growth in a changing business environment depends on 'institutional learning' which is a process whereby management teams change their shared mental models of the company, their markets, and their competitors."

4. Building Shared Vision – "The practice of shared vision involves the skills of unearthing shared 'pictures of the future' that foster genuine commitment and enrollment rather than compliance… One is hard pressed to think of any organization that has sustained some measure of greatness in the absence of goals, values, and missions that become deeply shared throughout the organization."

5. Team Learning – "When teams are truly learning, not only are they producing extraordinary results but the individual members are growing more rapidly than could have occurred otherwise… The discipline of team learning starts with 'dialogue,' the capacity of members of the team to suspend assumptions and enter into a genuine 'thinking together'…The discipline of dialogue also involves learning how to recognize the patterns of interaction in teams that undermine learning. The patterns of defensiveness are often deeply engrained in how a team operates."

These characteristics are essential to develop an environment where:

- The organization and the people in it are open to looking at themselves honestly and objectively and recognizing opportunities for improvement.
- Everyone in the organization understands the overall vision and how their role contributes to that vision.
- There is an atmosphere that promotes learning throughout the organization and sharing of learning to maximize the knowledge embedded in the organization.

KNOWLEDGE MANAGEMENT STRATEGIES

Knowledge may be accessed at three stages: before, during, or after KM-related activities. Different organisations have tried various knowledge capture incentives, including making content submission mandatory and incorporating rewards into performance measurement plans. Considerable controversy exists over whether incentives work or do not work in this field and no consensus has emerged.

One strategy of KM involves actively managing knowledge. In such an instance, individuals strive to explicitly encode their knowledge into a shared knowledge repository, such as a database as well as retrieving knowledge they need that other individuals have provided to the repository.

Another strategy of KM involves individuals making knowledge requests of experts associated with a particular subject on an ad hoc basis. In such an instance, expert individual(s) can provide their insights to the particular person or people needing this.

Four types of Knowledge Management projects have been identified in an article in the Sloan Management Review:

- **Create Knowledge Repositories**
- **Improve Knowledge Access**
- **Enhance Knowledge Environment**
- **Manage Knowledge as an Asset**

CRITICAL SUCCESS FACTORS

Critical success factors those are essential for Knowledge Management efforts:

- Knowledge management can be expensive, so inevitably, it gets support in a firm when it is somehow linked to economic benefit or competitive advantage…Ernst & Young, for example, measures the amount of knowledge it reuses in the form of proposals presentations, and deliverables and the contributions of its knowledge repository for closing sales.
- Knowledge projects are more likely to succeed when they use the broader infrastructure of both technology and organization…Of the two, technology infrastructure is the more accessible. It consists partially of technologies that are knowledge-oriented (for example, Lotus Notes and World Wide Web-based intranets)…Building an organizational infrastructure for knowledge management means establishing a set of roles and organizational groups whose members have the skills to serve as resources for individual projects.
- Finding the right balance in the knowledge structure is critical for many projects. Knowledge is fuzzy and

closely linked to the people who hold it: its categories and meanings change frequently. Consequently, knowledge often resists engineering. The expert systems movement of the 1980's confirmed this problem: it proved to be difficult factors to create rules that covered even narrow knowledge domains and even more difficult to update and modify the structure. If a repository has no structure, it is difficult to extract knowledge from it.

- A knowledge-friendly culture, one of the most important factors for a project's success is one of the most difficult to create if it does not already exist…In general, if the cultural soil isn't fertile for a knowledge project, no amount of technology, knowledge content, or good project management practices will make the effort successful.
- Clear purpose and terminology is particularly important for knowledge management. Normal business language gives the impression of being fact-based, often drawing on military and natural science metaphors. But knowledge management deals with things like complexity, uncertainty, and organic growth. That calls for a new vocabulary, and managers aren't used to it. The language is more probing, it invites debate, and it exposes the uncertainty we all have.
- Intimately and inextricably bound with people's egos and occupations, knowledge does not emerge from or flow easily across role or functional boundaries. Therefore, the motivation to create, share, and use knowledge is an intangible critical success factor for virtually all knowledge management projects.
- Successful knowledge managers recognize that knowledge is transferred through multiple channels that reinforce one another. It is easy to devalue the need for face-to-face interaction. Some firms with knowledge repositories realized that they had to regularly get contributors together, face-to-face.
- Like almost every other type of change program, knowledge management projects benefit from senior management support. The researchers, however, found that strong support from executives was crucial for transformation-oriented knowledge projects but less necessary in efforts to use for improving individual functions or processes.

RELATIONSHIP OF KNOWLEDGE MANAGEMENT AND QUALITY

Knowledge management is beginning to make the transition from an intellectual area of study to a more pragmatic approach that can be implemented in actual practice to drive business results. It is becoming recognized that an effective knowledge management system must be based on:

- A way of capturing and organizing explicit as well as tacit knowledge of how the business operates including an understanding of how current business processes function.
- A "systems-approach" to management that facilitates assimilation of new knowledge into the business system and is oriented towards continuous improvement/innovation.
- A common framework for managing knowledge and some way of validating and synthesizing new knowledge as it is acquired.
- A culture and values that supports collaborative sharing of knowledge across functions and encourages full participation of all employees in the process.

Without these basic elements as a foundation, it is unlikely that any knowledge management effort would succeed. Those are, in fact, the same elements that are at the heart of an effective quality system:

- The idea of explicitly defining how a business operates and the processes associated with it is one of the most fundamental requirements of quality systems such as ISO 9000.
- An underlying principle of ISO 9000 is the emphasis on the overall management system. Quality is based not just on having effective process controls, but on having an effective overall management system that provides a framework for continuous improvement.
- The document and data control requirements of ISO 9000 require companies to define a process for ensuring that any critical information that is required for the performance of a business process is accurate, up-to-date, and effective for its intended purpose.
- Because ISO 9000 places an emphasis on processes that, in many cases are cross-functional in nature, it forces companies to break down some of the organizational and functional “stovepipes” that inhibit effective sharing of information.

Knowledge management, like quality, has to be defined in the context of the business it serves and, in fact, it can take on very different meanings in different organizations that have different goals of what they want to achieve

with it. Both should be aligned with driving business results and that requires an understanding of how the cause-and-effect relationships of a business operate as a system. A good strategy should answer the following questions:

- What is the business strategy? Who are the customers? What are their needs and expectations? Who are the competitors? How does the business seek to differentiate itself to gain competitive advantage?
- What are the customer values that have the most important impact on business results and what are the internal factors that have the greatest impact on maximizing customer value?
- What role does "knowledge" play in achieving those results? What kind of quality system approach is appropriate?

THE ROLE OF CUSTOMER VALUE

Customer Value is broader than customer satisfaction – customer value is the sum of the attributes of a product or service as well as broader intangible factors that are important and "make a difference" to a customer. Customer satisfaction is a measurement of how well a company meets those particular needs. Many companies use a two-step approach to determine customer satisfaction:

- A qualitative approach to identify the drivers of their customer's purchase behavior (Customer Value).
- Quantitative measurements to assess how well the company has met those expectations (Customer Satisfaction).

Quality, in this larger context, is an alignment between the value proposition a company offers and the values of the customers it is focused on serving.

The message of *The Discipline of Market Leaders* is that no company can succeed today by trying to be all things to all people. It must, instead, find the unique value that it alone can deliver to a chosen market. The value discipline that the company chooses to pursue should be a critical element in defining its culture, business systems, and processes. Three distinct value disciplines have been defined - the principle is that companies need to be at least sufficient in all three of them but choose one in which to excel as it's competitive differentiation:

- **Operational Excellence:** Companies that pursue this [discipline] are not primarily product or service innovators, nor do they cultivate deep, one-on-one relationships with their customers. Instead, operationally excellent companies provide middle-of-the-market products at the best price with the least inconvenience. Their proposition to customers is simple: low price and hassle-free service. Wal-Mart epitomizes this kind of company, with its no-frills approach to mass-market retailing.
- **Product Leadership:** The second value discipline is called product leadership. Its practitioners concentrate on offering products that push performance boundaries. Their proposition to customers is an offer of the best product, period. Moreover, product leaders don't build their positions with just one innovation; they continue to innovate year after year, product cycle after product cycle. Intel, for instance, is a product leader in computer chips. Nike is a leader in athletic footwear. For these and other product leaders, competition is not about price; it's about product performance.
- **Customer Intimacy:** The third value discipline we have named is customer intimacy. Its adherents focus on delivering not what the market wants but what specific customers want. Customer-intimate companies do not pursue one-time transactions; they cultivate relationships. They specialize in satisfying unique needs, which often they, by virtue of their close relationship with - and intimate knowledge of - the customer, recognize. Their proposition to the customer: We have the best solution for you - and we provide all the support you need to achieve optimum results and/or value from whatever products you buy.

One point deserves emphasis: Choosing to pursue a value discipline is a central act that shapes every subsequent plan and decision a company makes, coloring the entire organization, from its competencies to its culture. The choice of value discipline, in effect, defines what a company does and therefore, what it is.

SHIFT TO A PROCESS-CENTERED ORIENTATION

The company's business processes are what create customer value and achieving superior customer value requires superior business processes; yet, most organizations are optimized to achieve functional excellence rather than overall process excellence.

If our purpose is to create value and processes do that, then better processes will do it better. However, this principle also runs counter to the beliefs of most managers.

Adopting a process orientation can mean a range of things.

- At a minimum, it means that companies should invest in defining what their critical business processes are so that they are aware of the tasks and functions that make up those processes and adopt appropriate metrics to characterize their performance.
- A more complete approach would be to realign the entire company and organizational responsibilities around a process-orientation. However, there is no company that the researcher is aware of that has completely shifted to a total process-orientation from a more traditional functionally-oriented structure and it's not clear that such an approach would produce optimal results either.

The right solution is probably somewhere in between these extremes:

- We do not recommend that processes become the only basis for organizational structure. Functional skills are important to a process orientation, as is concern for product management and the running of strategic business units.
- Most firms are well advised to adopt a multidimensional matrix structure, with process responsibility as a key dimension. An organization that wishes to benefit from process perspective must be prepared to tolerate the well-known problems with matrix structures, including diffusion of responsibility, unclear reporting relationships, and excessive time spent in coordination of activities and meetings.

The most important point is that regardless of how the organization is structured, process thinking should permeate the entire company as a predominant way of managing the business.

In the process-centered organization, this program of process improvement is not a secondary and peripheral activity. It is the essence of management. The process-centered organization embodies the notion that one manages a business not by managing budgets, departments, or people but by managing processes.

A well-designed quality system and a knowledge management approach are almost inseparable and each supports the other. Both have common goals of creating an environment that supports learning and continuous improvement.

CONCLUSION

If the 1980's were about quality and the 1990's were about reengineering, then the 2000's will be about velocity, about how quickly business itself will be transacted, about how information access will alter the lifestyle of consumers and their expectations of a business. Quality improvements and business process improvements will occur far faster. When the increase in velocity is fast enough, the very nature of business changes. A new "systems approach" to management is needed to support this direction.

IMPACT OF KNOWLEDGE MANAGEMENT

Knowledge management, if it is applied correctly, is not another fad - in fact, very little of the technology is radically new, but it is very likely to become the most important factor in many businesses to determine competitive success. The need to more effectively manage knowledge has become more urgent due to the rapid expansion of information and the broad proliferation of computers and worldwide communications capabilities such as the internet. Companies that ignore those trends are likely to loose competitive advantage while the payoff from increased focus on knowledge management can be significant in a number of areas which are discussed below:

PRODUCT DEVELOPMENT AND INNOVATION

Probably, the highest impact area is in the development of new products and services. The two major potential areas of benefit in that area are identified:

1. Getting the Right Product Out

More effectively using market and customer information to help guide the development of products and services can substantially reduce the risk of new product development. Hewlett Packard, for example, maintains a large database of customer comments about products. When an HP employee receives a customer complaint, comment, or suggestion for improvement of any kind about an HP product or service, he/she can input it into their database. The development engineers and product managers can use that information to help plan future products.

Price Waterhouse is an example where knowledge is the product they sell in the form of consulting services. To Price Waterhouse, maintaining competitiveness means that they have "no choice but to create and leverage knowledge.

2. Getting Products Out the Right Way

Companies that have experience with the development of new products should know what works and what

doesn't. Yet, more often than not, the experience and learning of past development efforts do not make their way in an organized and deliberate fashion to current initiatives. The result is costly waste of time and resources. To eliminate unnecessary delays, companies can bring together people who've been through the new product development process with those who are developing the next generation, in order to:
➢ Avoid prior mistakes, ➢ Build on market knowledge, and ➢ Cut cycle time.

OPERATIONAL EFFECTIVENESS AND EMPLOYEE PRODUCTIVITY

Using knowledge effectively to leverage employee productivity and operational effectiveness can also have a very large impact. A prime example would be sharing information regarding best practices to improve operational performance. Other examples would be using information more effectively in knowledge-intensive areas of the business such as using knowledge bases to rapidly identify and implement solutions in the customer service area.

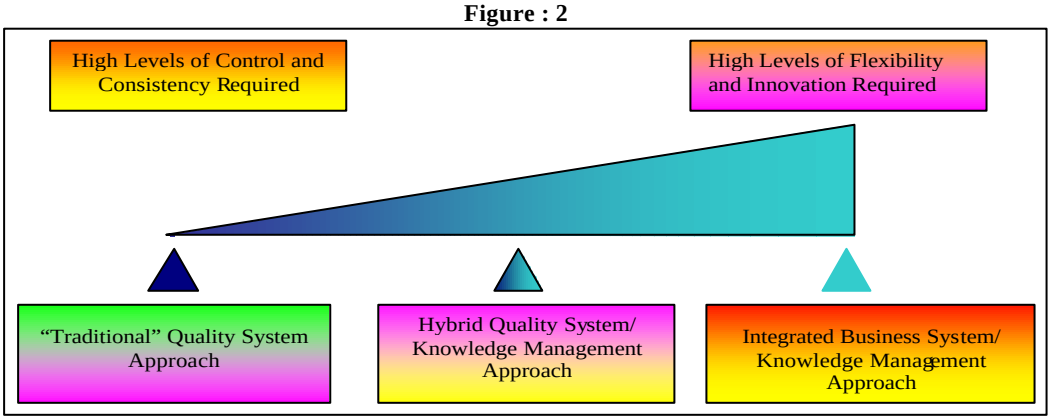
CUSTOMER INTIMACY

Finally, more effectively organizing and tracking what is known about particular customer needs and preferences can help a business customize its products and services to particular customers.

INTER-RELATIONSHIP OF QUALITY SYSTEMS AND KNOWLEDGE MANAGEMENT

Both quality systems and knowledge management are tools to help achieve business goals. Many companies have fallen into the trap of pursuing the latest management "fad" and both knowledge management and quality systems such as ISO 9000 have also been misapplied.
➢ There are many instances where there has been a superficial implementation of ISO 9000 "by the book" without tailoring it to meet the needs of the business. Typically, that type of effort results in very little real improvement and only added bureaucracy.
➢ It is also very easy to misapply knowledge management if it is not closely coupled with real business needs.
The most important thing to do; therefore, is to first define the goals to achieve in the business system and then as a second step, examine how both quality systems such as ISO 9000 and/or knowledge management help achieve those goals.
A very simple example is shown below…some businesses, by their very nature, require high levels of control and consistency and have less need for innovation. Some are at the other extreme and have higher knowledge content and a greater need for ongoing innovation:

Figure : 2



The optimum point would probably be at different points on this spectrum for different types of businesses. A nuclear power plant, for example, has a need for a very high level of control and consistency, and any "innovation" must be carefully controlled because of the associated risks and issues. A software services company that requires rapid adaptation to new products in a very complex and dynamic marketplace would probably be near the other end of the spectrum.
Even within the same business, some areas might benefit from higher levels of control than others, and the needs of the business might change over time. It's very easy to see that trying to make a business more innovative (that is already weak in control and consistency in a very high risk environment as a first step) might very easily lead to disastrous results. Achieving some level of control and consistency seems to be a logical first step.

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Empirical evidences in India also suggest that income growth benefits those just below the poverty line while progress is the slowest for the poor at the bottom line. Therefore, it is absolutely necessary for the central government and the respective state governments to make sure that the benefits of the policy reforms should reach the underprivileged rural mass so as to bridge the gap between haves and have-nots.

CONCLUSION

Undoubtedly, China is far superior to India in the agricultural sector. It is stated that an x % growth in agriculture would give a 2x % growth in the overall economy. The message is loud and clear. In order to make our nation a developed one, Indian agriculture must grow rapidly and that must be the basis for the evolution of a strong, small and medium industry sector established in the rural and semi-urban areas. Also, agriculture is intended to become not merely an efficient, eco-friendly production system, capable of meeting basic demands of the rapidly increasing population, but has to become a powerful instrument for a comprehensive socio-economic transformation of the country, including improvement in the quality of life of every individual. This is an exciting opportunity and a challenging responsibility for the policy makers and every other stakeholder.

BIBLIOGRAPHY

1. Arthur Kroeber, China Economic Quarterly "China versus India", www.ft.com
2. Bhanoji Rao, "China and India - Musings on recent economic histiry", www.thehindusinessline.com
3. Biswajit Dhar & Murali Kallummal, "Trade Liberalization and Agriculture: Challenges before India", www.macroscan.com
4. "China vs. India - part 2", www.neweconomist.blogs.com
5. G. Chandrashekhar, "Good governance key to fighting poverty", The Business Line, Nov.6, 2007.
6. "India: A tale of "two countries", www.hoover.org
7. Morgan and Stanley "India and China, The new tigers of Asia – Part II", www.morganstanley.com
8. Pallavi Aiyar, "Agriculture: Where India and China stand", The Hindu, Sep.3, 07
9. R.V. Badi and N.V. Badi, "Rural Marketing", Himalaya Publishing House
10. Survey of Indian Industry, 2003, 2004 and 2006, The Hindu annual publications
11. "The phenomenal growth of China and India", www.fap.org

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IMPLEMENTATION STRATEGIES

Having a defined system for managing quality and process improvement should be a foundation for almost any knowledge management system to be effective and both efforts can be very complementary, if they are used as tools to achieve a company's business objectives. The key to that synergy is a well-designed business management system that provides an overall framework for both Knowledge Management and Quality Systems. The full benefits of either approach will not be realized unless they are aligned with achieving business results and implemented as a part of an overall systems approach to management.

The implementation of such a fully integrated business system that provides all the benefits of a modern quality system as well as knowledge management capabilities can be quite complex and requires a considerable amount of planning and skill to implement effectively. It is a multi-dimensional problem and involves a broad level of cross-functional collaboration that many companies are not well organized to support.

It is unlikely that any company will achieve that goal of an ideally integrated system and it is unclear how it will be fully implemented, since this technology is still evolving rapidly; however, there are immediate opportunities for companies that recognize the inter-relationship of these two technology areas:

- Companies that have implemented systems for managing quality can revitalize those systems and make them more dynamic and more effective by incorporating knowledge management capabilities.
- Companies that are considering knowledge management efforts can improve the probability of success and effectiveness of those efforts by understanding the benefit to be gained by having a well designed business and quality management system as a foundation.

In either case, the approach should be focused on achieving real and measurable business results and should be designed for incremental growth so that it can easily evolve as the technology in this area evolves.

BIBLIOGRAPHY

1. Armand Feigenbaum, (1997) "Changing Concepts and Management of Quality Worldwide", Quality Progress, December 1997.
2. "Building a Learning Organization, David A. Garvin (1998), "Harvard Business Review on Knowledge Management".
3. Barry Sheehy, Hyler Bracey, & Rick Frazier (1996), "Winning the Race for Value, American Management Association.
4. Charles Cobb, (1998) "Total Business Management", October 10, 1998.
5. Davenport, DeLong, Boers, (1998) "How Can Organizations Use Knowledge More Effectively", Sloan Management Review.
6. Dr. Charles T. Bargerstock, "Organizational Solutions Group, Inc. Overview", Web Site, http://www.erols.com/osgroup/index.html
7. Marion Harmon, (1997), "Quality Leaders Predict The Future", Quality Progress, April.
8. Michael Treacy & Fred Wiersena, (1995), "Discipline of Market Leaders, Addison-Wesley".
9. Michael Hammer (1996), "Beyond Reengineering", HarperCollins Publishers.
10. Perry Glasser (1998), "The Knowledge Factor", CIO Magazine, December 15, 1998.
11. Peter Senge, (1990), "The Fifth Discipline: The Art and Practice of the Learning Organization, Currency DoubleDay".
12. Robert S. Kaplan & David P. Norton, (1996) "The Balanced Scorecard, Harvard Business School Press".
13. Stephen George and Arnold Weimershirch, (1994), "Total Quality Management, John Wiley & Sons".
14. Thomas H. Davenport (1993), "Process Innovation", Harvard Business School Press.

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I, S. Gilani, hereby declare that the particulars given above are true to the best of my knowledge and belief.

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S. Gilani
Signature of Publisher