

KM diagnosis and prescription

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This is fourth in a series on KM implementation techniques.

How do you know what you need to do to implement a knowledge management (KM) system in your organization? Or better yet, how can you turn your organization into a knowledge-managed system? Those are difficult questions to answer, and many KM solution providers don't bother to ask them. They just say, "Trust us—buy our solution."

There are no one-size-fits-all solutions. Every organization is a unique combination of people, process and technology that must work cohesively together to achieve the organization's objectives. Logically then, it takes all three components to establish good organizational health, and, therefore, all three must be addressed to effect organizationwide change. Sometimes the organization is not performing as well as it could because the three components have gotten out of balance. Often, that occurs when a new technology application is installed without considering its impact on the people or processes. Sometimes, the organization is in balance but environmental influences require it to establish a new operating paradigm. Regardless of the driver that necessitates change, there are three standard elements for creating an effective change program:

- Identify the underlying problem or issue.;
- Developing a tailored solution.;
- Provide an implementation plan that improves the likelihood of success.;

The chart on this page 1 shows the diagnostic tools and techniques that we have used to help our clients develop a KM solution. It shows which of the three KM system components each addresses. Although it is not a complete list of available diagnostic aids, it does provide a good sampling for those who may just be starting to conduct KM system evaluations.

The baseline assessment is used when an organization is just beginning to think about knowledge management and is unsure of the current status of its three system components. The assessment survey instrument is an evaluation tool that assesses the knowledge needs of an organization by defining the "as is" knowledge workplace and providing insights into the "to be" workplace. Our baseline assessment has two components—a cultural needs assessment, which reveals information necessary to make recommendations regarding how the current culture needs to be changed to transform into a knowledge-centric work force, and a technical needs assessment, which identifies and assesses the organization's existing technology infrastructure, systems management and how that infrastructure supports future KM

initiatives.

The description of the to-be knowledge workplace influences the development of new organizational processes. Adjustments to those processes, standards and policies will leverage the organizational culture toward becoming a knowledge-sharing community, and further align the organization with a KM infrastructure into what Tiwana calls an “infostructure.”

Maj. Gen. Michael Wiedemer, director of requirements for the Air Force Materiel Command (AFMC), introduced its 2001 assessment by saying, “These insights provide a foundation from which the to-be vision, policies and processes can be derived to support and effect a cultural shift, which is required for execution. The formulation of new processes and policies derived in support of the to-be knowledge environment injects new patterns into the organization that begins a cultural shift toward meeting business needs and the needs of employees.”

Our **KM maturity model** is patterned after the systems engineering and software capability maturity models that have been developed by Carnegie Mellon’s Software Engineering Institute. It is linked to our KM Blueprint (described in article 1), evaluating 24 of the key implementation activities in that process. While it is not an “approved” model, we find it a useful evaluation tool for determining where an organization is in its knowledge management implementation, for verifying whether all of the prerequisite activities are completed and for determining a course of action for further improvement.

Social network analysis is a technique for mapping the informal flow of knowledge in an organization. The work of the organization is most often accomplished through those networks, and astute practitioners can assess the effectiveness of the existing interpersonal connections and predict the impact of future changes to the formal organizational structure on the ability of the organization to get its work done. Social network analysis may well be the most effective methodology for leveraging knowledge capital. It borrows from the same body of knowledge that social and organizational learning specialists use to effect change in an organization’s norms, culture, teams, social dynamics and leadership.

Social network analysis is focused on uncovering the patterning of people’s interaction and how work is actually accomplished—who is communicating with whom on an organizational level and whether the right relationship links exist to optimize the organizational goals and objectives. That analysis is derived from asking simple questions like: Whom do you talk to? Whom do you go to for expert advice, or a quick decision? Which employees are creating information bottlenecks?

The **organizational cultural inventory** (OCI) provides an ongoing process for helping organizational units discover their concept of culture and how culture affects effectiveness and goal achievement. The OCI is a diagnostic tool that can identify and pinpoint activities relative to aligning the organizational culture (people) with the business objectives and the intended strategic direction, and, therefore, it is a mechanism to help determine what you need to do to implement a knowledge management system in your organization.

Once an organization identifies the significant challenges facing its future, breaking down the individual impact of those challenges is the next step. For example, Randy Adkins, KM manager, Air Force Materiel Command, embarked on a systemwide, top-down/bottom-up KM initiative to ensure that AFMC can function as effectively and efficiently as possible. AFMC identified its significant challenges as:

- rapidly changing communications technology,;
- growing customer requirements and expectations,;
- diminishing resources, and ;

- minimal ability to influence those environmental challenges.;

To meet the challenge, Adkins sponsored an OCI that was instrumental in influencing the AFMC Strategic Plan and Knowledge Management initiative currently in place within the organization

Value chain analysis is a way to visually depict an organization's mission and business strategy. It is based on a concept introduced by Michael Porter in his 1985 book titled "Competitive Advantage." The value chain provides a systematic way to divide a firm into its discrete activities, and thus can be used to examine how the activities in an organization are and could be grouped. Value activities are divided into two broad types, primary activities and support activities. Primary activities involve the physical creation of the organization's products and services. Support activities support the primary activities and other support activities by providing organizationwide functions.

An organizational structure that corresponds to its value chain will improve an organization's ability to create and sustain customer satisfaction and long-term success. We use that technique to help our clients identify groups of people who are candidates to become communities of practice and to demonstrate the linkage between the business strategy of the organization and that of each community.

Scenario-based design is a technique adapted from the usability engineering discipline, an approach to software development in which target levels of computer system interactions are specified in advance, and the system is engineered toward meeting those objectives. Using that technique, we coach our clients through the development of scenarios that are stories describing how people, processes and technologies work together to produce the organization's products and services. Problem scenarios describe the current practice in the as-is environment. Activity scenarios describe the way that the organization would work in a KM-enhanced environment. The resulting to-be workspace is evaluated for possible side effects and unintended consequences.

Various ways exist to implement change management and continuous improvement activities within an organization. Because each organization is different, the route chosen should be unique to its organization. More often than not, the process is iterative—not linear—relying on the ability of management to assess the big picture (systems view) constantly and use of appropriate activities to implement the process. When striving to go from the present state to the desired state, looping back through phases of the process often occurs. Our use of the diagnostic techniques described in this article is an amalgamation of systems engineering and analysis and social and organizational dynamics. The weaving of those disciplines allows us to craft a KM implementation strategy that addresses all facets of an organization.

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