WHITE PAPER



KNOWLEDGE MANAGEMENT IN A GLOBALLY DISTRIBUTED Organization



Companies across the world are going global both in terms of targeting new markets for growth and setting up distributed operations across geographies to improve efficiencies. This creates a "lowtouch" distributed organization working across multiple time zones with limited interaction across teams. A seamless organization with no information asymmetry across teams and locations is critical for any global organization to succeed. To achieve this, a well-defined knowledge management framework plays a key role.

Any information or content which is exchanged within an organization is a source of knowledge. However, it's difficult to capture and harness its potential for maximum benefit within organizations. As global organizations become more agile and technology driven, it is becoming imperative for them to fully harness the enormous knowledge base available internally and deliver quality output with a faster time to market. Knowledge within an organization can broadly be categorized as:

- Explicit refers to information which is captured either in documents or in some repositories
- Tacit refers to knowledge that has been gained over the years through experience and observation which remains in people's mind without being documented

Effective knowledge management requires establishing processes and governance mechanism for generating, capturing and sharing knowledge across the firm. There are multiple benefits of having a robust knowledge management framework:

 Reduced dependency on individuals

 Knowledge gets percolated deep within the organization, ensures reduced dependency on individuals, thereby ensuring continuity despite employee turnover

- Enhanced product / service quality
 Leveraging on documented
- experiences and past learnings aids

in minimizing errors and enhancing quality of product or service

- Improved turnaround Existence of integrated knowledge bases ensures individuals spend less time searching for information, avoid duplication of effort and aid in quicker decision making leveraging past data, thereby improving turnaround
- Builds organizational skills and competency – Easy access to knowledge on a wide spectrum of topics from technical, domain to soft skills helps organizations build strong internal competency and capabilities
- The ability to provide consistent services which has been tested, finetuned and documented lends great credence to organization's reputation as a trusted expert and service provider in a given area

• Enhances organizations' reputation

Companies across industries are looking at enhancing their digital capabilities to improve operational efficiencies and customer experience. Effective knowledge management is a key element in their Digital transformation journey. This is reflected in the increased KM spend by these companies.



Source : APQC KM Priorities Survey Data Report 2015



KM challenges faced by large global organizations:

As companies go global they face multiple challenges in terms of knowledge management. Typical challenges include:

- Lack of defined standards in capturing and storing data – As Knowledge Management doesn't have an immediate perceivable impact on business operations, organizations tend to lack defined standards & templates to generate, capture and store information. Employees feel that this impacts the quality of knowledge available. Additionally, it is seen that lack of a well-defined taxonomy makes it difficult for employees to search for required information easily.
- 2. Information existing in silos Over the years, companies have scaled their operations in terms of market reach and complexity. These operations are managed by teams working in silos across geographies and time zones. This results in compartmentalization of knowledge and significant information asymmetry across teams. Employees acknowledge that their team has the know-how of their respective areas but lack the complete end-to-end business knowledge and therefore miss the big picture. This hampers turnaround because significant amount of time is wasted in finding information or experts while working on business problems

3. Inefficient use of technology tools -

Firms generally have too many tools catering to a narrow set of requirements for a specific region or business unit. There is a proliferation of tools as multiple tools are procured to cater to specific local and global requirements. It is observed that organizations lack a centralized Knowledge Management tool, thereby restricting information search and retrieval. Additionally, it is also seen that companies do not fully leverage the existing workflow, reporting and collaboration capabilities of tools already in use. Other operational aspects such as license and space constraints and general tool limitations also discourages individuals from capturing knowledge in designated tools and therefore knowledge artifacts usually reside in local machines, impacting knowledge sharing

4. Localized best practices – In large organizations, it is seen that knowledge management best practices are adopted locally by some geographies / teams. Some of the best practices followed are- establishing Communities of Practice (COPs), organizing periodic share and learn sessions, inviting external specialists for training and job rotation within teams. However, employees state that such best practices tend to exist in small pockets and are not formalized or regulated within the larger organization, thereby limiting its impact.

5. Reduced focus on documentation

In an increasingly agile world
teams have reduced their focus on
documentation. Employees have stated
that tight execution deadlines leave
them with little bandwidth to focus
on documentation and knowledge
sharing. Increasing use of online modes
of interactions such as conference
calls and video conferences has also
resulted in teams reducing their focus
on documenting. This has resulted in
accumulation of tacit knowledge which
is generally lost when an employee
separates from the organization.

Overcoming these challenges requires adoption of a comprehensive knowledge management framework. The next section will cover key aspects that will enhance KM practices within a company.

Key Elements of Knowledge Management

Strong Knowledge Management in any organization requires a multi-dimensional approach. It is imperative that organizations address all dimensions of the framework (as shown in Figure 1).



Figure 1: Knowledge Management Framework

1. KM Vision

- Clear vision and goals before embarking on a Knowledge Management journey
- Alignment with the overall business goals of the organization

2. Knowledge

- Structured way of generating, storing and consuming content
- Content classification and grouping as it aids in easy access and retrieval of content when searched
- Tagging content to enable efficient search

3. People

- Inculcating a culture of Knowledge
 Sharing
- Implementing the right incentives to contribute to KM

4. Process

- Streamlined KM process to allow for standardization and consistency in capturing and dissemination of knowledge
- Integrating KM processes with business
 processes

5. Technology

- KM platform with advanced capabilities that empowers individuals to search for appropriate content without much hassle
- Advanced collaboration and personalization capabilities

6. Metrics

- Tracking of usage, adoption and contribution metrics towards knowledge management activities in the organization
- Providing a view to the organization's leadership on the effectiveness of KM practices

7. Governance

- Establishing a well-defined governance mechanism that regulates knowledge capture, sharing and consumption, thereby ensuring that it remains an integral part of the daily job
- Constituting a knowledge organization with clear roles and responsibilities

Ideal knowledge management practices that can be adopted in any organization

To address the knowledge management gaps organizations must define a KM target operating model across dimensions - people, process, technology, metrics and governance. Adoption of a comprehensive operating model will ensure that the organization's vision and objectives from a knowledge perspective are met.



Figure 2: Ideal Target Operating Model

1. Technology - Effective Knowledge Management requires robust tools and platforms which are integrated and streamlined across the organization. Centralized KM portal with strong presentation, search and reporting capabilities is critical for the success of the Knowledge Management initiative. Figure 3 shows a reference architecture which can be leveraged to build tools required for Knowledge Management.



Figure 3: Reference Technology Architecture for Knowledge Management

Content Management engine acts as the core Knowledge Management tool within the organization and requires ability to support capturing, storing and accessing information, collaboration, workflows, taxonomy implementation among others. This could be a single centralized tool or an array of tools capable to store information. A presentation layer, comprising of varied applications could be the gateway for end users to the content management engine. A search tool, with a capability to search across all repositories will aid users in searching for relevant content. The search capability can be further enhanced by providing users to filter results based on various criteria. Further, a reporting layer would provide organization's leadership visibility into various metrics indicating adoption, usage and contribution. Most content management tools can support

customization leveraging features such as workflow, advanced reporting, external integration, enterprise search and collaboration. Therefore, to achieve the proposed technology architecture, organizations can try to leverage already existing tools and platforms instead of investing in new software.

2. People & Culture – Adoption by employees is the most important contributor towards success of Knowledge Management initiative within the organization. This should be promoted and actively driven through leadership support for an extended period of time to ensure widespread adoption. For faster adoption of knowledge management practices, especially when employees have stringent delivery pressures a high degree of cultural change is required. This can be brought about by encouraging people by

means of rewards and recognition. Various extrinsic and intrinsic factors such as economic incentives, professional growth, improved sense of achievement, personal branding, pride in community membership among others contribute towards user adoption. We believe that the cultural change, brought about through rewards and recognition program should be a mix of quantitative and qualitative mechanism. Quantitative mechanism could include a system calculated score based on various input parameters such as rating on content uploaded, number of trainings conducted, contribution as an SME etc. which can be used to reward an individual and in performance appraisals, while qualitative assessment could take into account individual contribution in communities, use of existing knowledge in projects among others.





The knowledge rewards and recognition program should be along quantitative and qualitative factors

Quantitative Rewards & Recognition	
Based on avantitative assessment of	

- knowledge management activities
- Driven through system calculated score with minimal manual intervention

Qualitative Rewards & Recognition

- Based on qualitative assessment of knowledge management activities
- Driven through **nomination approach** with **decision** being taken by **KM leaders**





3. Process – The organization should strive to make knowledge process to be an intrinsic part of business processes. During each phase of the process there has to be artefacts created in a commonly agreed standardized templates. Offline and adhoc reviews of documents must be discouraged and all knowledge artefacts must undergo a well-defined review and rating lifecycle. This can be achieved by leveraging workflow capabilities of the KM tool. Once reviewed, documents must be organized and structured in the standard

taxonomy for easy search and retrieval of the artefacts. Classification, grouping and mapping of old artefacts to new taxonomy is tedious and time consuming but is an extremely critical process to ensure documents are tagged to appropriate groups. The taxonomy can also evolve over a period of time and therefore has to be monitored and updated regularly as and when there are organizational changes. Apart from the documents, organization should also create and maintain a database of its employees with clearly articulated

skills and experience, which could add up as a database of subject matter experts. Coupled with strong search capabilities the database will aid employees in identifying relevant stakeholders to solve issues in a seamless manner. Existing best practices like establishing communities of practice/COEs, inviting external specialist, conducting trainings and share-n-learn sessions, job rotation etc. should become an integral part of organizational activities, thereby aiding in dissemination of tacit knowledge which has been built up.



governance

Figure 5: KM Process



4. Governance - A Knowledge management organization has to be put in place to ensure various knowledge activities are driven and monitored across various units and teams. A dedicated team of KM specialists headed by an individual at the level of a unit head would be ideal. Further, each unit heads can have the additional responsibility as knowledge leads within their respective units. Knowledge leads can be supported by KM champions to oversee all knowledge activities within the unit. Additionally, every business team should have a KM SPOC responsible to drive knowledge activities within the team. The governance mechanism should consist of KM organization (dedicated team for Knowledge Management), KM Council (consisting select members of KM organization and KM Champions) and KM Board (consisting KM organization head, KM leads and key managerial person with the organization as chairperson of the board). The roles and responsibilities of all three components of the knowledge organization must be articulated clearly to avoid duplicity of effort.



Figure 6: Knowledge Management Governance Mechanism

5. Metrics - Tracking knowledge activities and measuring the benefits is an extremely important activity for the success of a KM initiative. The measurement of metrics can be broadly classified into usage metrics and contribution metrics which can be generated by the KM tool. Some benefits metrics that can be tracked are reduction in operational issues and improvement in organization productivity among others.

CONTRIBUTION METRICS

- Number of Communities setup
- Frequency of meetings / trainings conducted by these communities
- Number of documents created / uploaded per employee
- Number of documents reviewed and approved



USAGE METRICS

- Frequency of access of KM Systems by users
- Content downloaded / read from the system
- Average rating of documents
- Total number of searches in the KM system
- Total number of comments and feedback
- Most frequently accessed Documents / Document types

Annual KM Score for each employee

Figure 7: Reference Knowledge Management Metrics



Critical Success factors for KM initiative

A KM journey is usually a cross functional transformation and requires active participation from various stakeholders across the company. Therefore, for its successful implementation and adoption there are some key critical success factors that needs to be considered before embarking on a KM journey.

1. Start with a pilot program – It is always effective to select a team and undertake pilot of some key KM initiatives before embarking on a larger rollout. In our experience, the team selected for the pilot should have characteristics such as – smaller sized team which is co-located, is relatively new and therefore flexible, motivated to try newer initiatives, and doesn't have huge number of historical artefacts. A pilot with such a team will help identify the potential challenges in implementation and help course correcting the initiatives for a larger rollout.

2. Get leadership buy-in - Usually

knowledge management finds itself among the lower priorities for business leaders due to the lack of perceivable business benefit in the short run. Unless the leadership is convinced about tangible benefits of a large scale KM rollout, it is difficult to get their buy in and that impacts allocation of budgets and other resources. A pilot program as discussed above with a working prototype of the envisioned end state KM can be highly impactful in convincing the leadership team for such an initiative.

3. Navigate through organizational

resistance – In the new agile way of working in global organizations, teams function under immense pressure to deliver results under tight deadlines. Therefore, there could be a tendency to resist participation in KM activities, documentation and knowledge sharing. Ensuring that KM SPOCs, KM champions and KM leads are clear about their roles and responsibilities in terms of driving KM initiatives along with leadership support will help in navigating through the organizational resistance.

4. Ensure duplication of effort is avoided -

Global organizations would usually have many small and informal KM initiatives running across various units. Before embarking on a large scale KM program, it is imperative that all such KM initiatives are folded into one single KM transformation program in order to avoid inconsistencies and redundancies in KM activities across the organization.

Leveraging advanced digital capabilities to improve KM practices

Once an organization attains a certain level of KM maturity by implementing some of the fundamental transformation initiatives, they can consider leveraging advanced technologies to take KM to the next level and also cater to the millennials in the company who are exposed to social media and advanced digital modes of communication and collaboration. They are more comfortable with visually rich content that is easy to consume and prefer to network and collaborate using internal social media platforms.

AI based search :

Advanced AI based search can help augment the existing search capabilities, by better understanding the end users' information needs. There are tools available in the market that understand the essence of what exactly the user is searching for (instead of purely relying on the keywords and content metadata). These tools can also link data from multiple sources and present a complete cohesive picture to the user instead of separate search results

Gamification :

Advanced gamification techniques can be adopted to incentivize end users and improve their participation in KM activities. Gamification elements like leadership boards, badges and contests across units and the overall enterprise can help in engaging the employees for KM

Video Learning:

Employees have explicitly stated that video-based learnings are fun, much more intuitive and easy to comprehend vis-a-vis text information. Organizations should gradually move towards creation of more video content for training, especially for new joiner induction and SME knowledge sharing. Videos can be uploaded to document management platforms as content or learning management solutions. Various capabilities such as metadata assignment for search, in-browser playback and download option, tagging and rating etc. should be enabled on the video content. There are also provisions to embed videos from external sites like YouTube for trainings around specific technology or business processes

Collaboration:

Robust collaboration capabilities in KM tools can help in developing strong knowledge networks within the organization. Enterprise collaboration tools are available both as standalone software and as a part of inbuilt traditional document management tool. Out of the box features of collaboration tools like following topics/groups/users, displaying newsfeed on profile, undertaking discussions or liking, commenting on articles, asking expert, email subscription for alerts on topics on interest and many more can be leveraged to foster greater engagement within various communities and individuals within the enterprise

AI based self-generating knowledge tools:

Several employees and senior management in organizations have noted that KM tool should self-generate knowledge and it should therefore reduce the need to create and manage documents manually. To address this, there are several AI and ML based cognitive tools available which can navigate through multiple information sources and sift across structured and unstructured information to derive meaningful insights which can then be presented in easily understandable layout and format

In the era of technological disruptions and focus on agility, we believe that a focused approach is required by organizations to ensure that knowledge generated within the organization is not lost and is effectively leveraged for topline growth and is bringing in operational efficiencies.



About the authors

Raju Gholley Senior Consultant, Infosys Consulting



Raju has around 8 years of Consulting & Technology experience in Banking and Capital markets. He has led advisory as well as large transformation programs for global clients. Some of the projects executed by him include defining the knowledge management strategy and roadmap for a global bank, executing a banking risk and finance information management program, Optimization of portfolio reporting solution for an US based investment bank and Mortgages solution assessment for a large global bank.

Raju can be reached at raju_Gholley@infosys.com

Sreekanth Venkatramani

Principal, Infosys Consulting



Sreekanth has over 12 years of Strategy & Technology Consulting experience primarily in the Banking, Capital Markets and Accounting Domains. He has advised C-level executives on critical initiatives and program managed large transformation projects related to Information and Knowledge Management. He has executed a number of Advisory and Implementation projects for leading Financial Institutions and Regulators across US, Singapore and India. Select experience includes: defining the Knowledge Management strategy for a large global bank, developed a Technology roadmap for a leading Brokerage firm in the US, developed a compliance system for one of the largest stock markets in the US and prepared the roadmap to automate the data flow for the banking regulator in India.

Sreekanth can be reached at sreekanth_v02@infosys.com



For more information, contact askus@infosys.com

© 2018 Infosys Limited, Bengaluru, India. All Rights Reserved. Infosys believes the information in this document is accurate as of its publication date; such information is subject to change without notice. Infosys acknowledges the proprietary rights of other companies to the trademarks, product names and such other intellectual property rights mentioned in this document. Except as expressly permitted, neither this documentation nor any part of it may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, printing, photocopying, recording or otherwise, without the prior permission of Infosys Limited and/ or any named intellectual property rights holders under this document.

