Are You Wasting Money On Useless Knowledge Management?

by Martin Ihrig, Max Boisot, and Ian MacMillan | 11:54 AM January 20, 2011

Is your company investing in expensive knowledge management systems that are useless for making big, strategy decisions? Most companies recognize the need for knowledge management, but often delegate it to the IT and HR departments without linking it to corporate strategy, often thereby wasting both resources and the strategic options their firm's knowledge could generate. The problem is that most current knowledge management efforts merely inventory the company's knowledge, without parsing out the knowledge that is strategically relevant. Strategic management of knowledge focuses only on those knowledge assets that are critical to your firm's competitive performance — from the tacit expertise of key individuals right through to explicit company-wide general principles.

Here’s how to do it: use strategic management of knowledge (SMK) maps to depict a network of critical knowledge assets in four simple steps: 1) identify the knowledge assets that drive your organization's competitive performance; 2) map them along the dimensions we present below; 3) analyze the strategic implications of the maps; 4) strategize and plan knowledge development trajectories.

In our simplified format, knowledge assets map along two dimensions. The first measures the degree to which knowledge is tacit and uncodified, versus explicit and codified. Highly tacit knowledge embodies deep, almost intuitive understanding that is hard to articulate and explain to others and that is rooted in concrete experience. Over time, much of this tacit knowledge can be made more codified, and therefore more easily shared and understood by others.

The second dimension maps the extent to which knowledge has diffused to others. Undiffused knowledge is possessed by only a few people, highly diffused knowledge is shared by many others and, by implication, is accessible to competitors. Diffusion is in two forms: bounded diffusion, where knowledge has not diffused beyond the people in your firm, and unbounded diffusion, where knowledge is available to other organizations. So, while more codified knowledge becomes easier to profitably exploit, the danger is that over time it is more easily accessed and appropriated by competitors. While you would like knowledge to be diffused among the people within your firm, knowledge made available beyond your firm's boundaries should be a deliberate strategic move and not a consequence of leakage.
The first mapping challenge is to identify the most important "blocks" of knowledge in your firm’s possession and to gauge how codified and diffused they are. The second is to identify how these blocks link up into knowledge networks. Map A shows a simplified version of the strategic knowledge map we developed for a firm in the electronics industry. Each of the circles in the map represented a specific "chunk" of knowledge that the firm felt was strategically important for competitive performance (using acronyms to represent different types of knowledge--for this exercise it doesn't matter what they stand for). An example of such a strategic chunk would be knowledge of the procedures to follow in designing a specific aircraft engine (structured) or how to assemble the design team to develop a new type of aircraft (tacit).

Figure 1: Map A

You can start your own mapping process by using the following simple scale to map each block of strategic knowledge.

**Codification:**

- An expert can use the knowledge to perform tasks but cannot articulate in a way that others can perform these tasks.

- Experts can perform tasks and discuss the knowledge involved with one another.
The variables that influence the performance of a task can be exploited heuristically (i.e. they can be identified and described, but their interaction and causal relations cannot be).

The causal relations between relevant task variables can be identified and described, so that general principles can be applied.

Diffusion:

Only a few individuals in your company possess this knowledge.

Many in your organization possess this knowledge.

Some outsiders possess this knowledge.

Many outsiders possess this knowledge.

Once the knowledge is mapped, the strategic challenge is to then decide on how to profitably allocate your resources to its further development: To generating new, deep-seated uncoded knowledge? To codifying tacit knowledge? To diffusing the codified knowledge within your firm despite the risks of 'leakage' beyond it? To accessing complementary knowledge from outside? To transferring knowledge by licensing or selling it?

Consider by way of illustration, the strategic options available for exploiting the knowledge distributed across map A:

1. RAAS and ETAMC should be further codified and IP-protected to extract more rents.
2. DMIMO and AIF are in danger of leaking to competition; so consider licensing them while enhancing their value by capitalizing on the strength of their links to RAAS.
3. Collaborate with other firms — through JVs or alliances — to further codify MATA and AIF, sharing the spoils.
4. SAMC should be generating profits, but given its diffusibility, these could start being appropriated. Consider licensing it to others, exploiting its linkages to MAMC to enhance revenue streams.
5. Either codify MAMC to increase revenues, or leave it where it is and retain its "trade secrecy".

So, strategic knowledge mapping identifies the knowledge you should be investing in, holding on to, sharing with others — customers, suppliers, joint venture partners, etc. — or letting go, and how to go about it. Without a strategic knowledge map, costly investments in knowledge often remain ill-informed and misdirected. Asking the simple scaling questions to identify and locate your key knowledge assets (used to generate Map A), expensive mistakes can be avoided.

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