
INFORMATION AND KNOWLEDGE MANAGEMENT : ROLE OF KNOWLEDGE AUDITS, BENCHMARKS, MATURITY MEASURES IN KNOWLEDGE MANAGEMENT

VIJAY KUMAR ANAND SANJAY KUMAR ANAND

Abstract

Knowledge Management is a new and hot term in today's business world. It is not a technique. It is a process or discipline to identify the information need, identify what and where key knowledge assets can be found etc. . This can be achieved by the knowledge / information audit. Benchmarks help to set the direction for growth in the organization and communication within an organization. Maturity measure model in KM reflects where does the organization or a company stands. To basic maturity model used in KM are – Analysis Model and Development Model. The Analysis Model refers to the quality management and development Model refers to the CMM which include the People CMM.

Keywords : Information/knowledge audits/ Benchmarks/ Maturity Model/ Analysis Model/ Development Model/ CMM/ People CMM.

1. Introduction

Knowledge management is a discipline that takes a comprehensive, systematic approach to the information assets of an organization by identifying, capturing, collecting, organizing, indexing, storing, integrating, retrieving and sharing them. Such assets include intellectual capital, employee expertise, business and competitive intelligence, and organizational memory. It strives to make the collective knowledge, information and experiences of the organization available to individual employees or organizational groups for their use and to motivate them to contribute their knowledge to the collective assets. It seeks to create or identify communities of practice or interest, especially to identify lesson learned and best practices.

2. Information Audit

An information and/or Knowledge audit is a systematic process through which an organization can understand its knowledge and information needs, what it knows, the information flows and gaps. Resulting from an information audit is an 'information map', which can be used as the basis for designing the content of intranets, as well as for the foundation of a corporate information strategy or a knowledge management strategy.

3. Need of Information Audit

A Knowledge Audit is a rigorous examination of an organization's knowledge and information use. It is intended to make visible the knowledge and information assets that drive its core activities. Organizations conduct knowledge audits for a number of reasons, such as to:

- identify what and where key knowledge assets can be found.
- identify knowledge gaps (what they should know but don't).
- use them as evidence for developing a corporate taxonomy.
- identify high priority documents (in terms of demand and value) for migrating into a portal .
- use them to set KM priorities and needs in a KM Strategy exercise.

An information audit will review what information is created and needed across the organization. Everyone within an organization has a role in creating and using information – even if they do not realise it! One of the positive side effects of a well-run information audit is that it raises the awareness across the organization of the value of information and the value of sharing knowledge. An information audit will also:

- Identify the information needs of the organization itself, the various business units and divisions, and the specific needs of individuals.
- Identify the information created and assess its value to the organization.
- Identify expertise and knowledge assets and enable the start of an intellectual asset register.
- Identify the information gaps.
- Identify quick wins that could be implemented to produce immediate benefits.
- Review the use of external information resources and how it may be used more effectively.
- Review the use of internal information resources, how valuable they are, and how they may be improved.
- Map the information flows and current bottlenecks within those flows.
- Develop an knowledge and information map of the organization.

4. Benefits of Information Audit

Information and knowledge are now recognized as core assets of any organisation and are potentially the source of an organizations key competitive advantage. The main benefit of an information audit is the development of a much better understanding of this prize asset and how it can be used to stimulate creativity and innovation. Specifically an information audit will be to identify how the organisation can:

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- make better use of its intellectual assets
 - make better use of external information
 - avoid inefficiencies and duplication of information
 - avoid information overload
 - save real time and money through efficiencies

5. Information audit approach

A successful information audit must reflect the organisation and how it works. It must review the different business processes within the organisation, exploring what information is needed in the process and what information the process generates. It requires a top-down as well as a bottom up approach looking at all the information flows, barriers, and inefficiencies. An independent information audit team is often preferable, bringing confidentiality and a fresh perspective to information management practices and use. To achieve all the objectives of the information audit, to gather all the data, and to develop practical proposals, a mix of interviews, questionnaires, discussion groups and focus groups need to be used.

Once the information map is complete and recommendations implemented the information audit should not be forgotten. Organizations change and information needs and flows change – the information audit should be a regular feature of an organisation helping to maintain and capitalise on this vital asset.

6. Knowledge Benchmark

How does an organization assess its progress with knowledge management? How can we set directions for growth in our KM programs? How can we communicate within our own organizations and to our own management about our goals? Benchmarks provide an important measuring stick for this type of evaluation. Maturity models reveal step-wise growth at the organization level. They are useful to the knowledge management practitioners, to the end users, and to upper management.

There are numerous definitions of benchmarking, but essentially, it involves learning, sharing information and adopting best practices to bring about step changes in performance. So, at its simplest, benchmarking means:

“Improving ourselves by learning from others”.

Most organizations tailor definitions of benchmarking to suit their own strategies and objectives. Two examples are given below.

“Benchmarking is simply about making comparisons with other organizations and then learning the lessons that those comparisons throw up”. “Benchmarking is the continuous process of measuring products, services and practices against the toughest competitors or those companies recognized as industry leaders (best in class)”.

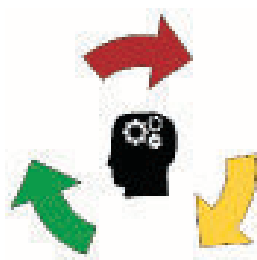
In practice, benchmarking usually encompasses:

- regularly comparing aspects of performance (functions or processes) with best practitioners.
- identifying gaps in performance.
- seeking fresh approaches to bring about improvements in performance.
- following through with implementing improvements and
- following up by monitoring progress and reviewing the benefits.

Although benchmarking involves making comparisons of performance, it is not:

Merely competitor analysis	- Benchmarking is best undertaken in a collaborative way.
Comparison of league tables	- The aim is to learn about the circumstances and processes that underpin superior performance.
A quick fix, done once for all time	- Benchmarking projects may extend over a number of months and it is vital to repeat them periodically so as not to fall behind as the background environment changes.
Copying or catching up	- In rapidly changing circumstances, good practices become dated very quickly. Also, the fact that others are doing things differently does not necessarily mean they are better.
Spying or espionage	- Openness and honesty are vital for successful benchmarking.
Industrial tourism	- If site visits are undertaken, they should be part of a structured programme leading to thorough analysis.

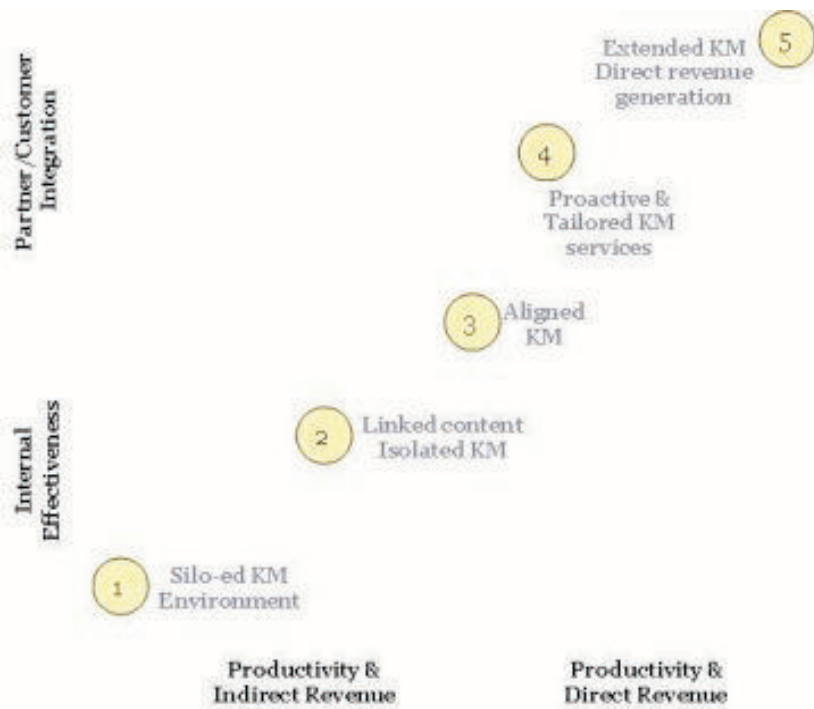
7. Maturity Model



Have you ever thought how are you going to measure your organization's KM success? Or probably, even before starting your KM initiatives, where does your company stand, in terms of managing resources? Of course, this is some basic questions that you first have to analyze so that you will have a better overall picture of your KM directions.

Having an effective and ideal Knowledge Management enables an organization to be competitive and productive in business market, thus empower its employees to innovate and optimize the business processes. No doubt, there is a need to access and

evaluate the state of acceptance and maturity of business initiatives which in turn will impact business process and delivery. Knowledge Management has now become one of most important business decisions since it affects all the touch points of business delivery.



KM Maturity Model as shown above depends on four main benchmarks, namely;

- Internal Effectiveness,
- Partner/customer Integration,
- Productivity and
- Revenue

The maturity in KM is an unpredictable state. One needs to be highly motivated, or under strict governance to ensure organization remains in the desired state. Any mistake in governance or low motivation level amongst its people, no matter how strong the processes and technology, will directly affect the success of KM and indirectly the state of KM maturity model.

Consider the followings scenarios :



1. **Phase 1 (Silo-ed KM Environment)** : A company has just started its business while a group of employees are divided by job functions. Each person shares related documents and information within the groups. After few years they notice that their resources are departmental-bound.
2. **Phase 2 (Linked content Isolated KM)** : Soon the organization sees the need to link resources internally. Some important databases are shared between departments or groups that are on working projects. And not only that, no one takes care to update or validate those documents. Some redundancies and obsolete information; that could lead to costly mistakes!
3. **Phase 3 (Aligned KM)** : Management now sees the need to integrate partners and customers with their services or products. Inputs from them and also employees are aligned, updated and validated in the process. As a result a structured KM is established, with an increase of productivity and effectiveness amongst its employees.
4. **Phase 4 (Proactive & Tailored KM services)** : With an ultimate objective to generate more revenues for the company, communities of practices are actively involved in seeking ways to improve business processes, thus offering a world-class customer service. Subject matter experts train and share best practices to novices. Every resources needed are at their fingertips, and not only that, everyone in the company is independent and proactive to get the job done, with minimum time.
5. **Phase 5 (Extended KM Direct revenue generation)** : The most desired phase for every organization, when the expertise of managing knowledge can be converted into monetary revenues as more and more organization turn and seek advice to emulate the exemplary success. This time, they do not initiate KM for money but rather the KM itself initiates money.

Knowledge Management success and maturity are dependent on a broad set of capabilities that cross processes, infrastructure and people. KM also needs organizational intent and support in the form of top-down communications, funding, governance and cultural change.

A KM Maturity Model helps an organisation assess its relative progress in KM implementation at a more detailed level than a KM Framework does. The main difference between a KM Framework and a KM Maturity Model is that the Framework simply sets out a desirable set of standards for the components that need to be in play for KM to be successful. The maturity model deepens this by describing identifiable stages on the way to KM maturity and it widens the perspective by bringing good practice KM activities and processes into consideration as well.

The maturity levels we use follow the standard Capability Maturity Model originally developed by the Software Engineering Institute.

- The components required for KM (The KM Framework)
- Factors that affect KM sustainability (Straits Knowledge KM Sustainability Framework)
- KM activities, processes and enablers.

8. Knowledge Management Maturity Model (KMMM)

Several years of examining knowledge management as a discipline have shown that its employment in real life is hampered by a number of barriers. To overcome these barriers we developed a holistic assessment method called the Knowledge Management Maturity Model (KMMM) that yields objective information describing the status of an organizational unit in terms of knowledge management. KMMM consists of two models, a development model and an analysis model.



Analysis Model

The Analysis model helps to take account of all important aspects of Knowledge Management and reveals which topics should be developed in future. These 64 topics are arranged in eight key areas, which are partly based on the enablers of the EFQM Model for Business Excellence and have also been extended or differentiated to represent KM specific aspects.

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Development Model

The Development model defines five maturity levels and provides information how to make the next reasonable step in Knowledge Management Development. The maturity levels were inspired by the levels of CMM from the Software Engineering Institute at Carnegie Mellon University and have been thematically worked out for Knowledge Management matters.

9. Capability Maturity Model (CMM)

Basically, The CMM is designed to be an easy-to-understand methodology for ranking a company's IT- related activities. The Level and its capabilities are shown in the following table.

Level	Capability
1. Initial	There are no planned activities for knowledge management. Knowledge collection and creation all rely on a personal level.
2. Repeated	The organization has very simple activities and knowledge management planning, facilitating users to reuse the information.
3. Defined	There is strategy and plans for knowledge management. The organization has constructed a uniform passage for knowledge sharing and management.
4. Sharing Managed	The organization has constructed effective system to collect, reuse, share and communicate information.
5. Innovation	The organization has the capability to use knowledge management for strengthening the organization and create competitiveness.

The purpose of these levels is to provide a “measuring stick” for companies looking to improve their system development processes. Since SEI CMM provides a well-known benchmark for judging the quality level of the processes in the organization, using this approach, People CMM Model has been developed.

10. People Capability Maturity Model

The People Capability Maturity Model (People CMM) is a framework that helps organizations successfully address their critical people issues. Based on the best current practices in fields such as human resources, knowledge management, and organizational development, the People CMM guides organizations in improving their processes for managing and developing their workforces. The People CMM helps organizations characterize the maturity of their workforce practices, establish a program of continuous workforce development, set priorities for improvement actions, integrate workforce development with process improvement, and establish a culture of excellence. Since its release in 1995, thousands of copies of the People CMM have been distributed, and it is used worldwide by organizations, small and large.

The People CMM consists of five maturity levels that establish successive foundations for continuously improving individual competencies, developing effective teams, motivating improved performance, and shaping the workforce the organization needs to accomplish its future business plans. Each maturity level is a well-defined evolutionary plateau that institutionalizes new capabilities for developing the organization's

workforce. By following the maturity framework, an organization can avoid introducing workforce practices that its employees are unprepared to implement effectively.

11. Importance of CMM

The CMM is valuable for several reasons. First, it is simple and easy to understand; therefore, it speaks to the executives of a corporation. Many corporate executives are already familiar with this model, and it is probable that your company's executives are also familiar with it. Over the years, I have been able to successfully use this model to illustrate major IT issues/concepts to senior executives. I have found the CMM to be a very valuable tool for obtaining project funding for key initiatives such as enterprise data asset management and meta data repository development; I will talk about these concepts in greater detail as my series on the CMM moves forward. Second, as you view the model, it is intuitive that a company cannot currently be ranked at a level 2 and jump directly to level 4. Instead, an organization must first develop a strategy to elevate it to level 3. Third, many large companies and government institutions are actively using this model to compare themselves with other entities. In fact, many corporations have IT goals centered on the CMM levels. Fourth, the model also gives companies a mechanism to compare themselves with other companies within their industry.

12. Conclusion

KM has become a powerful tool for promoting innovation and realizing the various walks of life. The value of KM relates directly to the effectiveness of an organization to deal with today's competitive situations and create their future. Information Audit, Benchmark and Maturity measure in KM plays a vital role for an organization. The basic purpose of Information audit is to develop the knowledge and information gap of the organization. Benchmark in KM sets the direction for growth in an organization and also tells about the progress of the organization. Maturity Measure of KM tells about where does the organization stands and also describes the status of an organization. For this, various KM maturity measure model are developed like- Analysis and Development Models.

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BIOGRAPHY OF AUTHORS

Mr. Vijay Kumar Anand presently working as Assistant Librarian and Head, Library Makhanlal Chaturvedi National University of Journalism & Communication, Bhopal, Noida Campus.

Mr. Sanjay Kumar Anand works at National Institute of Science Communication and Information Resources (NISCAIR), 14 Satsang Vihar Marg, Spl. Institutional Area, New Mehrauli Road, New Delhi - 110067
