Knowledge Management Adoption in India

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Abstract: The most significant discoveries of the 20th century such as integrated circuits, lead to ICT revolution, discovery of structure of DNA, has led to Recombinant DNA technology, poised the true game changer for the humanity and it has changed the world. This was possible after utilizing years of experience of intellectual people with highly developed technologies to come with such excellent developments and this necessity to harness the intellectual capital has led to a plethora of knowledge management development. Knowledge management has emerged as important field in recent times, It is been recognized and gaining acceptance in this competitive business environment. Our present focus on knowledge particularly for management is explicitly oriented towards commercial effectiveness. These paper is an attempt to study knowledge management adoption & implementation in Indian scenario, It gives business acceptance and adoption, current knowledge management initiatives of businesses, highlights opportunities for growth and development of knowledge management in India, concludes with the challenges faced by organizations and how knowledge management Strategies help business to maintain profitability and competitiveness with growth in current scenario.

1. Introduction

Today knowledge management is not a just man driven; it often depends upon the business or the activity for which knowledge management is executed. However, most organizations tailor knowledge management practices to their needs and environments and have shrink perspectives. Some are focusing on knowledge sharing among individuals or on building operational knowledge distribution capabilities. Some are emphasizing the use of technology to capture, manipulate, and locate knowledge and focus on knowledge utilization to improve the enterprise’s overall effectiveness.

2. Knowledge & Knowledge management

2.1 Knowledge: Knowledge is a fluid mix of framed experiences, values, contextual information & expert insight that provides a framework for evaluating and incorporating new experiences & information”. It originates & is applied in the minds of the knower. In organization knowledge is often embedded not only in documents & repositories but also in organizational routines, processes, practices & norms

2.2 Tacit knowledge: Tacit Knowledge is that which is within a knower’s mind & which cannot be directly expressed by, words, data or knowledge representation it is commonly in form of intuitions, insights developed from experience & is refereed as unstructured knowledge

2.3 Explicit knowledge: Explicit knowledge is objective and rational knowledge that can be expressed in words, sentences, numbers or formulas (context free) Knowledge which can be expressed into words and numbers, it is in the form of data, specifications, manuals, drawings, audio & videotapes, computer programs, patents & like

2.4 Knowledge management: It is a practice of selectively applying knowledge from previous experiences of decision making to current & future decision making activities with the express purpose of improving the organizations effectiveness whereas refers it to as a systemic and organizationally specified process for acquiring,
3. Knowledge management adoption & implementation in India:

3.1 TCS: TCS uses Enterprise Content Management (ECM) for knowledge management; ECM aims at managing all the unstructured information or content in enterprise. ECM helps to create content with common desktop applications like Microsoft word and easy to use content through authorizing templates. It captures & incorporates existing content from variety of sources. It manages content from other enterprise applications such as ERP, CRM & Enterprise Portal. ECM creates knowledge from content that is existing in enterprise in different forms in various applications, functions and processes by creating categorization schema, metadata and tags that helps searching and retrieval of data faster and efficient. It generates and manages relationship between pieces of content which are linked to multiple identities, it is based on intellect tagging of content that has been developed, providing easy access and well management of content through multiple channels. All these functionalities serves the purpose of leveraging enterprise knowledge assets for facilitating organizational efficiency, cost reduction, prompt response to customers, changing market needs and a competitive advantage. Components of ECM are document management system, Business process management, forms processing, enterprise report management, digital assets management, record management etc. The TCS-KM Practice has executed multiple assignments across verticals and geographies over the years. The gathered expertise has emerged as its multidimensional approach to Knowledge Management implementation known as SIGMARG™. It describes the approach, methodology and a delivery model for successfully conceptualizing, designing and executing a Knowledge Management initiative in any organization. [9]

3.2 ICICI: ICICI bank is the first commercial bank in India which adopted knowledge management as a key driver for its professional development in 2002[10]. A portal called “Wise Guy” was started by having a Coordination Group who sold the concept of knowledge management to the employees. When the site was introduced, awareness was generated by sending mails to all employees and by putting banners on the Intranet site, about ‘Wise Guy’ and its features. Interested persons were able to get in touch with the system administrator for login password. The Coordination Group members comprised employees from the research group, HRD, ICICI InfoTech and the library staff. The concept was initiated in April 2000. A dedicated team of 7 software developers worked on it using existing IT infrastructure. The first version went live on 15th June 2000 and the second version was made live on 15th October 2000. Between April and November it had 40,000 hits. The “Wise Guy” portal began with articulation of that information which was explicit to only a few persons in the organization and tacit in general. No person was asked to share his/her tacit knowledge at that point. Sharing of such explicit information did not threaten anybody’s knowledge quotient and nor did anybody lose any personal power which comes from being knowledgeable in a particular area. Contents of the portal were discussions, queries, edited contributions, books, training calendar, vendors, external and internal reports, events, and captured offline lectures/presentations. In order to sustain interest in the site, efforts were being made to acknowledge the contributions made by the users. Every month the top three contributors were selected on the basis of the contributions made in the last three consecutive months. Cash prizes (K-cash points) were given and photographs of the winners got a place for a week on the site. E-mails about the portal (both congratulatory and critical) were uploaded so that it generates discussion about the pros and cons of the system. A personal space exists in the Wise Guy. One can save searches or track ones level of involvement on the Wise Guy or count K-cash points or update personal profile. The expertise that is mentioned in the profile helps in tracking people expertise wise. The people tracker tracks people on the basis of names, or departments or areas. Each section in the Wise Guy is accessed only if one has a login-id (which is usually the employee code) and a password. Confidential sections, which are not for public view, are restricted by the administrator. This helps in building privacy, which is essential for sections containing client information. The Corporate Information Bank provides Company Research and Industry Analysis. The site also provides links to other useful databases as the MIT knowledge base, ICRA database, Banking Rules etc. all aimed at empowering the employee to make a rational strategic decision. Client tracker and Business tracker, which have restricted access, are useful for new incumbent at the job which helps to brief himself about the background of the client or the business in hand. [11] However it is clear from ICICI initiative that Knowledge Management cannot be subservient to information technology as “Wiseguy” has a human face also. Knowledge events were arranged by the Knowledge Management Group from time to time where people get to interact with CEOs or CFOs or Experts in a formal meeting which is announced beforehand. If a branches desire, a
webcast was arranged. The presentation was recorded and later transferred to the KM site. Implementing Knowledge Management was not easy and hassle free. In ICICI, the Executive Director provided the initial thrust and it has been observed that the Chief of the Knowledge Management Group reports to him directly which is a positive signal sent across the organization that the top brass is serious about Knowledge Management. It ensures that the WiseGuy contained enough information to be able to catch and retain the interest of a diverse interest group. In some cases, it was the daily capsule of the business news which hooked them while in other cases it was the business cartoons. Knowledge Management at ICICI began on an experimental basis and carried on expanding and exploring, widening its ambit of operations. No additional funding was required and nobody was under compulsion to use the site. The relatively young age group of the employees and support provided by the top management had led to the progress of the concept of knowledge management.[12] The Knowledge management initiatives in ICICI bank made a tremendous impact on the performance of the bank in various operational parameters such as deposits, current deposits, savings bank deposits, CASA deposits, share of CASA percentage, advances, investments, working funds, total expenses, interest expenses, staff expenses, other expenses, total income, interest income, other income, gross profit, provisions and contingences, net profit, gross NPA, net NPA, staff strength, number of branches, the ratio of non – interest of income to total income, the ratio of spread to average working fund, the ratio of establishment expenses to average working fund, the ratio of other expenses to average working fund, the ratio of gross profit to average working fund, return on assets, return on average assets, total business, business per employee, business per branch, net profit per employee, gross profit per employee, gross profit per branch, net profit per branch.[13]

3.3Tata Steel: Tata Steel is the world’s 11th largest steel company with an existing annual crude steel production capacity of 30777 million tons per annum as in year 2014 [14] Established in 1907, it is the first integrated steel plant in Asia and is now the world’s second most geographically diversified steel producer and a Fortune 500 Company. Tata Steel has presence in over 50 European & Asian countries having manufacturing units in 26 countries. Tata Steel introduced Knowledge Management initiative in the year 1999.[15] The beginning was made in July’99 to place a Knowledge Management program for the company to systematically and formally share and transfer learning concepts, and best practices. Tata Steel aimed at capturing knowledge from various working groups and outside agencies. The major stakeholders covered under Knowledge Management were senior management, officers, employees, customers, suppliers and experts in and outside company. It started with a small group of people from within the organization. The group formed a "knowledge repository", where all the employees shared their experiences and knowledge. One year after the knowledge repository was formed, the company formed "knowledge communities", which was a platform for like-minded people to meet and share their experiences. On the corporate intranet a KM Portal was developed to communicate all KM related matters across the company. It provides an online knowledge repository to the users who can submit search and use knowledge pieces available on it. The portal also provides a virtual forum where employees can invite and involve other fellow employees or lead experts to discuss and solve the problems faced by them. Relevant Indian and international standards, quality system manuals, standard practices and procedures were readily available for reference of users. In 2001, Tata Steel developed a “Knowledge Management index” to evaluate the performance of individual employee in the Knowledge Management initiative. Later, it linked performance evaluation to Knowledge Management and used a balanced scorecard to monitor the performance of individual employees, divisions, as well as the organization as a whole, in Knowledge Management. All these initiatives of Tata Steel seem to have paid off; in early, Tata Steel was recognized as one of Asia’s Most Admired Knowledge Enterprises (MAKE) award 2013 on 21 Feb 2014. It was the only steel company in the world to have received the MAKE award.[16] Tata Steel faced a difficulty in getting rid of the boulders (which is left out while extracting coal from mines) was expensive proportion, but Tata Steel’s Engineering department suggested in a knowledge management discussion forum, that it can be used for construction of Drain walls. This suggestion was implemented immediately and also circulated to all manufacturing units from this inter department knowledge sharing initiative company saved Rs 10 lacs during year 2003-04 as per Ravi Arora, Head of Knowledge Management at Tata Steel.[17]

3.4 Reliance Industries has around 40,000 employees working in different business divisions across the country. Managing and capturing knowledge and information from all these employees was a challenge for the company. To build this system RIL has used HP Proliant DL380 server for the database and applications, with 4 GB memory and 146 GB internal hard disk. The main data was stored in an HP SAN with 1 TB of space but mirrored 500 GB each for document management and redundancy. According to an internal audit, the company wasted around Rs 100 crore in a particular
year on duplicity of work and lack of knowledge sharing. To solve this problem, the company deployed a knowledge capturing and management portal. Reliance KMS has a single sign-on for all central applications. The single sign-on facility is extended to several applications such as travel management system, Project Management system, eLearning, all portals existing in each manufacturing site, SAP employee self-service, email, photo gallery, Wiki, appointments, announcements and awards, and all internal magazines. It provides the facility to upload documents, search documents, selective sharing of documents and picture and movie. Knowledge sharing has brought RIL employees closer. A document search like Google ensures easy access to desired files. It saves a lot of time of knowledge workers by referring to presentations and process documents on the KMS in order to prepare their own. It is beneficial to new joiners to explore the KMS to learn about the organization, which was earlier done only through structured training. After the system was deployed, the company decided to benchmark it against “Sparsh”, the Knowledge Management System of Infosys, which was given the ‘Most Admired Knowledge Enterprise’ award last year for its Knowledge Management and Intranet Portal, ‘Sparsh’. Infosys had put in 7,000 knowledge documents after one year of launching Sparsh, whereas Reliance KMS completed more than 50,000 documents on the portal within the same.[18]

3.5 ITC is one of India's foremost multi-business enterprises with a market capitalization of US $ 40 billion and a turnover of US $ 8 billion [19]. ITC is rated among the World's Best Big Companies, Asia's 'Fab 50' and the World's Most Reputable Companies by Forbes magazine and as 'India's Most Admired Company' in a survey conducted by Fortune India magazine and Hay Group. ITC faced problems in agribusiness of insufficient control over supply chain, lack of infrastructure for storage, handling and transportation of produce, middlemen and other intermediaries blocking market and price information, no direct control over quality of products response to this, ITC’s International Business Division started a unique initiative e-Choupal. Launched in June 2000, to address problems. The e-choupal initiative provided farmers with information on whether price and technical information free of charge through access to computer equipments with internet and training. The result is elimination of middle men and price distortion. Farmer profit increased by 33% and cultivation of soybeans increased by 19%. The problems encountered while setting up and managing these 'e-Choupals' are primarily of infrastructural inadequacies, including power supply, telecom connectivity and bandwidth, apart from the challenge of imparting skills to the first time internet users in remote and inaccessible areas of rural India was another big challenge. Several alternative and innovative solutions - some of them expensive - were being deployed to overcome these challenges e.g. Power back-up through batteries charged by Solar panels, upgrading BSNL exchanges with RNS kits, installation of VSAT equipment, Mobile Choupals, local caching of static content on website to stream in the dynamic content more efficiently, 24x7 helpdesk etc. and to integrate association with rural suppliers, E-choupal made use of IT tools to network villages and internet to provide information to farmers and others. It leveraged physical transmission capabilities of intermediaries and empowered them from flow of information and market signals. With 'e-Choupal' initiative Over 35000 villages linked through around 6100 e-Choupals servicing around 4 million farmers[20]. Leveraging Information Technology for the transformation was initiated to network villages and procures Agri products for export purposes. For the first time, illiterate farmers who lacked basic knowledge of IT were conducting e-commerce transactions. 'e-Choupal' services today reach out to over 4 million farmers growing a range of crops - soyabean, coffee, wheat, rice, pulses, and shrimp - in over 30,000 villages through 6100 kiosks across ten states (Madhya Pradesh, Haryana, Uttarakhand, Karnataka, Andhra Pradesh, Uttar Pradesh, Rajasthan, Maharashtra, Kerala and Tamil Nadu). ‘e-choupal’ works as trust building activity where farmers get all types of crop related information and they can sell their produce directly to ITC in ITC collection centers. The ‘e-choupal’ model worked in the following way. It had processing and collection centers as hubs and ‘Sanchalaks’ as conveners. These ‘Sanchalaks’ were chosen from among the farmers and were trained on using the PC. Farmers were provided with information like daily mandi prices, weather reports, global prices, best farming practices and water, soil, PCR testing etc. The farmers sold their produce in the collection centers for cash. It helped farmers in getting better prices, while ITC could directly procure from farmers and remove the intermediaries. It benefited the company by reducing its sourcing cost and gaining wider reach and networks. It helped in creating new markets for own and third party goods. ITC also used this model to sell FMCG products like packaged vegetable oil, salt, wheat flour and sugar, agri-related goods of other companies like Monsanto (seeds), BASF etc. ITC had taken care to involve farmers in the designing and management of the entire ‘e-Choupal’ initiative. The active participation of farmers in this rural initiative has created a sense of ownership in the project among the farmers. They see the ‘e-Choupal’ as the new age cooperative for all practical purposes. This enthusiastic response from farmers has encouraged ITC to plan for the extension of the ‘e-Choupal’ initiative to altogether 15 states across...
India over the next few years. [21] Another path-breaking initiative - the 'Choupal Pradarshan Khet', brings the benefits of agricultural best practices to small and marginal farmers. Backed by intensive research and knowledge, this initiative provides Agri-extension services which are qualitatively superior and involves pro-active handholding of farmers to ensure productivity gains. The services are customized to meet local conditions, ensure timely availability of farm inputs including credit, and provide a cluster of farmer schools for capturing indigenous knowledge. This initiative, which has covered over 70,000 hectares, has a multiplier impact and reaches out to over 1.6 million farmers.[22]

4. Findings:

1. Knowledge management is needed because, organization needs a formal process to identify, capture, store & retrieve critical knowledge when needed for decision making to knowledge workers.
2. From above practices it is clear that organizations need knowledge management to help them make sense of what they know & to efficiently use what they know. The benefit of replicating best practices identified in the repository and thereby eliminating the 're-invention of wheel'. The above strategies ensure knowledge sharing across the entire value chain from customer to the supplier.
3. Knowledge management typically center on personnel who embody & can apply their knowledge in business content.
4. From above business adoption it shows, that four models or processes, socialization, externalization, combination & internalization transfer knowledge of a common understanding which influence how knowledge is transferred & reused from tacit to explicit & vice versa.
5. Implementing Knowledge Management is not easy and hassle free. One has to face problems right from the conceptual stage. If the top management is not serious about the necessity for having Knowledge Management then it is difficult to emulate success. It require a company sponsor who will champion for the cause of knowledge management. Such an advocate of Knowledge Management is essential to maintain its importance.

5. Conclusion:

Organizations must structure their strategy so that strategic decisions & actions can be made on a variety of critical business areas. The importance of strategic alignment is recognized in this study its practical means to determine the business needs. All these functionalities serve the purpose of leveraging enterprise knowledge assets for facilitating organizational efficiency, cost reduction prompt response to customers, changing market needs, and a competitive advantage. These cases show that knowledge management is not only about technology and sophisticated systems, but it is more of human force, which decides success & failure in these competitive economies by emphasizing more on sharing through communication becomes an advantage to organizations.

6. References

[10] Rita Yi Man Li (2012), knowledge management, sharing and creation in developing countries banking industries, advanced in Network and Communications (ANC), Vol.1, Issue 1, Pp: 13-26