HOW TO LEARN YOUR INDUSTRY - STEP ONE FOR A CKO

Are you a technology expert or a key innovator in your company? Do you aspire to be a Chief Knowledge Officer (CKO) or have you just landed that assignment? Chances are pretty good in any case that neither your technology nor scientific competence includes in depth expertise about key knowledge resources in your organization. Acquiring that expertise will enable you to effectively manage them. While you may be skilled at finding information needed to perform in your own specific area, it is less likely that you are familiar with the resources people in other disciplines need and use for their work.

As CKO, one of your roles will be to insure that knowledge transfer happens and knowledge resources are available for every process in the organization. Learning the types of employee knowledge needed in your industry is vital to planning a knowledge architecture for your audience. [See November 2002 article.] Here I first describe ways to learn about your industry and organization, then some suggestions for tools you can use to learn quickly. A brief table at the end shows a variety of knowledge resources and how they vary from industry to industry.

THERE IS NO SHAME IN NOT KNOWING, ONLY IN NOT LEARNING

At a point early in my experience as a technical librarian, I became frustrated about my lack of understanding of the workings of graphite electrodes in electric arc furnaces for steel making, one area in which I had to do searching and document indexing. My boss was quick to inform me I wasn't hired for my expertise in arc furnaces; it was because they believed I had the ability to learn. A few years of experience taught me that learning is what professionals must face first in any new job.

We rarely come equipped with all the expertise we need to do a job even as we are admonished that we will need to hit the ground running or to be a quick study. Many of us assume that means producing results immediately but we also get advice to slow down and take a deep breath. I believe that the latter is the only way to let learning happen so the product of our work is really fruitful. We all know that learning is a lifelong activity for personal and work success. After taking a deep breath, what you first must do is find your most efficient and effective learning path.

ASKING QUESTIONS IS A GREAT WAY TO LEARN, BUT MAKE IT WORK FOR YOU

I heard an interesting talk recently that got me thinking. It was by a professional sales coach who made the point that the more questions you ask, the more you can lead a prospect to your point of view through the questions you ask. Although I am not a sales person, I do know how important it is to ask lots of questions. When I am in a situation as a consultant where part of my job is to gather information, I do fine because I have the questions written down that I want to ask and it is understood that this is my role. In other situations, particularly if there is some give-and-take, I usually get off track once the other person starts asking me questions. I think many of us have that problem; it is hard to stay focused on what we want to learn.

This is also a problem if you aren't good at formulating questions like one employee in our company; he came with a marketing agenda but he never asked one question, in the first day, second day or third day. I listened to lots of his ideas, fully aware that he knew nothing about our industry, not to mention about the company. Things came to a head on day three when, in spite of

having a full client list on his desk, he jumped on the phone and started to pitch one of our clients the product they already had. He later defended this as "trying to establish a need for our product in that industry," an industry we had operated in for over 15 years. As a result of that embarrassment, I gave him an assignment to come in the next day with ten questions he needed answered about the industry, the company, or the products we offered. He couldn't come up with a single question. Needless to say, his job with us ended swiftly.

The message in this story is clear, if you can't think of what to ask, you better have another way to learn, because you need to.

APPROACHES TO TEACHING AND LEARNING THAT WORK

As a small business founder and owner, I was challenged to effectively motivate and train employees. I alternatively tried to do this by setting an example and personally giving instruction. Neither method was an overwhelming success with all employees; there were some who easily followed my lead and some who liked having me coach them. Employees with previous expertise in the industry did well by following the lead, while those new to the industry did need someone to give context to their expected role in the company. You may fit into either category but entering at a high level will require that you seek the example or coach.

Another technique for getting good industry and organizational information out to employees was developed after several years of building staff experience. It was an adaptation of a program from a large corporation where I had worked. We were small, however, and couldn't indulge in long meetings with the entire staff. Instead, we initiated a monthly, 90-minute Tech Seminar in which each employee was expected to participate as a presenter. Every employee selected some aspect of his job to explain to the rest of the company. The agenda was organized so that more experienced employees presented early in the program with emphasis on topics that would benefit everyone. It was a tremendous success and I would repeat it for any team I would lead in the future. But why?

- It gave everyone from the office manager to the senior software engineer speaking and presenting experience.
- It made everyone an expert contributor and fostered pride in what they did.
- It was the ultimate in knowledge-sharing and reinforced my philosophy that knowledge transfer is the essence of corporate quality and helps secure the future by securing knowledge for reuse.
- It gave all employees insight into the business, the industry and how a company in our industry does its work.
- It stimulated thinking and improved internal processes because each would give to and take from every presentation; the Q&A would often result in the presenter coming away with ideas for changes that would advance their process.
- It took the focus off me as the only expert and demonstrated where else in the organization the staff could go for help and information.
- Most important was the respect that each employee gained for the others' contributions.

The net result was a program that got terrific acceptance because it was never perceived as a waste of time. After the first couple of meetings there was an eagerness to present and excel, and we all looked forward to what was coming in the next. Once this program began, we had a real knowledge-centric organization with obvious benefits:

- Improved databases for knowledge sharing about customers & their calls
- Better quality assurance and test tracking
- Heightened awareness of competitors and better intelligence sharing
- Streamlined operations and procedures in finance & administration
- More ideas for design and technical advances to our products

I had always felt that my former career as a technical librarian was ideal because I was in a position to be exposed to what everyone in the R&D operation was working on. In some ways, the monthly seminars gave my entire staff the same kind of view into what we did and how we did it. It is a long-term process and won't ramp you quickly in a new job, but you can develop your own program for identifying people who will give you the information you need to understand how they work and what knowledge they need to do their jobs.

TOOLS TO USE FOR BECOMING A QUICK STUDY ON YOUR INDUSTRY

Learning in a short time what you need to know to become an effective CKO with demonstrable results is dependent on how quickly you can grasp the essence of your industry and how organizations in your industry work. To start, try some of these resources:

The Organization Chart - Study the organization chart and know what all the groups on it do for the business. This means that you will need to visit with managers or key people (people with long experience, preferably) in each group. You'll need that list of questions already prepared in advance because you are, basically, taking a survey. When you have finished, you should have a clear idea of how different parts of the business work together.

As you move through the organization, you will undoubtedly ask better questions as the big picture becomes clearer. Make observations about relationships among groups. For example, in a pharmaceutical company, you would learn that good scientists read everything they can find that is published in their area of focus. Articles and documents that are read and referenced in their work must be supplied as supporting documentation to the FDA with drug filings, or must be cited if there is a relationship to claims in a patent application. Mature and successful companies in this industry have sophisticated processes to insure that cited publications or material used in the discovery process are organized for recall and reuse. Regulatory and patent groups will both need this material later as invention becomes product. Reconstructing this research knowledge base would be time consuming and costly, and needs to be avoided. A CKO in the industry must understand this and plan the knowledge architecture for rapid retrieval of key materials.

Industry Associations and The Web - A terrific source of information about any new discipline is professional or trade associations in the industry. The most comprehensive source for finding associations by topic is Gale's Encyclopedia of Associations. Searchable through Dialog on a fee basis, your library might have access or a print copy. Once you have the names of associations in your organization's field(s), you have a key to people in the industry, trade publications, meetings, and specialized databases of articles, books and other worthy content. Some associations maintain links to sponsoring members or vendors in the industry on their Web pages. You, or someone in your group, should join to gain access to the best information, an excellent value for the modest expense of most memberships.

Industry Publications - You must read about your industry. If you have been involved in IT you will surely have kept up with technology news and advances through one of numerous IT publications

like Information Week, or eWeek or their on-line daily eZines. I strongly suggest you add CIO Magazine (http://www.cio.com) to your reading for generalist information about the knowledge management field and perhaps the Project Management Journal from the Project Management Institute. It contains excellent best practice articles on managing large projects in every field from transportation infrastructure to building shopping malls to automating an entire university. As a CKO involved in large projects, you are likely to find in these publications articles on similar projects in your industry.

Finally, identify a couple of publications that are specifically about commerce, research, and company news in your specific industry. You want know what your competitors are doing financially, in knowledge management, and in running their Web sites. Familiarity with how they do their business gives you insight into what they get right and where they go wrong. You can learn a lot about their organization structure, the types of technical information they share with their customers, and where they place the emphasis in their marketing statements. By reading a news publication such as Aviation Week or Plastics News, if you are in those industries, it will be easier to converse with all types of employees in the company. Learning about your industry will help you build interest in the business your organization pursues. If you can learn how your competitors manage knowledge, you may get some good ideas.

Industry specific awareness is important. If you work for a defense contractor, there might be government resources available on a need to know basis. Internal subscribers to defense databases or document distribution lists are a good source of information about them and how to make them available to others with clearance for access.

In a consulting firm, proposals and client reports can be used to build a foundation of company expertise. The people who consult are also knowledge assets that should be identified for others to benefit from their expertise. Building a cohesive knowledge base in this highly competitive environment is a challenge but you must make a case for why the work of all benefits the organization as a whole, if this is where you work.

Industry Meetings - Already mentioned are trade associations that will lead you to meetings in your industry. These are great places to get up to speed quickly, particularly the large annual conferences. Through papers that are presented, people you will meet and the exhibits, you will learn the types of knowledge that are shared, used and sold in your business environment. Publishers of books, journals and electronic resources exhibit; technology producers show off their specialized tools for managing and storing unique proprietary data types, from text to engineering drawings to chemical models. Industry exhibits are more productive than a COMDEX or massive publishers' exhibit because they are targeted at a unique audience.

Knowledge Management Societies - Finally, you need to insure that you can benefit where others have already demonstrated a best practice for managing and sharing knowledge. KM is a new field but not a new concept. Pieces of it have been present in organizations like the American Chemical Society, ACM, IEEE, in professions like information science, indexing, taxonomy/thesaurus development, special librarianship, and in management disciplines through MBA programs or peer management groups such as the AMA and Conference Board. But there is no one degree, or cohesive body of practices and methodologies that have combined all KM elements: management, information technology (hardware, software, networks), and information science (categorizing, storing and searching structured and unstructured data).

A number of professional groups, local and national have sprung up to address parts of these disciplines, to try to develop standards, and training programs. They are evolving and converging but still discovering the pieces that constitute KM. Use the Web (http://www.brint.com) to discover groups in your area that have participants who are practitioners in a variety of industries including yours.

SUMMARY

Learn your industry by reading, participating, joining, and asking questions. Get others in the organization to share their knowledge with you, and then work to devise processes that do the same for sharing it throughout the organization, and preserving it for business continuity. Vest in the industry while you vest in your job and in your company by building expertise in how the knowledge processes need to work to benefit the enterprise.

NOTE: You will find that the knowledge in your industry is defined by the industry. Following the additional readings is a non-exhaustive list of knowledge resource types that are prevalent and useful in selected industries. There will be exceptions. For example, a large chemical firm with its own law department will have law reporters or an engineering firm might be doing bench science and have laboratory notebooks. This table should give you an idea of how varied the scope of your knowledge enterprise might become.

- Lynda W. Moulton

RELATED READINGS OF INTEREST

Berkman, Eric. Skills. Successful CIOs Stress Business Acumen, Not Technical Expertise. CIO 03/01/2002, 4p.

Davenport, Tom. Knowledge Roles: The CKO and Beyond. CIO 04/01/1996, 9p.

Duffy, Daintry. Knowledge Champions; What Does it Take to be a Successful CKO? CIO Section II, 11/15/1998, 68-71.

Russom, Philip. An Eye for the Needle. Intelligent Enterprise 01/14/2002, 6p.

Sample Knowledge Resources for How to Learn Your Industry – Step One for a CKO

Sample Industry >	Engineer./ Manufact.	HMO	Law Firm	Bio/Pharma/ Chemical	Energy	Software	Publish.
Resource Type V							
Lab Notebook				X	X		
Engineering Drawings	X			X	X		
Photos/Slides	X			X			X
Tech. Documentation	X			X	X	X	
Proposals	X				X		X
Client Reports			X				
Plan. Docs.	X	X		X	X	X	X
Finan. Docs.	X	X	X	X	X	X	X
Procedures	X	X	X	X	X	X	X
Human Experts	X	X	X	X	X	X	X
Corp. Annual Reports	X		X	X	X	X	
SEC Filings	X		X	X	X	X	
Regulations	X	X	X	X	X	X	X
Law Reporters			X				
Hearings & Testimony		X	X	X	X		
Standards	X			X	X	X	
Gov. Docs.	X	X	X	X	X	X	
Patents	X		X	X	X	X	
Trade Magazines	X	X	X	X	X	X	X
Peer Reviewed Journals	X	X	X	X	X		
Books/Conf. proceedings	X	X	X	X	X	X	X

Figure: Starting Point for Identifying Content Repository Types in an Enterprise