



Knowledge Management- Key Lever for Business Transformation: A Case of an IT Organization

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Learning gives Creativity, Creativity leads to thinking, Thinking leads to Knowledge and Knowledge makes you Great - Dr APJ Abdul Kalam

Abstract

Knowledge is critical for success of any individual and for an organization the collective knowledge of employee is crucial for success. Knowledge Management (KM) function ensures the seamless knowledge flow from Experts to Knowledge seekers. This paper is aimed at sharing few insights on how KM plays critical role in bringing the business transformation across the organization and in this case an IT organization is considered. In the current Digital world, various tools and technologies are acting as catalyst for bringing the excellence or value through KM initiatives. Business transformation elements like Customer satisfaction, productivity improvement, and cultural shift towards sharing the knowledge are discussed in this paper. For any IT organization, customers are critical and this paper described about how organization's collective knowledge is being demonstrated to the customers in every interaction and delivery of the projects. Similarly effective usage of KM has resulted into significant improvement in productivity of various teams. 80+% employees engagement in KM initiatives is bringing the cultural transformation along with augmented skills. Based on the overall results, there is a strong positive correlation between effective KM usage and business transformation elements.

1. Introduction

Knowledge Management (KM) plays a vital role in Business Transformation journey of any organization and driving KM culture is more challenging in any IT/BPS organization due to the high dependency on people. The definition of Knowledge Management is different for different people. At macroscopic level, Knowledge Management can be defined as a systematic approach to get the right knowledge to right people at right point of time so they can be more efficient and effective and further deliver value to our customers.

Knowledge resides within the employees of the organization whether this is related to domain, technology, process or practice. Knowledge grows day-by-day while executing projects and interacting with various customers or stakeholders.

KM focus is on capturing constantly growing knowledge, creating knowledge artifacts, distilling some of the knowledge assets, sharing the knowledge assets with relevant groups and of course enabling various teams to apply this knowledge. In addition to this, KM focusses on

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collaboration to enable anyone in the organization to reach out to Subject Matter Experts of various domains, technologies or practices for solutions to problems. The inherent objectives in the whole KM cycle are to retain knowledge within the organization, enable new hires to come up to speed in their project execution, enhance knowledge of the workforce on domain, technology, or market trends, and provide value added service to our customers.

KM journey in the specific IT organization has started way back in 2000 and KM initiatives matured over a period of time from simple repositories to KM 4.0 (Digital Intelligence) in the last few years. In this journey, the organization has won many awards as Most Admired Knowledge Enterprise (MAKE) at Global, Asia and India level. Filed around 30 patents in KM domain and published KM case studies in various forums.

2. Objectives

Key objectives of Business Transformation journey of any organization are

1. Customer Satisfaction
2. Business Growth
3. Improved Margins
4. Innovation
5. Employee satisfaction

Figure 1 illustrates the role of KM for business transformation in various dimensions.

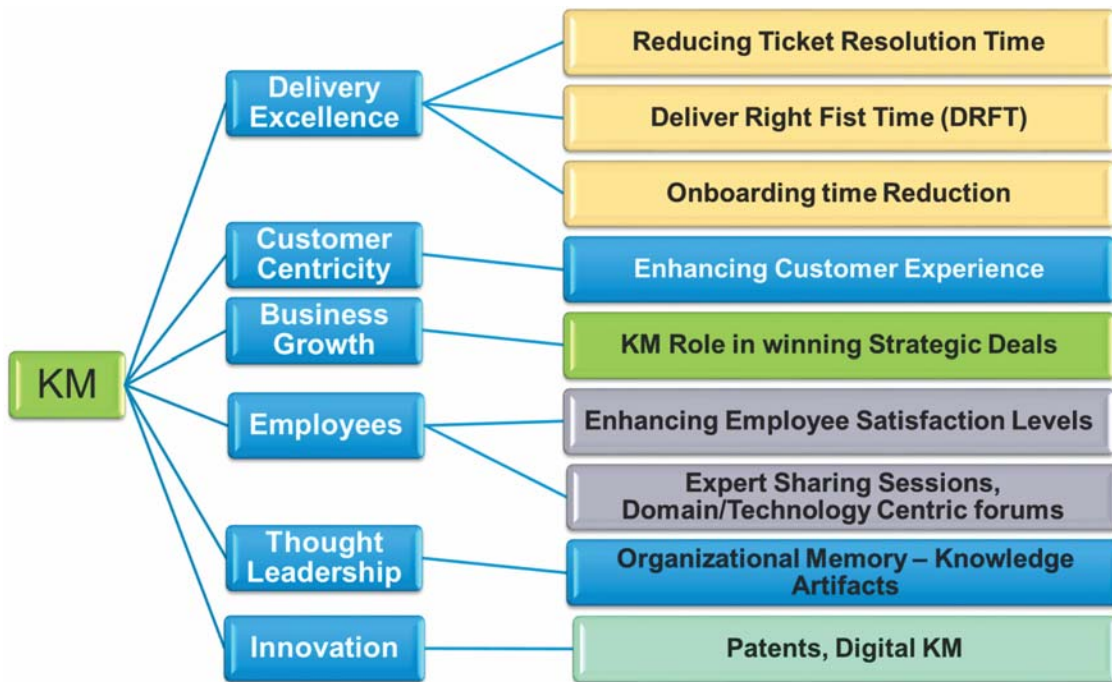


Figure 1: KM for Business Transformation

3. KM Frameworks for Business Transformation

Business transformation objectives are achieved with a KM strategy designed to simplify, standardize, segment, secure, and sustain knowledge. The KM effectiveness and efficiency is assessed based on the KM maturity of groups in the organization to capture, create, share, and apply knowledge with a value generation focus.

3.1 KM Strategy

KM strategy used 5S framework (Figure 2) to simplify the business process for knowledge creation and sharing by standardizing knowledge management practices, measurement, and maturity levels for all segments in the organization, providing a secure environment to ensure customer IP is protected, and sustaining the knowledge management setup, culture, design and deployment.

KM initiatives are aligned with the strategy to ensure organizational knowledge is available to people at the right time. Quintessentially the strategy entails building and maintaining a robust KM that one can take to its customers, to add value to business, and help customers make informed decisions. Just like one size does not fit all, different groups have various knowledge management needs. The 5S strategy addresses the segmentation to achieve its objectives across delivery, consulting, services, functions, practices, sales, and business process outsourcing segments. The KM Plan is defined to ensure required support is provided for organic and inorganic growth of businesses. The culture of the organization encompasses every aspect of employee's day-to-day work activities and is efficiently structured to implement from employee onboarding phase till they become experts in their area of work. Role based knowledge learning activities are included to help employees achieve their goals. Employee goals that are set at the beginning of each financial year include goals on knowledge creation and sharing. Employees are provided with competency frameworks to help them achieve their knowledge creation goals.



Figure 2: 5S Framework for KM Strategy

3.2 KM for Customer Satisfaction

KM for Customers through Collaboration (KMC²) is a KM initiative offering a bouquet of KM features through a web-based application called Crystal where customers can participate in discussion forums, engage as subject matter experts, collaborate with project teams, and leverage collective knowledge and expertise in domain, technology and thought leadership.

Crystal gives customers a transparent and clear view of the overall engagement performance on-the-fly. With Crystal, customers can:

- Share ideas and concerns in live discussion forums
- Participate in knowledge sharing initiatives
- Follow thought leadership opinions

Project teams can use KMC² to engage in discussions with Customers on various topics. Since it demonstrates Thought Leadership & its perceived value add by customer makes it a differentiator. KMC² also brings with it the potential to take ideas to the next stage through a joint effort.

3.3 KM for Business Growth

Knowledge Management initiatives provide the capability of bringing organizational collective knowledge in domain and technology areas to the project teams during execution. This is one of the differentiating factors since customers experience expertise and knowledge in their project delivery. Another key differentiating factor is retaining the customer knowledge within the organization irrespective of employee churn or attrition. These KM initiatives are being positioned as differentiators to our customers during the sales process, which results in winning more deals.

There is another dimension of KM which will help any organization to grow. The reusable components that are being captured/generated as part of Knowledge creation will help the organization to reduce the effort that is required to deliver a project. The reduction in the effort is directly correlated to the win ratio of new engagements

3.4 KM for Delivery Excellence

Knowledge Universe is one-stop-shop for end-to-end account engagement knowledge. The goal is to simplify the knowledge management from Day 1 and ensure that programs and projects have efficient knowledge management system for flawless execution.

The first element that is activated in the Knowledge Universe is something called the Day 1 site. All artefacts required during the sales cycle are managed on the Day 1 site which is active for 90 days. If a deal is won with the customer within those 90 days, the site remains active and Transition elements are activated on the site. As and when transition activities complete, Program and Project sites are set up. Eventually the Delivery Review site is activated. An overall account status is displayed that catches the eye with one glance on the site. The Knowledge Universe also streamlines management activities by providing templates and tools for management to manage confidential customer knowledge in an access-restricted account governance space.

Employees can use the Knowledge Universe to collaborate and find Experts, solutions to queries, discussions, wikis or use portals, war rooms, and blogs. KM analytics is designed in the site

to display the most active users, documents, experts, and contributors. Apart from the mandatory elements, the site can host newsletters, dashboards, announcements, initiatives, fun events, team roster, etc. The Knowledge Universe is designed for users to find and collect internal knowledge and best practices. It improves knowledge access since it is designed for employees to identify ways to facilitate, find Experts, and to transfer or apply the knowledge. It also enhances knowledge culture, consistently fostering knowledge sharing, reusing and applying existing knowledge. It manages knowledge as an asset since it involves demonstrating effective use of knowledge management has resulted in cost and effort savings.

In a nutshell, the Knowledge Universe inherently simplifies knowledge flows since it is structured based on segments such as business development, management, product teams, operations, and millennials and is supported with analytics designed to push the relevant knowledge to right roles or groups. The knowledge managed in the Knowledge Universe is secure to ensure that knowledge specific to a business unit, customer account or project team is available only to those relevant groups, and enterprise knowledge is made accessible to the entire organization. Generic technology, domain and practice knowledge is pushed to all of these zones in the universe.

Knowledge Universe has additional frameworks like SHINE (Seek, Hands-on, Interact, Network and Enrich) and KEDB (Known Error Database) which will ensure the flawless execution. SHINE framework is a unique mechanism for faster knowledge transfer and learning environment to enable new joiner's inducted into account in a structured process and transferring the tacit knowledge between expert and new joinee. SHINE learning framework that consists of five tracks, viz., Seek, Hands-on, Interact, Network and Enrich to induct new employees into customer projects. Project members can do self-learning, receive guidance from mentors and discuss with the surrounding community. It also facilitates cross skilling within teams and has enabled individuals to improve their competency levels in a short span of time.

KEDB is a collection of knowledge generated through past experience judiciously used by employees to resolve known and unknown problems in an efficient and effective manner leading to client satisfaction. KEDB documents the knowledge gained regularly as part of incident resolution and problem analysis in support and maintenance projects. This enables support teams across the globe to access and maintain the content in KEDB in a collaborative manner with the key objectives of increasing the "Ticket resolution rate" and improving "Turnaround time".

3.5 KM for Innovation

In today's constantly changing business world, innovation is the mainstay of organizations. The speed and complexity of innovation increase with growth of knowledge in organizations. In other words, innovation relies heavily on availability of knowledge. KM drives initiatives to make knowledge available for innovation, and keeps the innovation engine oiled. Ensuring knowledge flow to build a culture of consistently innovating warrants fresh thinking and staying relevant in the future. This results not only in shorter IT lifecycles and higher rate of new product development, but also execution excellence, and maximizing value of customer businesses by building solutions that integrate deep industry insights, leading technologies and best-in-class delivery processes.

As shown in Figure 5, the KM phases and innovation phases map at various levels depicting how the innovation process uses organizational knowledge in the production of knowledge based innovative products and solutions.

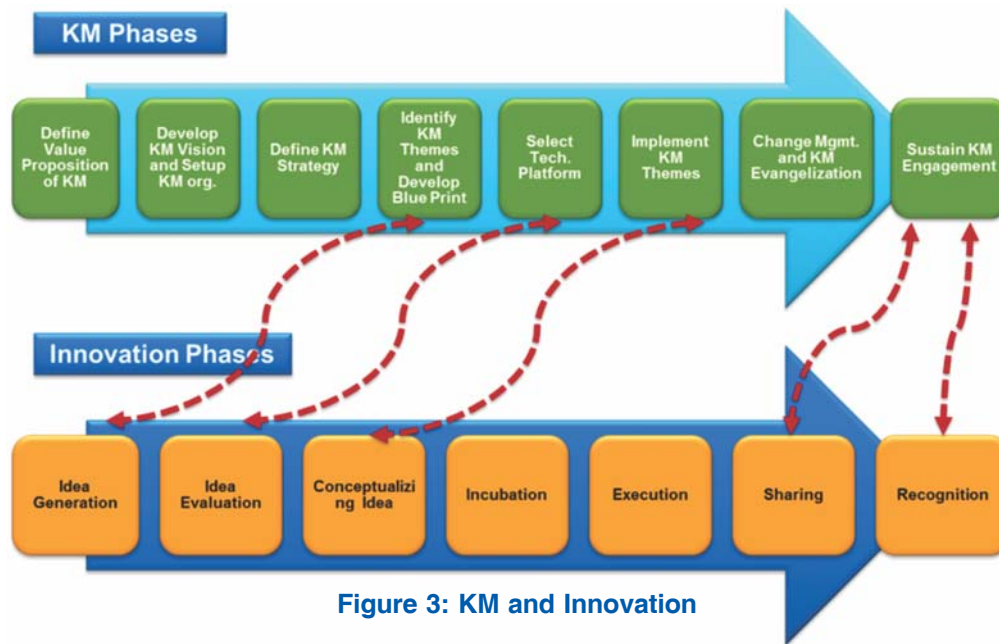


Figure 3: KM and Innovation

3.6 KM for Employee Satisfaction

KM provides the system, knowledge assets and resources that bridge the gap between the SMEs and rookies. KM caters to baby boomers in the organization as well as the Gen X and Millennials by providing traditional as well as new age and state-of-the-art KM initiatives. Few KM initiatives that provide innovative approaches for the workforce to capture, share, use, and retain knowledge are listed here.

- **Gamification:** Gamification drives the competitive spirit among with workforce and integrating the knowledge sharing process into the well-known games in the region will boost the engagement in KM initiatives and further strengthens employee satisfaction levels. The games are designed to be fun, but each has a behavior-change component to encourage employees to build their skills, learn new concepts, and share their knowledge.
- **Storytelling:** A concept to share knowledge and success stories, through various communiques such as KM Employee Speak videos and KM impact stories (aka KMpact).
- **Video and Audio based KM:** Transferring knowledge through audio and video knowledge sharing sessions, leadership talks, best practices, quick tips, FAQs, etc.
- **Analytics based Knowledge Repositories:** Deploy analytics on the search engine to utilize for pushing relevant knowledge to employees. Social Network Analysis (SNA) has also helped identify the networking patterns of employees and gaps between Millennials and other segments/teams.

4. Digital Intelligence – KM for Futuristic Business

Positive disruption is happening in the Industry with Digital Technologies. The role of traditional KM is diminishing and standard Document based or Template driven KM will not have any place in the organizations. Knowledge Capturing and Transferring should happen on the Fly and current Digital revolution is strengthening the KM role further in accelerating the Business Transformation objectives that were depicted in Fig 1. Few use cases of these technologies are discussed here.

Virtual reality will be helpful for project teams who are working in different domains and developing software applications with limited practical exposure the scenarios on the ground. Virtual reality will give the experience of end user whether it is drilling process in Oil & Gas Industry or Sophisticated Nano tubes manufacturing to the developer who writes the code. This experience will help the software engineer to develop more user centric, reliable and robust application. This significantly enhances the success rate of projects.

Analytical insights of unstructured data like review comments, customer feedback, root cause analysis brings proactive alerts while executing the projects and combining this with Knowledge base (counter measures, remedial solutions and the way the experts handle such scenarios) will help the organization to prevent the failures. Digital technologies like Artificial Intelligence, Machine Learning have a significant role to support this.

Internet of Things (IoT) simplifies the connectivity between two entities and make it real. IoT eliminates the challenge everyone is facing in collecting/codifying the Tacit knowledge. Though this is in the early stages but there is high probability of capturing the mental maps of expert and transferring the same to new comer.

One of the recent reports mentioned that 88% of employees do not have passion for their work and Employee disengagement costs more than \$500 billion per year for US economy. Bringing Gamification elements into KM will drive employee engagement and enhances learning, Knowledge Sharing, Collaboration and Knowledge Application significantly. Gamification as a concept scores well to strengthen the urge for learning and to sustain the learning through KM practices. The concept uses the fundamentals of gaming which entails fun, an eagerness to do something challenging based on a set of rules, a competitive spirit with a desire to takeaway not just recognition and rewards but most relevantly, knowledge.

KM Engagement in an organization revolves around Knowledge Artifacts submission, usage, Knowledge sharing sessions, Knowledge Base articles, Project specific trainings and assessments, etc. Figure 5 illustrates the magnitude of the KM engagement.

KM Engagement – FY 17

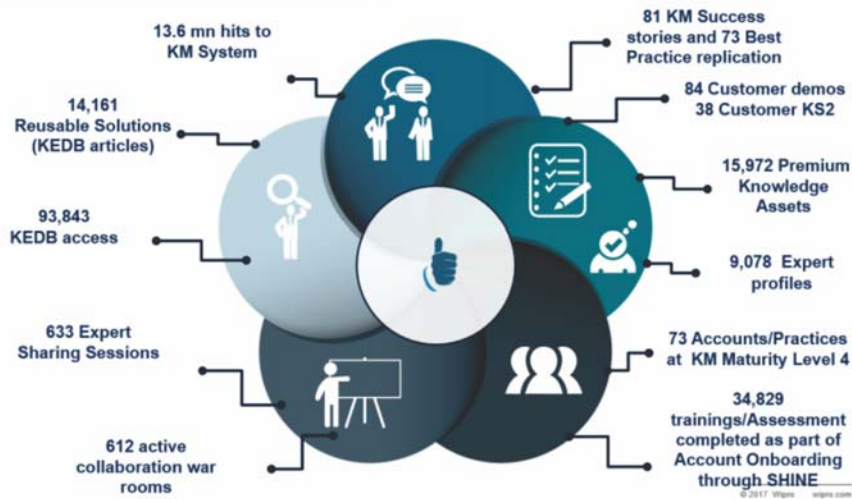


Figure 4: KM Engagement in the IT organization

5. Results/Benefits

Impact of KM on Business Transformation journey of the IT organization is indicated here

- High adoption of KM at account level resulted into higher customer satisfaction levels
- Significant improvement in productivity for the accounts where KM usage is high (30+% improvement)
- KM frameworks have resulted in reducing the cycle time (around 40%) for Onboarding employees into accounts and ensured 100% mandatory induction compliance

6. Summary

Knowledge Management vision, strategy and objectives should be aligned closely with the business objectives. KM strategy should have innovative initiatives to foster a culture of knowledge sharing and collaboration. KM uses state-of-the-art and emerging technologies to efficiently manage the organization knowledge, enable knowledge push to relevant users, and produce value for internal as well as external customers and stakeholders. KM caters to the knowledge needs of a cross generational workforce and taps into all the hatches that contribute to the organizational knowledge.

The KM systems, tools, applications framework, standards, processes, measurement models and culture together yield business growth, improve customer satisfaction, create value for stakeholders, partners, suppliers, and enables business transformation.