A Method for Acquiring and Representing Personal Knowledge in the Organization

Frederick G. Kohun, Robert Morris University, kohun@rmu.edu
Robert J Skovira, Robert Morris University, skovira@rmu.edu

ABSTRACT

Organizations are embodiments of knowledge. Organizational procedures and processes are ways of knowing what to do, how to do things, when to do them, and why to do them. Such procedures and processes are also representations of what is known in the organization: the semantic space or the organization's ontology. This type of knowledge is explicit and can be found in organizational policies, ethical codes, customer contracts, service contract, databases and software. Personal knowledge is the individual's understanding and use of this explicit organization knowledge. Individuals within organizations use explicit knowledge to do the jobs assigned to them. Personal knowledge within the organization environment is also tacit. People know things within the organizational setting that is not codified: this is tacit knowledge. Individuals have a semantic or knowledge space that shows up in communication and actions. The paper presents a methodology for uncovering the personal side of knowledge management.

Keywords: Knowledge management, organizational knowing, personal knowing, tacit knowledge, explicit knowledge

INTRODUCTION

What do you need to know to do your job? What knowledge is of use to you? Where can you find this knowledge? Whom do you ask? Is there an expert to go to in order to find out the information you require? Are there repositories you can access? How does an expert become an expert? How do knowledge repositories develop? Where do you look? How does a firm grow in knowledge? How does knowledge show up in the socio-cultural environment of the corporation? These are some of the questions that people ask of themselves and others. These questions lead into the world of knowledge management and to a practical method of obtaining personal knowledge. Issues for a practical method: social nature of knowing and the personal nature of knowing. The difference between social, organizational knowledge and personal knowledge.

Corporate culture is the knowledge institutionalized within a context of a firm's everyday activities of doing business—the practice of business. This is business experience (and personal experience) made explicit in the formal structures or relationships. This knowledge is represented in all of the explicit forms of policies, mission and vision statements, procedures and processes. Knowledge within a firm shows up in the way things are done, in business as usual. Business practices are a firm's knowledge. Business practices are the frames of reference and metaphors at work in a firm. Business practices are the results of communities of practice (for example, product development teams, standing committees, etc.) Knowledge is embodied in these structures.

In today's business world, knowledge management is a new focus of business pundits. Knowledge is a firm's competitive advantage. Knowing about your customers (Customer

Relations Management (CRM)), your vendors, and markets for your products is just as important as knowing how to manufacture the products, or provide quality service. The knowledge that employees have is also very important to corporations. The knowledge of how things are done in a firm or a company's department resides in the personal experiences of individuals. Knowledge management has opened up new vistas for the firm, and its managers. Those vistas look out over the hills and valleys of a firm's corporate culture.

The results, the products (some would say debris), of organizational living in business firms, are products of knowledge. A major difficulty is getting the information that people know about things out into the general stream of things; making personal knowledge (knowledge in the head) common knowledge (knowledge in the organizational world). Knowledge management is concerned about how individuals share what they know with fellow workers.

Corporate culture is knowledge in the world (the corporate environment). Corporate culture or corporate knowledge exists also in the heads of people within a firm. This knowledge in the head is personal knowledge. It is tacit knowledge. This knowledge in the head is the mental models at work within corporate settings. These mental models are interpretations, theories, knowledge of individuals applying corporate knowledge that they have been socialized into, to their jobs.

Mental models show up in language use. The jargon of a person's professional specialty is not jargon to the person speaking the professional language. It is how the individual sees things and speaks them (although one might say of or about). It could be also that jargon does the thinking or, at least, provides the categories of thought, emotion, and experiencing in general. In any case, it is a fundamental assumption of this essay that language is the way by which people represent what it is they know. Thus, this essay is about a practical method for gathering, understanding, and using, the shards of knowledge in one's personal experiencing of organizational worlds. A brief disclaimer is that this is not an essay about how individuals know things to be true. It is an essay about a possible way of capturing and making articulate the personal knowledge that interests the business field of knowledge management.

KNOWLEDGE MANAGEMENT

Knowledge management is about the presence and use of knowledge in the operations of a firm or corporation for increasing productive activities and ultimately profits. A large amount of the knowledge needed to manage a business resides in the organization's formalized procedures and documents. The structures of an organization (a business firm) constitutes a taxonomy of knowledge of how to do business.

Knowledge management is about the knowledge needed to manage a business and to maintain competitive advantage in the market. Knowledge management is also about the creation of explicit knowledge bases and the identification of existing repositories of formalized business knowledge at work in a firm.

Knowledge management recognizes that employees (or as knowledge management calls them: knowledge workers) share a common body of knowledge and a common framework for using the knowledge in their jobs. They share a common ontology. That is, knowledge workers

participate in, work within, common semantic or knowledge spaces and the language reflects this. Organizational culture (knowledge) provides all the knowledge people need to know in order to do their everyday jobs. Knowledge or semantic fields are localized in communities of practice based on social networks. These social networks and the accompanying communities of practice cross the normal structural components of a firm.

Knowledge management is concerned with the creation and dissemination of knowledge. Knowledge management is the sharing of knowledge throughout the firm and even outside of the firm. Knowledge is shared within the communities of practice across the social networks; the commonsense of communities of practice. The distribution of knowledge is a barrier many knowledge management theorists want to get over.

Knowledge management advocates suggest that a firm's knowledge is represented in the corporation's best practices. Best practices are a taxonomy of knowledge embodied in the procedures and processes that have resulted in an increase in productivity and profitability. These are knowledge of how to do things ; they show up in an architecture of performative knowledge. This also allows for knowledge sharing across what knowledge management theorists call communities of practice.

While there is a lot of business knowledge explicitly presented by the firm's policies, procedures, and other processes, a concern is the knowledge in the heads of the employees of a firm. As knowledge management theorists write, this knowledge in the head needs to be harvested (an interesting metaphor) and added to the explicit knowledge bases or repositories already available. This is the area of interest that this essay addresses.

ORGANIZATIONAL KNOWING

Knowledge is located in a firm's culture. A company's culture presents institutionalized forms of what to do, how to do them, and why the activities need to be done. This knowledge is represented in a firm's policies, procedures of purchasing materials, techniques of selling products, ways of understanding and dealing with customer needs and requirements. This knowledge, the corporate culture, is the commonsense of a firm. This common knowledge structures and constructs business behavior.

Corporate knowledge is embodied in the means and ways of various departments (communities of practice) do their jobs or fulfill their roles within the organizational structure. Communities of practice are also more than departments. Communities of practice are the actual social networks, built up around shared purpose and endeavors, which exist within corporate environments. Organizational practices, or best practices, originate in communities of practice.

Organizations are embodiments of knowledge. Organizational procedures and processes are ways of knowing what to do, how to do things, when to do them, and why to do them. Such procedures and processes are also representations of what is known in the organization: the semantic space or the organization's ontology. Procedures are embodiments of the knowledge applicable to the situation in which they are used; they assume a certain situation; they also assume certain consequences or results, both good and bad, right or wrong, appropriate and

inappropriate. Procedures are plans aimed at desirable consequences. Procedures are names of actions to be performed at certain times, in certain ways, for certain reasons. This type of knowledge is explicit and can be found in organizational policies, ethical codes, customer contracts, service contract, databases and software. Every organization has its own ontology.

Knowledge in the world of the firm shows up in situations. Knowledge is embodied in things: objects, processes, states of affairs, events, activities and actions taken, reports written, databases designed and used, decision support systems developed. Organizationally, this knowledge is learned in training sessions. These training session are distilled versions of the needed knowledge. Training is one of the basic methods of passing on and sharing know-how in a firm.

Organizational practices are the embodiment of and articulation of knowledge. One might say that practices are habits, routines, and rituals of doing things: managing, decision making, problem solving, strategic planning, doing tasks, doing tactical operations, following procedures, doing one's job.

Organizational knowledge or culture is the text to be read and understood; this includes language and practices. Organizational knowledge provides the explicit and articulate frames of reference that are interpretative models of a corporation's world. In corporate settings, business application software which model procedures of functional business areas represent organizational knowledge. The personal knowledge of employees develop within the context of organizational knowledge or culture. Personal knowledge is a result of the process of enculturation into the explicit culture or knowledge structures of a firm. Personal knowledge shows up in framed performative and linguistic behaviors. This essay is about a practical method for uncovering this personal knowing.

PERSONAL KNOWING

Personal knowledge is the individual's understanding and use of explicit organizational knowledge. Personal knowledge is what I need to know to do my job and make a contribution to the team, the department, and ultimately to the firm. Personal knowledge is fundamentally tacit. Individuals within organizations use explicit knowledge to do the jobs assigned to them. Personal knowledge within the organization environment is subconscious or unconscious knowledge. People know things within the organizational setting that is not codified: this is tacit knowledge. Individuals have a semantic or knowledge space that shows up in communication and actions.

Personal knowledge is local and specialized. All knowing on-the-ground is always personal. We know within circumstances and situations. Personal knowing is located in any informational situation. An informational situation has two aspects: it is a social situation and a cultural scene. A social situation is a social network of fellow employees engaged in a common endeavor with a common purpose. A social network develops a common sense of dealing with problems or tasks-at-hand. This common sense is personalized in individuals' language and actions. A social network with its attending cultural space or knowledge space (ontology) is the employees' personal circumstances.

People are always presenting what they know to other people. Knowledge shows up in conversations, essays, reports, documents, art, graphics, and actions. Knowledge is presented in the doing and the showing. Knowing is performative; knowing is presenting. Knowledge in the head motivates performance. Understanding is interpreting; using is understanding; using is interpreting.

What do you know? You know a great deal. But most of what you know is inarticulate; it is knowledge in your head. The architecture of personal knowledge begins in the tacit dimension. To be articulate about anything, you must first recognize that you know things, that you can do things based on what you know, that you sense things based on what you know. You have a personal ontology. You have mental models, theories about things. Articulate knowing is self reflexive. What we know, if we are self-reflexive, is how to hear, to see, to taste, to smell, to touch. We know that we conceptualize. We know that we can do things, and use things. We have frames of reference, mental models, and procedures, or rules to follow.

A taxonomy or architecture is a model of categories. Every category has a name. Every category is a model of relationships of elements within a category. A taxonomy is a set of related conceptual models (as opposed to mental models, i.e., knowledge in the head) or knowledge in the world. A mental model is a naïve or folk explanation of a phenomenon, whereas the conceptual model is a formal explanation, a finished theory about how something is, or works.

Conceptual models formalize mental models. Conceptual models move personal knowledge into the organizational world. Conceptual models or maps (a conceptual model is a map) consist of the names (terms), their attributes and properties, their ways of behaving, their consequences, their assumptions and constraints, or their affordances and constraints, their contexts, their frames of references. Architectures are conceptual maps or maps of constellations of concepts that arise from the semantic, pragmatic, and syntactic levels of language. Constellations are domains of meaning or sensibility.

A taxonomy of personal knowledge is a conceptual map or model of what a person knows about something. Personal knowledge architecture consists of the names, or categories, of semantic spaces, logical spaces, or even linguistic space, maybe even "doing" spaces, event spaces, etc. The development of the knowledge architecture includes the generation of information architectures or the classification schemes and categories people have, build and use to sort things out. Architectures of information and performativity are articulated semantic networks or structures of mental models (the tacit). They are conceptual models(the articulate).

Information architectural elements are types of mental models, cognitive models that name the basis for being able to say or do something. Information architectural elements are linguistic categories. They classify by naming experienced reality, objects of perception and cognition in the world. They show up in language. They are the semantics of behavior.

Performative architectures are the cognitive and emotional models that shape action and could be embodied in lists of procedures, beginning with the recognition of signs of the situation plus possible consequences of any and all procedures. Performative architecture are the classification of functionality or effectiveness. Performative architecture shows up in knowing how to do

something. Performative architectures are the mental models, the cognitive models (a type of knowledge in the head) that categorize the types of ways of doing things. There are performative games, i.e., rules of use. Performative architectural elements are part of personal knowledge architectures. They form constellations of behavior with information architectural elements.

Language is a way into studying the acquisition, understanding, and use of things you know about. Language is the tool of the personal. It is also the embodiment of the collective use of terms with sense within interactions. To articulate what you know, you use language. Language is about concepts, categories of experience, that show up in words, in action (and behavior), in the use of time and space (and you understanding of time and space), in the rituals (e.g. a committee meeting is a ritual) performed. The practical method for articulating personal knowledge is a method that uncovers the architecture of personal knowing by capturing and analyzing language use.

METHOD FOR ARTICULATION OF PERSONAL KNOWLEDGE

The method is reflective and observational participation within an informational situation. The method is helps us see and record how the constellations, the architectures of personal knowing show up in behavior within organizational settings. Knowledge shows up in mental models (the inarticulate and the tacit) and conceptual models (the articulate) that organize and relate details (facts) about the world. The method for personal knowledge rests on personal information or knowledge requirements that are the basis for knowledge management.

The context for the method is the business and its needs, its policies, its rules, and the person in the midst of these. We possess the knowledge needed to do things within the business world, within the firm's world, within your world.

The method is about articulation. Articulation is experiential. To know what you know you must somehow express it. You must get it out of your head (where it exists as mental models and frames of reference) and onto paper or some other medium.. The act of naming an idea constitutes an act of articulation.

Practical methods of acquiring, understanding, and using personal knowledge are based on a combined ethnographic and semantic analysis approach. The method relies upon the capturing of words and their settings, or language games. The method begins by locating the person in his or her everyday business behavior. Everyday business behavior is situational. There are activities that are ritualistic and symbolic. These are almost always named activities. Within meetings, personal knowledge will show up in language use. All business activities have personal sides to them; individuals carry on conversations related to tasks-to-be-done, decisions-to-be-made, and problems-to-be-solved..

The architecture of personal knowledge can be articulated using a classification system of personal knowing. This way of categorizing experience is the meta-architecture of articulated personal knowledge. This meta-structure consists of the categories: knowing that, knowing why, knowing how, knowing about, knowing of, knowing how much, knowing when, knowing who, and knowing where. These categories allow the construction of conceptual models by making

explicit the mental models in the head. Personal knowledge is expressed in conceptual models that demonstrate a personal ontology. The architecture of personal knowledge consists of conceptual models are made up of the names (terms) of items in a model, their attributes and properties, their ways of behaving, their consequences, their assumptions and constraints, or their affordances and constraints, their contexts, their frames of references. This can be expressed in conceptual maps or ontological diagrams.

Select References (Complete List Available)

1. Andreas Abecker et al. "Toward a Technology for Organizational Memories." In The Knowledge Management Yearbook 1999-2000, eds. James W. Cortada and John A. Woods. Butterworth-Heinemann, Boston, 1999: 185-199.
2. Katherine C. Adams. "Information Architecture Translates KM Theory into practice." KMWorld 10, 6, June 2001: 8-10.
3. Chris Argyris. "Teaching Smart people How to Learn." In Harvard Business Review on Knowledge Management. Harvard Business School Press, Boston MA, 1998.
4. Chris Bednar. "Capturing and Packaging Knowledge." In The Knowledge Management Yearbook 1999-2000, eds. James W. Cortada and John A. Woods. Butterworth-Heinemann, Boston, 1999: 211-220.
5. John Seely Brown. "Research That Reinvents the Corporation." In Harvard Business Review on Knowledge Management. Harvard Business School Press, Boston MA, 1998.
6. James F. Brule and Alexander Blount. Knowledge Acquisition. McGraw-Hill Publishing, New York, 1989.
7. Thomas H. Davenport and Laurence Prusak. Working Knowledge: How Organizations Manage What They Know. Harvard Business School Press, Boston MA, 2000.
8. Keith Devlin. InfoSense: Turning Information into Knowledge. Freeman, New York, 1999.
9. Keith Devlin. Logic and Information. Cambridge University Press, Cambridge, England, 2000.
10. Nancy M. Dixon. Common Knowledge: How Companies Thrive By Sharing What They Know. Harvard Business School Press, Boston, 2000. [658.45 D621c 2000]
11. Bonnie Durrance. "Some Explicit Thoughts on Tacit Learning." In The Knowledge Management Yearbook 1999-2000, eds. James W. Cortada and John A. Woods. Butterworth-Heinemann, Boston, 1999: 28-36.
12. Umberto Eco. Kant and the Platypus: Essays on Language and Cognition. Translated by Alastair McEwen. Harcourt Brace, New York, 2000.
13. Mary Eisenhart. "Gathering Knowledge While It's Ripe." Knowledge Management, 4, 4, April 2001: 49-52, 54.
14. David A. Garvin. "Building a Learning Organization." In Harvard Business Review on Knowledge Management. Harvard Business School Press, Boston MA, 1998.
15. Philip J. Gill. "Once Upon An Enterprise." Knowledge Management, 4, 5, May 2001: 24-28.
16. Barry Grushkin. "Context Dependency." Intelligent Enterprise, 3, 15, September 2000: 20, 22, 24, 26.
17. Geert Hofstede. Cultures and Organizations; Software of the Mind. McGraw-Hill, New York, 1997.