The Role of Stories in Knowledge Management

By Rudy Ruggles

Neal Stephenson, the best-selling science fiction writer, was visiting Boston last summer and went to see the 200 year-old frigate USS Constitution-"Old Ironsides"-anchored in the harbor. After the tour of the ship, he noticed on display a copy of the working manual for the ship detailing rigging, maintenance, and other standard procedures. Now, Neal is no stranger to large volumes of text (his recent novel, Cryptonomicon, weighs in at over 900 pages), but he remarked about the amount of information that was contained in this manual. Obviously, a large ship like the Constitution is very complicated so it's not surprising that the manual would be so large, but consider the literacy rate of the average sailor back in the 18th century. Certainly these folks were not spending their time pouring over the manuals, yet they were learning the contents somehow. Yes, there's trial and error, but you don't get too many errors in that context. Neal, given his perspective as a writer, was quick to realize that the way that whole tome was turned into practice was through training and through stories. Why err when you can benefit from those that have erred before you? Why learn from one experience when you can learn from 1000? If you listen to the stories you will learn the ways of the ship and the ways of the sea as they have been learned by those who have come before.

These days, the concept of "knowledge management" seems to be discussed everywhere. I have spent the past five years researching various aspects of the topic, looking at how knowledge is generated, acquired, captured, represented, distributed, and utilized in organizations. An extremely interesting and useful pursuit, but extremely difficult because of one confounding factor in particular: knowledge is very complex. I believe, however, that what Neal saw at the Constitution can help us in tackling this difficult dilemma. Stories are a very powerful way to represent complex, multi-dimensional concepts. While a certain amount of knowledge can be reflected as information, stories hold the key to unlocking the vital knowledge which remains beyond the reach of easily codified information.

Knowledge Management

Several years ago, the term "knowledge management" rose in popularity as a descriptor of organized efforts to more actively leverage the knowledge of individuals in order to produce greater value. These efforts have taken many forms, including initiatives to capture lessons learned, catalog and benefit from existing intellectual capital (e.g., patents), create corporate "yellow pages" allowing people to find others by knowledge instead of just names, map informal networks of experts, and so on. While the specific actions taken may be very different, at its root knowledge management is really about increasing the effectiveness of the creation, diffusion, and adoption of ideas.

Most all of the efforts outlined above are useful, to at least some extent, as they help organizations discover heretofore hidden value in ideas and intellect. Unfortunately, many knowledge management initiatives have found only the tip of the iceberg, since the vast majority of what people know lies below the surface of their conscious understanding about what they know—the difference between explicit and tacit knowledge. And this is the difference that makes all the difference.
Tacit and Explicit Knowledge

Knowledge has many definitions, and the attempt to answer the question "What is knowledge?" has guided philosophical inquiry for hundreds, even thousands, of years. In fact, the study of knowledge and knowing has its own term: epistemology. I will therefore not take much time here trying to create a fully satisfactory response. (However, for an interesting, very readable treatment of both Western and Eastern perspectives on knowledge through the ages, see chapter 2 of *The Knowledge-Creating Company*, by Ikujiro Nonaka and Hirotaka Takeuchi.) I will say that knowledge is a "sticky" (i.e., not easily pulled apart) collection of information, data, experiences, and even emotions, which resides most richly within people. In addition, the knowledge we are most interested in is that which allows effective action within a certain domain. Knowledge which never results in action is of little interest in most cases.

It is widely accepted that there are two classes of knowledge: explicit and tacit. Explicit knowledge is that which an individual can express or represent relatively effectively. While knowledge resides most richly within people, some knowledge can be made explicit, becoming represented as process descriptions, lessons, coaching, etc. Knowledge that has been turned into signals such as these is, I would argue, information. However, from the perspective of the person with the knowledge who is representing it, it can be called explicit knowledge. He can explain what he knows.

Tacit knowledge is much trickier. There are plenty of things that we know but which we can not represent effectively, either because we aren't aware that we know something (usually an innate skill, like having naturally perfect pitch - "I don't know why it's a C-sharp, it just is"), or we lack the vocabulary (broadly defined) to represent the knowledge. In some cases this vocabulary can be developed, as when coaches learn how to turn their observations into helpful tips ("Try shifting your weight to your left foot as your body comes forward"). But in other cases, the knowledge is so deep, or it exists as such a tangle of informational, physical, and emotional elements, that outright representation is nearly impossible. Ask someone to express what they know about something in this realm and you may get some vague, disjointed descriptions of many of the elements or, most likely, you will get a sampling of the knowledge which can be made explicit, combined with that person's expression of the emotional, physical, and informational elements they associate with that knowledge. In other words, they will tell you a story.

Stories as Idea Wrappers

Stories are great vehicles for wrapping together the many elements of knowledge. A good story combines the explicit with the tacit, the information with the emotion. Stories are not effective, or even appropriate, for every attempt to express knowledge, but I believe that they are underutilized in knowledge management approaches. Now, I am not proposing "story management," per se, but I do believe that stories enable people to express and comprehend the sticky, context-rich aspects of deep knowledge much more effectively.

There are of course many forms that stories take. When written down, they suffer many of the same problems that all explicit representations of knowledge face: disconnection from the teller, locked linearity, and a certain element of petrification that is required of any snapshot. It is the story as it existed in a point-in-time, with a specific audience. Still, Harvard Business School has a long tradition of teaching complicated topics using stories, in the form of cases. Many of these cases are used year after year, with appropriate modifications in their discussion and interpretation, but with their core lessons remaining constant.

In this new age of multi-media, visuals are becoming a standard part of what used to be purely text-based stories. Video and audio help to bring to life the ideas by adding more non-text clues.
and cues, including body language, graphic illustrations, and sound effects or music. This helps activate many more parts of the brain than text alone, increasing most people's ability to pay attention and to recall what they've heard, plus it draws in people who are not as comfortable in purely text-based communications.

Still, recorded stories are static. While they may affect us on many levels and while their interpretation may lead to rich interactions over time, the stories themselves are represented at a single point in time. When stories become dynamic, as when they are told to us live, they can resonate even more deeply. A new level of connection is possible because the listener becomes connected not only to the content, but also to the teller and to the process of the story unfolding. The specific context is accounted for in the way in which the story is related, which is key in sharing tacit knowledge. Knowledge expressed out of context is usually just informative. When the teller and the listener are both interacting with a given context (environment, recent experience, or situation), the story can take on that extra layer of meaning. The more layers of meaning, the better when dealing with knowledge.

Perhaps the ultimate layering of meaning happens when the person hearing the story is able to interact with it and with the teller. The men on the USS Constitution would not have learned what they learned by sitting in a classroom listening to people tell stories about what it was like to sail the ship. They needed to hear the stories in context, ask questions, add their own stories to the mix, test ideas, and act on what they heard. Even when the stories are recorded, it is still more effective for learning purposes to have interaction built-in. Technology now allows very sophisticated story interactions, to the point where what might start as a story can actually lead into an actual simulation. Pilots who hear from those who have been through it what it was like to experience wind shear effects during take-off can then experience it for themselves in flight simulators, driving the knowledge down into their own personal experience base.

What To Do
In order to leverage the power of stories to increase the effectiveness of the creation, diffusion, and adoption of knowledge in organizations, I believe that there are three major skills which should be developed.

1. Storytelling - I have outlined the forms that stories may take in the section above and described how those forms help increase understanding. However, this presumes that the stories in these forms are well-communicated. Unfortunately, this is a risky presumption since not all of us are natural storytellers. Whether the stories are written, spoken, or drawn, storytelling skills are extremely valuable in communicating their many layers, allowing among other things, a greater range of expression, a broader spoken and non-spoken vocabulary, and a better ability to interact with the listener(s). This has a direct impact on how well the tacit and explicit aspects of the speaker's knowledge are able to shine through.

2. Story Crafting - Most stories told in everyday situations are not carefully crafted. These rely on the speaker's storytelling skills to make them come alive. However, there are many times, especially in knowledge management activities, where it is useful to have the skills to consciously create the stories. Case studies, "lessons learned," and scenarios are all forms of stories which benefit from careful, deliberate crafting. There are many people in the world who make their living writing stories and some excellent resources available on how to put together a good tale (see Robert McKee's excellent book Story, for example ). It is time to get some of those people on the payrolls and some of those resources on the bookcases of companies everywhere.

3. Story Understanding - It is almost enough to be able to construct and communicate stories adroitly. However, for really effective knowledge sharing and building, the ability to hear and understand the stories told in organizations will also prove invaluable. Stories are told constantly. Those who know how to listen to the many layers wrapped within such stories can hear the tacit and the explicit, the emotional and informational
elements. Someone who really understands stories knows when not to read too much into them (sometimes a story is just a story), but he or she can also spot the real knowledge wrapped inside what is said, even when the speaker may not be aware of the richness of his expression. This is useful when trying to understand the knowledge personally, but also when trying to elicit and represent knowledge such that others may benefit from it more easily.

The world of business is becoming more comfortable with the idea that people are not purely logical, rational, mechanistic entities. Data is still important, but does not necessarily trump emotion, and certainly not knowledge. Stories may still seem too "touchy-feely" to some, but for those who are really serious about leveraging knowledge, focusing on logic and data alone will not do the trick. Stories tap into all that is richest about knowledge, so when dealing with knowledge you are well served tapping into the richness of stories. And if nothing else, they are certainly more interesting than reading the manual.

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