

Total Knowledge Management



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Tacit knowledge is exchanged. It's about people sharing "know-how" in ways that help organizations foster innovation, streamline inward and outward-facing response times, get products and services to market faster, reduce costs, increase productivity, and increase revenues.

Tacit knowledge, you see, is made up of things that we know, but cannot explain. Things like driving a car or recognizing someone's face. Tacit knowledge—truly tacit knowledge—is transferred through human-to-human contact: storytelling, apprenticeship, conversations around the water cooler. Tacit knowledge is transferred by people with ideas talking to other people with ideas, by people with experiences talking to other people with experiences. It is synthesized through social effort.

In this model, tacit knowledge isn't captured—it's exchanged.

Knowledge by Half



The concept of knowledge exchange isn't new. You can go back thousands of years and find master/apprentice relationships in tight-knit guilds where arcane knowledge was passed carefully from one generation to the next. If you think of each guild as a kind of "corporation," it is clear that the way in which knowledge was "managed" in these "corporations" was through a system of continuous tacit knowledge exchange.

Sure, there were also endless hours of study where apprentices would peer closely at hand-lettered texts, many carefully guarded so that guild secrets would never be revealed outside the elite membership. But the primary model was not oriented around study. Study only provided the basic "how-to" knowledge these young guild members needed. Without the tacit knowledge

exchanged through apprenticeship, apprentices would never learn enough to become masters themselves.

True knowledge management, then, was a blend of learning that combined both the carefully wrought explicit texts and the learned tacit experience of the most senior guild members.

If the barely literate people of centuries past could figure out that effective knowledge management consisted of both tacit and explicit knowledge transfer, why have today's companies forgotten this lesson? Why do so many KM projects today focus on the capture and dissemination of purely explicit knowledge?

Simple. We can see it. It's easier. And that's a dangerous, one-sided view.

The One-Sided Knowledge Project



Effective KM can occur only when a systemic approach to all knowledge sources is taken, sources that are both tacit and explicit.

There's been a lot written about why so many KM projects fail, and there is certainly no single reason. We know, for example, that in many cases KM is a solution in search of a problem and that companies have often failed to look at the business purpose for implementing a KM strategy. We know, too, that end user acceptance has been a factor, as companies too often ignore the cultural implications that accompany the creation of a knowledge-sharing culture. We have also seen more subtle problems including fading corporate interest, organizational structures that hamper support, and more.

One of the overlooked areas is the emphasis of many KM projects on the organization's explicit knowledge while ignoring the vast value of the tacit knowledge that also exists. The approach is akin to paying attention only to the part of the iceberg you can see.

Effective KM can only occur when a systemic ap-

proach to all knowledge sources is adopted...an approach that includes both tacit and explicit knowledge. As Nonaka and Takeuchi point out in *The Knowledge Creating Company*, “the tacit–explicit dichotomy is false.” Any system that aspires to truly manage the intellectual capital within an organization needs to approach both as two sides of the same coin. It’s all knowledge after all. Why would anyone want to manage only half of it? As Alee has summarized, Nonaka and Takeuchi “see tacit and explicit knowledge working in both directions, in continual flux and movement” leading to “knowledge conversion.”

There’s an argument that managing tacit knowledge may be the more vital activity. Stephen Denning writes that, “explicit knowledge is the only knowledge that is visible and so it is tempting to focus on it. And yet we know that most of our real knowledge is tacit.” Denning would argue that the communication between individuals is a fundamental KM principle, and that “in the end [it] provides a vehicle for conveying unseen tacit knowledge.”

Reaching for Knowledge



When we ask for help, we’re asking people to share what’s in their head, their “know-how,” and perhaps to assist us in understanding meaning and application. That’s very different from looking something up in a book or on a web page.

Think about the last time you needed help doing something, or needed an answer to a question. What did you do? If you’re like most people, you probably did one of two things: checked a reference of some kind (like a web site or instruction manual, for example), or asked someone whom you believed had the knowledge you needed. Let’s look at those two processes a bit more closely.

When you check a reference of some kind, you are touching explicit knowledge—knowledge that someone has physically instantiated. We do it all the time when we check the television listings in the newspaper, when we watch the sports scores scroll across the bottom of an ESPN broadcast, when we try to put together the furniture we just bought from Ikea. The knowledge we access may

be simple or complex, easy or difficult to understand, but it's still explicit. It's written down. (Whether it's written down well or not is a different issue: I think we've all had the stereotypical experience of trying to follow instructions that were translated from another language, or worse, were purely pictorial.)

When we ask someone for help, we are doing something very different. We are asking someone to share what's in his or her head, and perhaps to assist us in understanding meaning and application. We engage in an interchange—an interchange that is more likely to teach us something more than merely referring us to something written.

The simple truth is we reach for help both ways: diving through manuals and web sites, newspapers and books, and diving through the experience and knowledge of those around us. (Unfortunately, what often happens is that those who are asked to provide answers aren't necessarily the right people. They are just those that are convenient.)

With respect to KM, what should be obvious is the need to manage both types of knowledge sources: tacit and explicit. We reach for both all the time. Yet too often companies ignore tacit knowledge management in favor of explicit knowledge management.

As I mentioned earlier, explicit knowledge is easier to see. It's almost always physical and is sometimes already stored electronically. So it's easy to understand why corporations are willing to spend money on managing explicit knowledge resources. Explicit resources have a physical presence and seem more controllable. They seem somehow more "real." Conversely, tacit knowledge isn't visible. It's hard to get a handle on.

Another significant difference is that with tacit knowledge, it's hard to know when people are going to reach for it. Again, it's much simpler with explicit knowledge. Basic

processes can be mapped, people can be observed doing their jobs, and the when-and-where of explicit knowledge access can itself be made explicit, resulting in a set of business rules that control the content, rights and availability associated with the explicit knowledge sets.

With tacit knowledge, the mapping isn't so clean. Often people don't even realize they're "accessing" anything when they ask someone for help. And since tacit-knowledge needs are more amorphous than the kinds of explicit knowledge so often captured in current KM systems. It's also harder to determine where in a work process that knowledge will be needed. So people just get up and walk down the hall when they have a moment. They schedule "face time" with people they think might help. They pick up the phone or drop an e-mail on someone. Others will desperately search for anyone who can help them with a customer's issue NOW! Whatever mechanism is used, and whatever urgency is shown, the reach for tacit knowledge is done with the hope of getting some guidance and advice from someone who has "been there" and "done that."

Wikström and Normann, in *Knowledge and Value*, refer to such knowledge as "know-how" and argue that it is, "learnt by watching other people do." The result is often newly acquired skills, and when combined with thought and review can yield "understanding" which "arises when we recognize principles and connections." A good deal of understanding, they say, "can never be codified." It requires an "open problem-solving style" where experts share their knowledge with others.

With all the value inherent in tacit knowledge, it makes sense to plan a systematic and simultaneous approach to managing both. Knowledge workers *need* both.

Combining Tacit and Explicit Strategies: The Whole KM View

If a company really wants to maximize its intellectual capital, it takes a strategy that combines both tacit and explicit Knowledge Management.

I can't think of a single work activity that isn't going to need ongoing access to both explicit and tacit knowledge resources. Think about sales, customer service, and marketing. Think about pharmaceutical regulations, insurance, and taxation. Think about manufacturing, distribution, travel and tourism. Slice it anyway you want, the result is the same: there are going to be policies and procedures—ways of doing things—that are easily and efficiently made explicit and that are ripe for KM principles and practice.

Now look at that list again and you'll see something rather obvious. Every one of those functions and industries relies heavily on the creative "know how" of the individuals performing those tasks. There are always "masters" and "apprentices" who share knowledge. They share it in meetings and they share it around the coffee machine. They create new knowledge through socialization and externalization, and synthesize new ideas and new ways of doing things.

The explicit knowledge can easily be made available through the myriad "knowledge delivery systems" that are currently in the marketplace. They can integrate with other systems, attach themselves to data warehouses for analytical purposes, and contribute to the efficient ongoing operations of organizations across changes in staff, management and even strategy.

It's the "know-how" that rarely gets approximated in any explicit way. "Human beings may be expensive and cantankerous," Tom Davenport writes in *Some Principles of Knowledge Management*, "but they are quite accomplished at certain knowledge skills," such as when there is a need to "combine [knowledge] with other types of information,

or to synthesize various unstructured forms.” He continues, “Computers [are best] for the capture, transformation and distribution of highly structured knowledge.” Tacit knowledge needs something more.

Quite simply, if you’re going to manage your organization’s knowledge, you need to simultaneously look at both the explicit and the tacit domains. It’s the two together that represent your organization’s intellectual capital.

The Risk of the One-Sided Approach

A one-side approach that only focuses on capturing explicit knowledge can lead to employee dissatisfaction, and ultimate failure of the KM project.

Let me say it again. I can’t think of a single work activity that isn’t going to need ongoing access to both explicit and tacit knowledge resources. Yet time and again I see corporations making decisions based on a false dichotomy—tacit vs. explicit knowledge—and then going ahead with plans to implement a KM program that manages only one or the other. Taking such an approach means ignoring the systemic and changing nature of knowledge.

Explicit knowledge is fundamental to all work. There’s absolutely no question about that. But explicit tends towards the simplistic or rote, and doesn’t often require the kind of thinking and learning that increases the value of knowledge resources—including the people in the organization.

Tacit knowledge, on the other hand, is the “know how” that Wikström and Normann talk about. It’s the type of knowledge that truly adds increasing value to an organization, to the individuals who make up that organization, and to the work activities those individuals perform.

What happens if you look at only one side of the coin? While there have been no specific studies on “explicit-only” or “tacit-only” KM projects, it’s not hard to imagine

some nearly-certain pitfalls.

First, it's likely that user-acceptance of an "explicit-only" approach would be weak. Much of the "easy" knowledge that can be captured and made explicit is knowledge that many people already have in their heads, the habits developed through performing the same basic procedural functions for a long time. There would certainly be an advantage for new employees but that's only a small part of the role KM should play in an organization. Most employees—particularly the experienced ones who have all that "know-how"—aren't likely to be motivated to use such a system.

Second, there would likely be employee morale issues. Individuals who have "know-how" would feel pressure to somehow "capture" what they know into a document form but would run up against the constant fact that there are some things they "know but cannot describe." Even if they do manage to approximate some of what they know in a way that can be captured, they can't be expected to actively support such a restrictive KM approach without ongoing acknowledgement and respect for their tacit skills.

Where does that leave a company that has just spent a six- or seven-figure budget on an incomplete KM approach? Not much further ahead than before they even started. Yet companies are still spending their KM dollars on the explicit approach first when tacit knowledge management is such a critical piece of the puzzle.

Managing Tacit Knowledge Through “Enterprise Expertise Management”

Enterprise Expertise Management (EEM) takes the approach that you can link the right people together at the right time in order to accomplish specific work. “Know-how” gets transferred because the approach maps the right people, processes, knowledge and technology.

One of the points raised earlier is worth repeating: explicit knowledge is often the first to be “managed” because it’s easier to do. The knowledge itself exists physically and is (somewhat) easy to locate. Technologies for delivering explicit knowledge in a myriad of ways are available from a variety of vendors using a variety of techniques. Until recently, however, there were few effective approaches to managing tacit knowledge. Pioneers in the field had done it—at places like Buckman Labs, Hewlett-Packard, SAIC and Johnson & Johnson, to name a few—but there wasn’t a clear technology and industry niche until Knowledge Exchanges came along.

The early knowledge exchanges weren’t very good. They modeled themselves on internet auction companies hoping that people would pay for answers to questions. They didn’t. People stayed away in droves, and the result was a complete rethinking of the knowledge exchange approach. What emerged was recognition that the real value in knowledge exchange technology was *within* corporations, creating a virtual social network where the driving forces behind “who got asked what” wasn’t convenience, but *expertise*. The result is Enterprise Expertise Management which is a knowledge exchange technology focused on balancing the KM equation, thereby allowing companies to intelligently pursue both explicit and tacit KM programs simultaneously (and to escalating effect).

Enterprise Expertise Management (EEM) is based on a simple premise: when people have questions that require “know-how,” the system should match a questioner with someone who can answer the question AND share that know-how, and do it in a way that maps to work activities and takes into account business rules, procedures and ad hoc events (like someone being on vacation, for example).

At the same time, the communication should be stored so that any advice that is of the explicit type can be captured, and so that any tacit knowledge that is shared is rated for value.

Matching available experts and resources to needs, and tracking the resulting workflow and information exchange are fundamental business processes in all enterprises. EEM technology matches inquiries to the right expert, facilitates the right interaction process through its action-oriented workflow, captures the questions, answers and behavior, and provides measurement tools for enhancing the question & answer process. It's a technically sophisticated approach to knowledge-enabling the tacit elements of an organization.

Conclusion

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In the working world, true intellectual capital comes from a balanced combination of tacit and explicit knowledge. David Skyrme writes that one of the keys to a successful knowledge strategy is, "a well-developed knowledge infrastructure" that includes "people and information" that is "readily accessible through your computer and communications network."

It's not just information. Its' *People* and information. Until now, too much emphasis has been placed on the latter. The emergence of Enterprise Expertise Management provides the balanced approach required for real Knowledge Management success.

Further Reading

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