Practical Aspects of Knowledge Management

Knowing what knowledge is
Lately I've been monitoring some heated discussions in an online community dedicated to Knowledge Management (KM), and while it's fascinating, I'm a bit out of step with the group's comments and concerns. Much of the energy and debate seems focused on defining Knowledge Management, on what "knowing" and "knowledge" are, and how to build a case with senior management for launching a KM initiative in a large company. Interesting topics, but most of the concerns seem awfully academic. Some participants are so consumed with the issue itself that they're missing the fact that many companies already accept that effective KM is crucial to their success - they just want to figure out what to do and how to do it, and fast. Here I offer not a general answer or one suitable for any particular organization, but rather a short case study describing a set of principles and observations drawn from our experiences at Viant, where we are aggressively experimenting with and adapting our Knowledge Management processes as we build our company.

Conditions required for the success of KM
Before getting into some of the practical aspects of KM, I propose the following initial and ideal organizational conditions, which can help KM take root and flourish. For medium to large companies that have been in existence for years, changing the mindset and habits of hundreds or thousands of employees to create this environment may well be the toughest hurdle. Any company that can start fresh, writing new rules and building a culture that supports KM, has a distinct advantage in this area. Either way, for a KM initiative to be successful, employees must have the motivation to participate, access to adequate training when necessary, feel a sense of security in sharing their knowledge, and get some form of reward for doing so. When the goals of individuals are aligned with those of the company, people adopt behaviors that are consistent with those required for the success of KM.

Conditions at Viant that make KM necessary
Founded in 1996, Viant is a professional services firm that helps companies build digital business strategies, brands, operations, and implementations in the I*Net space. Our founders had some lofty goals about openness, sharing, and lack of rigid hierarchy - a tall order, but not too hard to achieve in a company with 50 people in two offices. Now, with more than 400 employees in eight offices from Los Angeles to London, Viant is moving away a bit from the "start-up mentality," but is still focused on preserving an environment that remains conducive to KM. Truth is, it's more important now than ever before, and it will become increasingly valuable as we grow.

To deliver value to clients, Viant brings together a range of skills and backgrounds to address the needs of companies ranging from Fortune 1000 to still-need-a-business-plan startups. Employees who may have never met are working on similar projects or encountering similar problems. They need facilities for recording and locating explicit knowledge assets, allowing reuse of materials that may contribute to the completion of their projects. They also need the ability to locate and interact with experts and interested parties, sharing tacit knowledge in collaborative communities. Clearly, there's a lot of KM ground to cover.

Conditions at Viant that make KM a reality
To make KM work at Viant, we start with the directive stated above: aligning the goals of individuals with those of the company. Our corporate goals include rapid but stable growth, while continuing to perform innovative and challenging work that meets or exceeds all client expectations. These goals cover both motivation and reward. They resound with employees, who want to do the most interesting work possible, as well as build a successful firm that can, and will, contribute to their own financial goals. All Viant employees receive stock options upon joining, making each of us a shareholder.

Security comes from the understanding that knowledge sharing presents no risk to our job or our chances to pursue the path we find most satisfying. Again, the founding principles of openness and sharing, and the absence of a rigid hierarchy - actively preserved as we have grown - make this kind of security possible. And in fact, security is tied to reward - sharing knowledge and experience is actively encouraged, and Viant rewards performance and growth in the form of public recognition and direct compensation. Performance is defined as an individual's direct contribution to the success of client projects; growth encompasses demonstrable personal skill growth, role growth, and the individual's contribution to the growth of the firm.

Finally, all employees start their Viant careers with a mandatory training program we call QuickStart. Held monthly in our Boston headquarters, new hires from all offices spend three weeks together, learning about Viant's culture and norms, the processes that guide our work, and the infrastructure and systems that support us. This training comes together in week three of the program, with small team projects that replicate our project environment. When QuickStarters return to their home offices, a support structure is made available to them in the form of KM specialists,
or Project Catalysts, who provide ongoing help and assistance in the correct application of process and the best use of
the systems and tools at hand. Additional training, delivered in-house, on-line, or in classrooms outside the company,
remains available to all employees throughout our time at Viant. Training, too, is tied to reward: two-thirds of Viant's
recognition and compensation program is based on growth and learning.

All of these cultural norms and programs create an ongoing motivation to participate in KM for the "greater good."
Incidentally, there's also the matter of technology infrastructure. Serving clients' needs in the Internet space has also
helped us think through our own needs to build a robust and pervasive infrastructure that supports all Viant employees
in all offices. As a result, individuals and teams have access to the full knowledge and resources of the firm from any
Viant office worldwide. Connected by high-speed lines, we share a common email system and an Intranet that
provides staff and revenue reporting, project collaboration, document sharing and categorization, plus index and
search capabilities.

Where to begin?
To launch a KM initiative in your organization, start by considering the four primary cultural factors: motivation,
security, reward, and training. What can you do to promote these? Stating the explicit goals for your KM initiative and
some success metrics to measure performance against those goals is important for management buy-in. No matter
what the goals might be, success will require that some individuals put something into the initiative to get it going,
without receiving any direct immediate benefit. This calls for the dedication of "true believers," or maybe someone
willing to make that their job responsibility for a while - it takes time to define and put in place the processes. Once you
figure out a plan to capture and categorize explicit knowledge, or facilitate the creation of communities to share tacit
knowledge, you can pilot a program with a minimal amount of funding and technology infrastructure. You may even
have spare capacity on some systems where you can embark on your efforts without much expense.

To recap: when developing a KM program, consider cultural factors, define goals for success, lead with process, and
let technology follow once you know what you really want.

Define goals and success metrics
Goals can take many forms. For some companies, the primary goal of a KM initiative might be to make more of the
tacit, or "unspoken," knowledge in the organization explicit, and then create mechanisms to share it. Others may
choose to ignore recording and categorizing explicit knowledge, preferring to create opportunities for direct
collaboration where knowledge seekers locate experts to interact directly, even if those interactions go unrecorded and
not made explicit.

The goals of Viant's KM program are simple, and defined with a focus on project teams: to improve the efficiency,
repeatability, and consistency of those executing client work. Even though all clients and their needs are unique, we
encounter many patterns and similar elements in our work. That's why we have placed emphasis on capturing and
conveying explicit knowledge, both in the process of delivering client work, as codified in Viant's Service Model, as well
as in the artifacts required to complete that work, such as financial models, creative style guides, system architectures,
source code, etc.

Measuring success is a step that's easy to skip, which isn't fatal at first, but if you clearly define what you hope to get
out of a KM initiative and create a way to actually measure it from the beginning, you'll be much better off. Remember
that KM costs an organization in people, in time, in the "extra" work it demands at the beginning (at least until critical
mass is achieved), and in the financial investment required for hardware and software. Even in the most enthusiastic
organizations -those that already believe in the value of KM - having some indicators to track and measure success
over time are important to ongoing executive support and good employee participation.

Viant has three ways of measuring the success of our KM efforts: activity, investment, and effectiveness. The following
are some of the areas to which we apply those measures. Core Knowledge represents generally accessible assets
(documents, charts, graphics, papers, etc.) that have been identified as having the potential for broad reuse or
reference. Core Knowledge assets are "scrubbed" of any mention of specific clients, and may not contain real client
data. Community Workspaces represent email list servers, threaded discussion groups, and shared document
repositories that allow communities to form and collaborate around a specific topic. Directory Assets are those that
usually have no intrinsic value, but organize, recommend, and direct people to other assets that may be used directly
in their client work. (Note that Directory Assets themselves may be directly applicable to a team's client work if the
client is pursuing a KM initiative.)

Activity is measured monthly by analyzing information associated with KM system use, including:
- Total number of Core Knowledge and Community Workspaces, and the number of newly created ones.
- Number of accesses to KM Directory Assets.
• Total number of documents classified as Core Knowledge, and the number of newly created ones.
• Number of unique user accesses of Core Knowledge documents.
• Total number of established, active communities (leader/moderator + collaboration space + activity).
• Total number of collaborative Community Workspace sessions/threads conducted.
• Total number of Viant experts accessed from other project teams via KM channels.
• Total number of Project Catalyst interactions with project teams and communities.

Investment is measured monthly in total dollars allocated to salaries, hardware, software, and services, and in total person-weeks spent on KM activities such as training and knowledge capture. Each month, we analyze:
• Total number and total salary of KM personnel.
• Total spent on outside KM services/contractors.
• Total capital investment for KM & Collaboration (hardware and software).
• Total person-weeks allocated to dedicated training (QuickStart, classroom, online).
• Total person-weeks spent by project teams in knowledge capture and making assets reusable.

Although the effectiveness of our KM program cannot be measured directly, it can be measured through a set of proxies. The items we track monthly include:
• Percent of accesses to KM directory assets that lead to use of a project-related asset.
• For completed projects, the percent of project deliverables derived from reused assets.

There are also several "soft" factors that are more difficult to measure or to prove are the direct result of KM activities, but which we strongly believe are affected by it. These include enthusiasm and support by all employees for KM efforts, and the external image this helps Viant build with potential clients and investors. There may also be a correlation between KM activities and project profitability. We will look for these correlations; if we identify any, we may attempt to prove causality at that time.

Put processes in place
Once goals and metrics to gauge them are defined, carefully consider the processes that will work in your organization. You'll want to help create and advance a culture that supports KM (or a sub-culture if you're starting at the departmental level). Not all KM practices require a lot of technology to support them, and many begin with little more than file sharing, list servers, and email capabilities. After all, the goal is get people to record and share knowledge, or to find each other and interact directly.

What you will need, however, are defined processes or channels, with effective owners or champions. There must be at least one person in the organization dedicated to driving your KM initiative, and bearing the responsibility for its success or failure; better still, a few people. Once they're done defining it, they need to spend time "selling" it - informing, inviting, cajoling, reminding, training, and challenging people to participate. If all goes well, enough people in the organization will buy in and become secondary agents. Through their belief in the KM program and the benefits they receive from it, they will naturally and informally assist in propagating it, building support, and helping it to spread more rapidly.

Within Viant, several groups participate in the processes that directly support KM. Each has a primary target audience they are meant to support. The Development & Learning group runs the QuickStart program, and organizes much of the subsequent training and direct mentoring available to all individuals. Regional Discipline Leaders help organize the technology, strategy, and creative communities by chairing periodic conference calls that we call Conduit Calls. These calls include a few key members of the community from each office, who then serve as conduits to report back to the rest of the local community. They also capture news and issues from the community and discuss them on the Conduit Call. The discipline leaders also track the needs of their communities in terms of best practices, emerging trends, and needs for training and resources. Finally, the Catalyst group concentrates on helping project teams execute efficiently by addressing their needs in the areas of tools, assets, processes, and knowledge. Regional Project Catalysts support project teams by coaching them in best practices in our delivery process, helping them locate assets and expertise that is relevant to the work they are doing, and training them in the correct and complete use of the various systems available to them. Based on frequent interactions with many project teams, the Project Catalysts also publish a monthly report, which is distributed over the Intranet, describing best practices, lessons learned, and best-of-breed assets contributed by those teams.

All of the support roles described above are full time, meaning the people who perform them are not staffed to client work at the same time. Some people accept these support roles permanently, while others commit to the role for one
year. In the latter case, these individuals have usually done client work prior to their rotation, and plan to return to it at the end of their tenure.

**Add supporting technology**

Finally, it's time to think about the technology you will need to support the goals you've specified, the stakeholders you've chosen to support, and the way your organization works (or is willing to work). For example, if your goal is to capture and categorize explicit knowledge, you'll need a document store, a database, an index & search engine, and a web server. Workflow support for document authoring and publishing may also be important. You'll require a process to define a categorization hierarchy or nomenclature for documents, identify the best ones to capture, clean them up or convert their formats for publication if necessary, and categorize them. Ongoing processes will also be required to identify new documents that belong in the document store and categorize those. Note that this is somewhat process heavy, and may be seen as intrusive in some organizations.

As a result, some organizations choose paths they see as less intrusive. One example is the class of email monitoring and analysis software. Such software analyzes the content of selected emails (which theoretically, people are already creating), and profiles employees' areas of expertise and interests. Once profiles are built, employees can submit questions targeted at subject matter experts, or explicitly search for expertise. Many "Big Brother" concerns surface in this area. However, depending on the specific product, only emails specified by the creator will be analyzed, and each individual's expertise profile will remain under their own control, hidden until that person chooses to expose it. Supporting technology here includes email servers, web servers, a database, and the expertise profiling software.

Another category of software deals with communities and collaboration. Rather than try to record assets or profile individuals, bring people together to share ideas and experiences. The mechanism by which the communities come together may be ignored by the supporting products, but real-time chat software, asynchronous threaded discussions, video conferencing, live document sharing, and whiteboarding can all contribute to compressing distances, reducing travel costs, and allowing idea sharing to flourish.

To provide end-users with a consistent and coherent experience that unites separate products, systems, and information stores, several vendors offer web portal products. These allow information to be united for display on a single screen in a web browser, as well as for search purposes, combined as a single logical source of data and information. For organizations that have a variety of legacy systems and sources of data - many that may have no web-based interfaces - this is an effective way to unlock, unify, and deliver a large amount of information that could not be accessed previously using pervasive and affordable technology.

Viant has combined many of these elements in our Intranet system, and created some custom applications, as well. For more than two years, we have been using a web-based enterprise document store that allows categorization and search, and supports secured access. Separate workspaces are organized for each project team, community, and area of corporate core knowledge. Corporate news and headlines are placed on the home page of the Intranet, keeping everyone informed about major events of broad interest. Several Resource Centers exist to help employees navigate through process- oriented areas or special topics. Through a separate system, employee information is available, with project staffing history and skill profiles. The professional resumes of all consultants are also available, and may be searched as well to locate subject matter experts. All employees may contact each other through email and live chat sessions, and may discuss topics of interest through threaded discussion groups and list servers.

**Looking ahead**

In the coming year, we will unite some of these capabilities behind a corporate portal, allowing personalization and customization so that each employee can combine the elements most important to them into a single view that best supports the way they prefer to work.