

How To Build A Great Knowledge Management Portal

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ABSTRACT:

Technology can be a powerful enabler to make Knowledge Management (KM) effective and to maximize its results. The most commonly used technology-support for KM is the KM portal that often forms part of a company's Intranet. However, examples of companies that sunk tons of money in sophisticated technology solutions for KM without any real business results abound. This article begins with real examples of companies that have derived significant business results through their KM program, of which their KM portal is a key enabler. It then talks about how to keep the KM portal simple for the user. Next, we look at how your KM portal can enable 360-degree KM. Finally, it provides a list of functionality and features that a KM portal must provide in order to be a serious enabler of better business performance. The article is based on first-hand experience with world-class KM systems and practices at a global professional services firm, followed by leading the conceptualization and implementation of KM systems at several large and different businesses that derived breakthrough results through KM, and a study of KM portals at other organizations.

Keywords: *Knowledge management, KM portals, KM technology, KM solutions*

1. Introduction

So you have a KM portal. Congratulations! But wait a minute ... ask yourself the following questions about your portal. Is your KM portal the most powerful application on the company's Intranet? – powerful in terms of utility to the business and not technical sophistication. Is your KM portal the homepage of choice for most employees? Is your portal the first place people go to when they have a problem on their job – to find a solution or to find experts who can help them? Do they keep coming back every time they face a problem? Does your KM portal empower each individual employee with the collective knowledge of the entire organization? Does it make it easy for employees to share best practices or other internal or external knowledge relevant to the business – as easy as writing an email with an attachment? Or even better, does your portal make it fun to share knowledge or reward people for doing so?

Does your portal do all of the above, OR is it a place where people share articles from yesterday's newspaper that might be interesting but have little to do with your company's business, or funny emails they got from their friends? Is the portal a place where employees go when they want to take a break or when they have nothing else to do?

As an architect of your company's KM portal, you can ensure that the way you build your portal and the features and functionality you give it make your portal fall in the first category described above.

2. Some Real Examples

At a global professional services firm with offices in 145 countries (over 500 cities worldwide) and 70,000 employees, *any* knowledge relevant to the firm's areas of practice, including project work done for customers, proposals, research reports and so forth is available on the KM portal on the firm's global Intranet instantly and uniformly to all offices and employees worldwide. As a result, every single employee is able to effectively leverage the combined expertise of all 70,000 people in any work they do for any customer anywhere in the world. The portal provides employees access to thousands of people-years of experience and expertise in the form of documented knowledge of

present and past experts of the firm worldwide. The KM system is a key factor in winning many of the firm's assignments, because many prospective customers are hugely impressed by richness of the firm's global knowledge-base and the value they can derive from it. The firm's KM portal is the first place that employees visit every time they need to make a proposal to a prospective customer or begin a project – to find what is already there and how they can leverage it for their current customer's requirement. Customers also appreciate this because they get proven results, and much faster because of the elimination of re-invention which the KM portal ensures.

At a large diversified conglomerate group with over 20 different companies in a variety of unrelated industries, the KM portal on the group's Intranet acts as a bridge across group companies. The portal contained knowledge repositories that were specific to each line of business as well as common repositories for areas where synergy was possible across different group companies. The portal has promoted synergy and savings across seemingly unrelated businesses – e.g. a single knowledge sharing initiative in key material and service purchases supported by one such common repository resulted in annual financial savings of US\$ 3 million. Such synergy & savings had never happened in the past, even though these group companies all had their offices in the same building for years – till a formal KM program was put in place.

A large service company structured its knowledge repositories around its most critical business processes and performance-measures to keep KM relevant to its business. The company defined standard KM processes for sharing and replication of knowledge and measurement of results. The company has a points system (called Knowledge Dollars or K\$) to reward employees (and their team-members, functional heads and business units) for sharing internal or external knowledge relevant to the business. K\$ are also awarded for replicating knowledge shared by other employees. The KM portal helps employees keep track of their K\$ balance (just like their bank account) and facilitates online exchange of their K\$ for gifts. The popularity of the K\$ scheme, and its role in creating an organization-wide culture of knowledge sharing and replication exceeded all expectations. Within the first year of launch of the KM portal, K\$ 120,000 was earned by over 2,500 employees. Over 1,500 knowledge submissions and 500 replications were published on the portal during the year. These KM replications have led to significant improvements on the company's key performance measures, had a very positive impact on customer satisfaction scores and resulted in financial savings of US\$ 1 million within the first year itself. The KM portal has played a vital role in creating interest, excitement and motivation and has helped make knowledge sharing and replication fun and rewarding.

3. Who Is The Customer For The KM Portal?

KM practioners and technology vendors need to remember that the organization's employees at all levels including senior management are the primary customers and users of the KM portal. The portal is of value only if it helps them do their jobs better and to achieve their performance objectives. You therefore need to focus not on what technology can do and then try to get people to use it (this has been the root-cause of many failure stories in KM), but understand the needs of the business and your customers, the users of your KM portal, and build the system in such a way that they will want to use it and keep coming back because it helps them do their jobs better and faster; and makes it easy for them to collaborate with other experts.

4. Keep It Simple For The User

Also remember, your customers do not have time for KM or the portal for its own sake. They will use it only if they find it helpful in their own jobs. What may seem to be technical sophistication to you may not impress them if they need to wade through a maze of screens and clicks to share a piece of knowledge or to find what they are looking for. You need to keep your portal easy to use (always remember your users have very little time for this and do not have to use it unless they want to). The user interface must be clean, friendly and uncluttered. Knowledge sharing must be as simple as writing an email with an attachment. Finding knowledge or searching must be easy and fast. Do not try to impress your users with sophisticated (cluttered) screens. But build the required technical

sophistication at the back-end so that a search by a user is fast and gives relevant results that meet their requirement.

5. 360-Degree KM

The 360-degree KM (Hariharan, 2005a) model enables a single-window access to *all* Knowledge within and outside an organization that is relevant to the most critical aspects of the business. The model organizes this Knowledge around the organization's most critical business measures. 360-degree KM enables companies to maximize their effectiveness in managing and deploying knowledge relevant to improving performance on their top priority business measures. This helps to keep KM entirely relevant to the business, to smartly focus KM efforts and to ensure real business results and performance improvements through KM.

Most companies today suffer not from lack of knowledge, but from sub-optimal ability to effectively deploy *all* available knowledge and expertise relevant to their top priority business measures – resulting in non-attainment of their full potential in business performance. The 360-degree KM model helps organizations unleash the power of integrating knowledge and expertise along six *Knowledge Dimensions* for each of their top priority business measures – and thereby help raise their business performance to its full potential. The six Knowledge Dimensions for each top priority business measure are the community of experts, internal performance measures, customer-voice, internal & external knowledge relevant to improving performance on that business measure and knowledge replications. The 360-degree KM model is shown in Figure 1.

6. The Role Of The KM Portal In Enabling 360-Degree KM

Your KM portal can play a vital enabling role in each of the six dimensions of 360-degree KM. In Dimension 1 (community of experts), the portal can knit the experts together into a virtual community and aid collaboration. It can also help to provide the entire organization easy access to experts in each top priority measure through corporate yellow pages or similar tools. In Dimension 2 (internal measurements) and Dimension 3 (customer voice), most companies today use some form of technology systems for measurement and reporting. The KM portal can provide links to these systems. In Dimensions 4, 5 and 6 (knowledge bases of internal knowledge, external knowledge and replications), the KM portal contains this knowledge in an organized form and provides search and retrieval capability. Finally, the KM portal can effectively provide a single window access around each top priority measure, to knowledge and expertise in the all the six knowledge dimensions relevant to that measure.

It is not necessary for your KM portal (you must not even attempt this) to physically contain all relevant knowledge within itself. However, it needs to be linked to other systems on your Intranet or elsewhere to provide access to all six knowledge dimensions for each critical business measure. Thus, the KM portal must be the single-window that provides this 360-degree view around each of your company's top priority business measures.

7. How KM Really Works

.Actually what KM does is disarmingly simple. All it does is provide the members of each community of experts (which is around one of your top priority business measures) access to each other and to the repository of documented knowledge relevant to improving performance on their top priority measure. KM makes it easy for experts to collaborate with the rest of their community and seeks to promote a culture of sharing and replication of knowledge relevant to their community.

As these experts are the most important customers of the KM portal, all that your portal needs to do to be of value to your customers is to facilitate the above.

8. The KM Portal Must Facilitate KM Processes

One of the most Critical Success Factors (Hariharan, 2005b) for Knowledge Management (KM) is to have robust processes for sharing as well as replication (use) of knowledge around top priority business processes and measures. Your KM portal must be an enabler of KM processes. The portal is an effective tool to automate and close-loop these processes so that sharing and replication of knowledge in areas that are most critical to the business are mandatory, and not left to chance or choice.

The KM processes that your portal must support include:

- Knowledge sharing process [including the “Best Practice funnel” (Hariharan, 2005c) – i.e. identification of potential best practices from high performance on internal measures and/or customer satisfaction and ensuring these result in published best practices on the portal]
- External knowledge process (publishing external content relevant to the business)
- Knowledge submission and approval process
- Knowledge replication (use) process. Results of replication of previously published knowledge submissions on the portal must also be documented and published. This facilitates measurement of results of KM, and captures new knowledge that is invariably added during replication.
- Process for capturing new knowledge during replication
- Process for incorporation of knowledge submissions into standard business processes

9. The KM Portal Must Enable Measurement Of Business Results Of KM

At one company where we implemented these KM processes, the Knowledge Replication process does not end with a business unit completing replication of a knowledge submission. It is mandatory to measure the quantified impact of the replication on the relevant business measure. This is not difficult because each knowledge repository in the portal is created around a business measure in the first place. It is also mandatory to document the completed replication along with the resulting quantified improvement on the relevant business measure. The company has a standard format to document knowledge replications – just as it has a standard format for knowledge submissions. The replication format has a mandatory field to identify the original (source) knowledge submission that has been replicated, the approach taken and the business results of the replication.

Within the first year of launching the KM portal at this company, over 1,500 knowledge submissions had been published and 500 replications were completed across the company. Over 2,500 employees participated in at least one knowledge sharing or replication initiative within the first year itself. Every one of the KM replications resulted in a significant improvement on a critical business measure, and typically in a fraction of the time it had taken the original (sharing) unit to get similar results. With one completed replication for every three knowledge submissions, the replication rate is extremely high by any standards, as we found out later when we exchanged our KM experiences and results with several other companies. The KM replications helped improve the company’s customer satisfaction scores and resulted in direct financial benefits of over US\$ 1 million in a single year. We were able to measure and promote these results only because it was mandatory to measure and publish the quantified impact of every single replication – and our KM portal facilitated this. A summary of the functional specifications of the KM portal that delivered these results is the next section.

10. Indicative KM Portal Functional Specifications

The following functional specification list was the basis for the KM portal at this company. What is shared below is a summary. Based on this, a design document with complete functional details was created and signed off. You could use this as a generic guide or check-list. Your organization might have its own requirements – for which you could refine or add to this list to create your own specifications.

Functional specifications summary for KM portal:

- Creation of multiple knowledge repositories and sub-repositories (typically, each repository would be a critical business process)
- Populating repositories with re-usable knowledge submissions
- Ownership / Administration / Content Management of each repository by a different owner or knowledge champion
- Ability for all employees to upload (contribute) knowledge into repositories (which will be accepted after quality-check by repository owners)
- Ability for all employees to download (re-use) knowledge from repositories
- Creation of communities of experts / virtual groups; virtual meetings* / discussions* (* these applications are outside the KM portal, but the portal provides links to these)
- Classification / taxonomy scheme (meta-data)
- Personalization - individual users must be able to subscribe to selected repositories that are of relevance / interest to them; and create their personal library of selected knowledge submissions
- Pushing content to people who are most likely to use it - email alerts when there is a new addition to the subscribed repositories
- Workflow capabilities (e.g. knowledge submission, alert to Knowledge Champion, editing and acceptance for publishing in repository)
- Quick, robust and accurate search & retrieval capability
- Rating of content by readers
- Logs / reports for number of contributions, number of hits per repository / sub-repository, number of views / downloads per knowledge submission, details (name and dates) of employees visiting the portal, who has read / downloaded which knowledge-object, etc.
- Points (K\$) for knowledge submission and replication
- The “look & feel” of the KM portal must be designed “around the person”, i.e., it should be part of a larger intranet with other content / applications such as news, personal content, experience & skills profile, etc.
- Capability to provide access to stakeholders other than employees (e.g. distribution agents, customers, partners, suppliers, etc.) to selected parts of the KM portal
- Access control - Capability to provide restricted access to certain employees; or certain sections only to specific users, read-only access – e.g. access to only meta-data with contact-details of the owner

- Capability to provide links to external content / websites
- Capability to provide links to “experts” in each repository / sub-repository
- Capability to post ideas / questions for experts
- “What’s new” button that displays recently added content or features
- Capability to interface with other applications wherever required
- Linking a single knowledge submission to more than one repository

This was an indicative list of features required in this company’s KM portal for the initial launch. Additional requirements based on new ideas, suggestions from users and changing business requirements keep coming on an ongoing basis. Thus it is important for the KM portal to have the flexibility to change and grow constantly.

11. A Note For Technology Vendors And KM Practitioners

Always remember the KM portal exists for the business and users. Technology vendors offering KM products or solutions to clients can greatly increase the value that your customers perceive in your services if you bring an understanding of 360-degree KM and some of the other KM concepts shared in this article, in addition to technical knowledge.

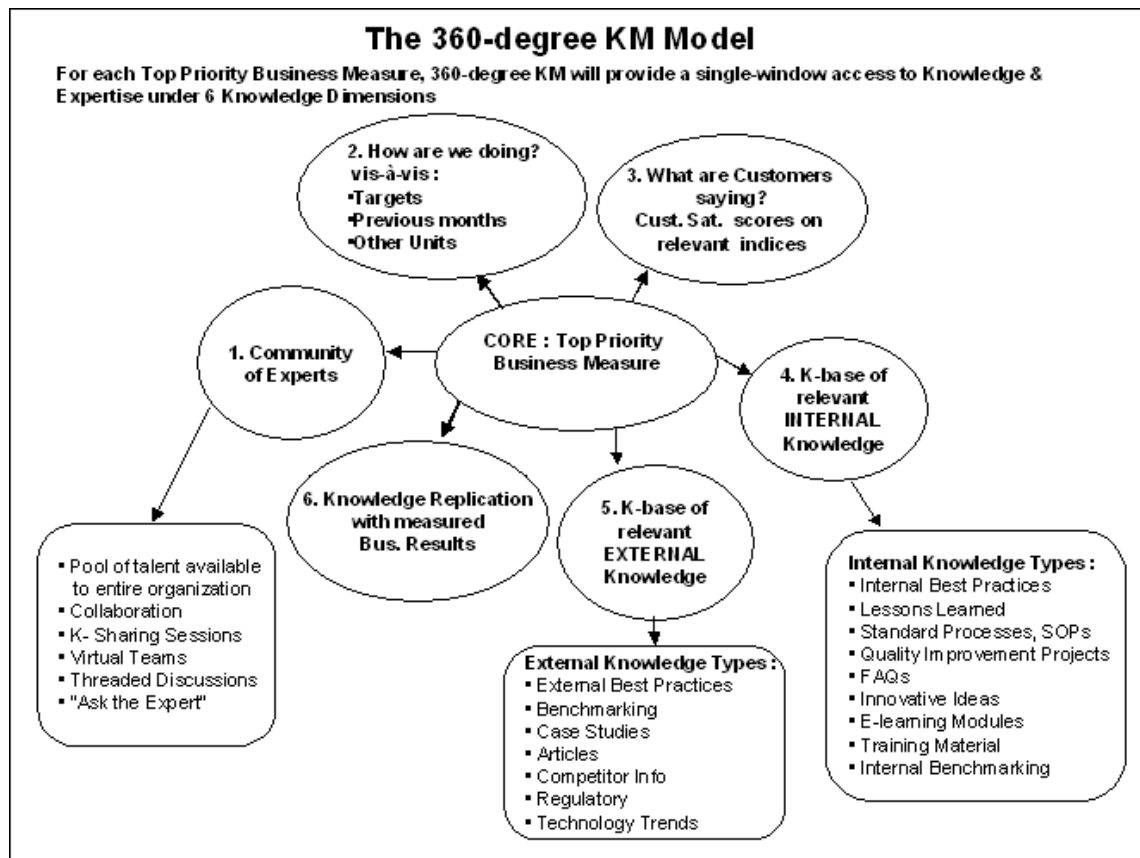
Do not forget that the real customers for the portal are employees from various functions and not the KM team. Keep the system simple (remember, users have no time). Create an attractive, functional and friendly front-end or user interface. Build the necessary sophistication at the back-end to ensure that your portal is robust and runs smoothly.

Be flexible. Do not offer a rigid solution or use a rigid backend technology and then try to force the customer to sacrifice on the functionality or the “look & feel” that they require. Have an open mind that welcomes rather than resists new ideas. As users start using the portal, they are bound to come up with ideas and suggestions on new features that would increase the utility of the portal for them. These suggestions from users are the best opportunity for you to continuously improve the business-value of your KM solution – for this customer as well as for other customers. Therefore, make sure your backend technology is flexible and scalable to meet the customer’s ongoing requirements. Use the concepts and indicative functional specifications given in this article, and new ideas you will get every time your product or solution is deployed for a customer to continuously improve and upgrade your solution. And remember “upgrade” means improving business-value and not necessarily technical sophistication.

Finally, a word on “personalization” - the KM portal can be a powerful platform to recognize and provide visibility to people who share or replicate knowledge relevant to the business. Having one’s knowledge contribution published on the company’s portal with one’s name and perhaps a photo is an honor for most employees. Many portals offer personalization where employees can subscribe to knowledge repositories of their choice or build a personal library of their favorite content. These features help to make the portal more specific and useful to individual users.

However, I have come across cases where the “personal home page” is carried to an extreme, and the KM portal is buried among dozens of other buttons or categories of applications, many of them not directly relevant to the business. While your company may want employees to have access to weather, news, games, horoscopes, matrimonials and so forth, you may want to keep your KM portal separate from such content and maintain its structure so that the focus on your top priority business measures is not diluted.

Figure 1: The 360 Degree KM Model



12. References

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