

The Third Stage of KM Emerges

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A third stage of knowledge management has surfaced. If you peruse the content of the KMWorld conferences in 2000 and 2001, you can see it clearly. At KMWorld 2000, a track on content management appeared for the first time, and at KMWorld 2001, content management was the dominant track, constituting the largest cluster of topics. The third stage that has emerged is taxonomy/content.

The three stages of KM

Stage 1: "by the Internet out of intellectual capital"

- information technology;
- intellectual capital;
- the Internet (including intranets, extranets, etc.);
- key phrases: "best practices" replaced by the more politic "lessons learned" Stage 2: human and cultural dimensions, the human relations stage;
- communities of practice;
- organizational culture;
- the learning organization (Senge);
- tacit knowledge (Nonaka) incorporated into KM;
- key phrase: "communities of practice";

Stage 3: content and retrievability

- structuring content and assigning descriptors (index terms);
- key phrases: "content management" and "taxonomies";

First, let's review the developments to date and the first two stages. Note that new stages don't replace earlier stages, they merely add an emphasis to aspects of KM that--although already there--were inadequately recognized previously.

Stage 1

The initial stage of KM was driven primarily by information technology. That stage has been described in an equestrian metaphor as "by the Internet out of intellectual capital." [Editor's note: In horse people's talk, a horse would be characterized as "by Native Dancer out of Flashback," meaning that Native Dancer was the sire (father) and Flashback the dam (mother).

Organizations—particularly the large international consulting ones—realized that their stock in trade was information and knowledge, that often the left hand had no idea what the right hand knew, and that if they could share that knowledge, they could avoid reinventing the wheel, underbid their competitors and make more profit. When the Internet emerged, they realized that the intranet flavor of the Internet was a tool to accomplish that knowledge coordination and sharing. The first stage of KM was about how to deploy the new technology to accomplish those goals.

Stage 1B, if you will, was that those large international consulting organizations also realized quickly that many of their customers shared the same problems, and that the expertise they were building for themselves could also be a product, an expertise, that they could purvey to their customers. A new product needs a name and a theme or rationale. The name for their new product was knowledge management, and the theme/rationale justifying it was *intellectual capital* . . . a theme which coincidentally had emerged as a hot topic in business literature only a couple of years earlier, and which provided a wonderful rationale for the importance of KM.

The first stage might be described as the "if only Texas Instruments knew what Texas Instruments knew"—to revisit a much quoted aphorism. The hallmark phrase of Stage 1 was first *best practices*, to be replaced by the more politic *lessons learned*.

Stage 2

The second stage of KM, described simply, added recognition of the human and cultural dimensions. It might be described as the if-you-build-it-they-will-come-is-a-fallacy stage . . . the recognition that "if you build it, they will come." is a recipe that can easily lead to quick and embarrassing failure if human factors are not sufficiently taken into account. As that recognition unfolded, two major themes from business literature were brought into the KM fold. The first was Senge's work on the learning organization (Peter M. Senge, "The Fifth Discipline: The Art and Practice of the Learning Organization," New York, Doubleday/Currency, 1990). The second was Nonaka's work on tacit knowledge and how to discover and cultivate it (Ikujiro Nonaka and Hirotaka Takeuchi, "The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation," New York, Oxford University Press, 1995). Both were not only about the human factors of KM implementation and use, they were also about knowledge creation as well as knowledge sharing and communication. The hallmark phrase of Stage 2 was *communities of practice*.

The Conference Board (conference-board.org) has been organizing meetings on the subject of KM since 1995. The early meetings were populated overwhelmingly by IT people. A good marker of the shift from the first to the second stage of KM is that for the 1998 Conference Board on KM, there was for the first time a noticeable contingent of attendees from human resources departments, and by 1999 HR was the largest single group.

Stage 3

The third stage is the awareness of the importance of content—and, in particular, an awareness of the importance of the retrievability and therefore of the arrangement, description and structure of that content. Since a good alternate description for the second stage of KM is "it's no good if they don't use it," then in that vein, perhaps the best description for the new third stage is "it's no good if they can't find it," or perhaps "it's no good if they try to use it but can't find it." Another bellwether is the TFPL's (tfpl.com) report of its October 2001 Chief Knowledge Officer (CKO) Summit in which for the first time taxonomies emerged as a major topic (TFPL, "Knowledge Strategies--Corporate Strategies," 4th International CKO Summit, London, TFPL, 2001). In the graph TFPL summarizes the results of that summit. Note that the largest, boldest word is taxonomy. The hallmark phrases emerging for the third stage are *content management* (or enterprise content management) and taxonomies.

What does that tell us?

Recognizing the stages of the development of a concept is a good way to recognize where one is, where the field is, and, of course, to ask the question: Am I up on things and have I missed anything?

Another advantage is the recognition that a new stage is a change of direction, and when changing direction we should ask: What are the rocks and shoals out ahead and what are the new opportunities?

Various ramifications of that change of direction will undoubtedly unfold, but one important corollary already stands out. There seems to be a clear missed opportunity, at least so far. The KM community seems to be trying to reinvent

the domain of taxonomy, while there are plenty taxonomic specialists out there. The KM community seems to be almost entirely unaware of their existence and is looking in the wrong direction. Taxonomies are perceived by the KM community as emanating from natural scientists, not from librarians and information scientists.

To be sure, meaning #2 in Webster for taxonomy is "classification, especially the orderly classification of plants and animals," but meaning #1 is "the study of the general principles of classification." That is librarianship and information science. If business professionals and KM staff could visualize what they have in mind when they talk about taxonomies—and only a few could adequately do that—what would constitute that picture is something very similar to MESH, the carefully structured compendium of MEDical Subject Headings compiled by the National Library of Medicine (nlm.nih.gov). But there is precious little awareness that taxonomies and classificatory structures like MESH are the natural domain of librarians/information scientists.

An interesting token of that gap in comprehension was a presentation at KMWorld 2001 by members of the staff of the [American Productivity and Quality Center](#), an important organization in the world of KM. The presentation was entitled "Managing Content and Knowledge;" its theme concerned the critical success factors for KM implementation. It was clearly a Stage 3 presentation, and the most heavily stressed point was the prescriptive offered for successful KM implementation: "Taxonomy before Technology."

What was even more interesting was what emerged indirectly. A number of examples/case studies were briefly described. One of those was the implementation by the [Washington State Library](#) of a system to deliver state agency and related information to small businesses in particular and to the public at large. Some dollar figures were given, and the Washington State Library project was striking indeed for its impact per dollar—a fact commented upon by the audience. The phenomenon, however, should not be surprising; after all the project had a running head start, it was spearheaded by librarians, taxonomic specialists. Unfortunately while there was no opportunity to ask the question in public, as the content-filled session ran overtime, the question that obviously occurred was: Had the team examined whether the central involvement of such staff was also a generic, critical success factor for KM implementation, and, if so, what had they found? The answer, delivered privately after the talk, was yes the question had been asked and "yes, very much so" as to whether the involvement of information professionals was a critical success factor.

To be sure, content management and librarianship are not a simple one-to-one relationship, but the area of core overlap is substantial and critical.

An important corollary is that one area where the KM community should take advantage of the expertise of information professionals, as opposed to IT professionals, is in software selection, particularly software that offers some sort of automatic classification, categorization or indexing—an area of great interest to Stage 3 KM. By way of illustration, 25 software packages were submitted for the KM Promise Award at the KMWorld 2001 Conference. They provide a snapshot of where the vendors think the field is going and where they think there is a need they can address. The largest cluster, nine products, attempted in some algorithmic fashion to structure and index a body of documents. The next largest cluster consisted of eight communities of practice/yellow pages products that attempted at some level to identify and classify who in the organization or the extended organization possessed what particular subject knowledge or expertise, and then facilitate an appropriate linkage. In either case, but particularly the former, program or product selection should centrally involve information professionals who are familiar with taxonomies, thesauri, indexes and the world of textual information retrieval in general.

The bottom line in the new third stage of KM is that information professionals need to make their skills known to the KM community, and the KM community needs to seek out information professionals and bring them more into the KM fold. If that doesn't happen, there will be a lot of needless reinvention of the taxonomic wheel.

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(Note: For further discussion of the developments through Stages 1 and 2, see *The Evolution of Knowledge Management*, Chapter 3, in "Knowledge Management for the Information Professional," edited by Michael E. D. Koenig and Kanti Srikantiah, Medford, NJ, Information Today, 2000.)