IT Neologisms: Necessary but Dangerous

To make sense of rapid change, we are inclined to make incremental alterations to our existing world view — much like adding a patch to a comfortable shirt. A good example is the phrase “horseless carriage,” a neologism that helped people absorb the concept of a self-propelled vehicle. Although they can be expedient in the short term, most neologisms are eventually replaced by other terms that more accurately reflect the new reality. In the meantime, they can confuse both developers and consumers, increase costs, and obscure the true nature of change. In this article, we’ll look at neologisms in knowledge management — why they appear, who creates them, what problems they can cause, and how to manage them.

What are neologisms?

The term neologism is used by linguists to describe a new word, usage, or expression. It is often created by combining existing words (e.g. horseless + carriage) or by using a word in a different context (e.g. using the biological concept of taxonomy in the context of Web publishing). Some neologisms of the 19th century have now become a part of Standard English, while others have faded away. In the same way, some of today’s neologisms will become a part of the dictionaries of the 22nd century, while others will be discarded, replaced by more descriptive language.

Neologisms help us understand and cope with change by creating mental bridges between the old and the new. An example is knowledge management, an attempt to describe how new technologies and traditional management practices can be used to increase the return on intellectual capital. Neologisms also play a key role in branding of both products and services. A classic example is the brand name Kleenex, invented by Kimberly-Clark in 1924. Initially, the name was used for a product to remove cold cream, but eventually it was accepted in common usage to denote a disposable handkerchief.

Knowledge management examples

The temptation to coin neologisms is hard to resist. At the Montague Institute we are also guilty of bending old words into new shapes. In 1998 we invented the phrase knowledge base publishing to describe the blending of concepts, tools, and techniques from four different business functions: general management, computer systems, corporate journalism, and library science. Since then we have attempted to refine and clarify the concept through our articles and courses. At the same time, we have tried to monitor the evolution and impact of such terms as:

- **blog**, a contraction of web + log, is a personal Web site that serves as an electronic diary containing news, links, and personal comments. Blogs have made it possible for unknown individuals to establish a personal “brand” and extend their influence without an editor or publisher as an intermediary. However, because of their chronological method of organization, they are not as effective for business research as other formats (e.g. books or magazine articles).

- **card sorting**, the expansion of a pre-computer term for a technique used to organize information for term papers. Authors shuffled index cards containing ideas and topics into an order consistent with the composition’s outline. Today, a similar technique is used to create a “taxonomy” or table of contents for a collection of content accessible from a Web site. See Card sorting techniques.

- **content objects**, a general term for all types of published electronic works, including documents, Web sites, images, audio and video files. Although limited in its usage, the term is useful when discussing methods of finding, classifying, and linking the many different products of the creative process.
- **curation**, a term recently borrowed from the museum community to describe an editorial and preservation role performed by editors, librarians, and archivists. As the original physical objects — newspapers, books, and historical documents — are replaced by electronic formats, the IT community is beginning to recognize that these roles are still necessary. See A curated list of 10 top articles on curation.

- **information architecture**, a phrase that augments the concept of information with the concept of structural design in the context of conceptualizing and erecting buildings. In knowledge management, it was an early attempt to adapt the concepts of library science to help organize and label web sites, intranets, and online communities. Today, like knowledge management itself, there is a lack of agreement on what it actually means. See What is architecture?, An architecture for information, and Taxonomists vs. information architects.

- **mapping**, an expansion of a mathematical process by which each element of a given set of numbers is associated with an element of another set. In knowledge management, it refers to the process of identifying and analyzing the relationships among intellectual assets in an organization or area of interest. It can also refer to the process by which vocabulary terms in one subject matter domain are correlated with those in another domain (e.g. creating a relationship between the medical term myocardial infarction and the layman’s term heart attack). See Mapping your knowledge space.

- **ontology**, a word borrowed from philosophy to describe complex relationships between things, including rules and axioms. A thesaurus — which authors, librarians, and indexers have been using for years — is a specialized ontology. Computer scientists use ontologies to feed programs the data to perform tasks requiring “artificial intelligence.”

- **semantic web**, a phrase that describes a methodology and encoding structure designed to add computer-readable meaning and context to publishing on the World Wide Web. Currently, the concept is being employed in two ways: 1) to enhance commercial and consumer information services and 2) to allow information from two different sources to be merged and manipulated. However, this phrase is a “sleeper” that opens the door to an entirely new way of publishing and using information. See articles listed under “semantic web” in the Montague Institute A - Z index.

- **search engine**, a phrase that combines the concept of information seeking with the industrial age concept of a mechanical device. In this case, the device is a computer program that performs functions such as text scanning, query processing, text matching, and results ranking. While they are powerful information retrieval tools, search engines are only one among many in a complete search system. See Share-Point: Search system or search engine?

- **taxonomy**, a word borrowed from biology to describe a hierarchy of categories that serves as a table of contents for information accessible from a Web site. Unlike a biological taxonomy, in which a species can exist under only one category, terms in the Web version often need to appear under multiple headings — a feature called polyhierarchy. Moreover, biological taxonomies are granular (detailed) and have many levels while the topics in a Web site taxonomy are broad and shallow — topics that are general in nature and a hierarchy with no more than three levels. See Ten taxonomy myths.

**Who creates neologisms?**

It seems that the IT community has created most of the neologisms in knowledge management. One reason may be that editors, librarians, and other content professionals have little choice but to follow the lead of consultants and software vendors in naming new features and capabilities. With limited development resources, their only option is to select among commercially available off-the-shelf (COTS) products, using the vendors’ sales pitches (and the neologisms they employ) to justify the purchase.

A second reason may be that, being deeply immersed in creating and implementing new systems, IT needs new words to help craft new development and implementation models. Third, IT staff may simply be unaware that other information disciplines have tackled similar issues. For example, in After the dot bomb, Marcia Bates points out that the 1990’s-era neologism push technology was called selective dissemination of information (SDI) in the 1960’s. Of course, SDI was based on mainframe computers and proprietary network protocols while push technology uses client/server computers and the Internet. But the idea — and most of the conceptual issues — were well known, at least in library science. In creating the neologism, the IT community was reinventing the wheel.

**The problem with neologisms**

Regardless of who creates them, neologisms can lead to several problems:

- **Oversimplification.** Neologisms, especially those originating in other disciplines, tend to focus attention on one area at the expense of others. For example, the rush to add a hierarchical list of categories (taxonomy) to Web portals to solve the “findability” problem obscured the need for lateral thesaurus relationships (related terms or see also references) and other information discovery tools, such as topical indexes.

- **Design and implementation errors.** Neologisms can introduce or reinforce assumptions that reflect a distorted view of reality. Software and systems based on those assumptions can waste time and money. As an example, Marcia Bates cites the word ontology, which she says implies that the system designer has discovered a single, universal reality. That may be true for a very circumscribed business process, but even there it is very hard to discover and account for all of the variables and
permutations. Moreover, it is inevitable that the process will change over time. Librarians had to abandon the “one true way” approach implied by the word ontology in the early twentieth century. As many are (re-)discovering today, information indexing and description need to be adjusted and adapted to a myriad of different circumstances.

• Misuse of human resources. It is common practice, especially in large organizations, to make knowledge management a team effort, but neologisms can skew team dynamics so that technologists and business managers have too much influence. The effect is often that other team members are inhibited from contributing their knowledge and experience — or are not forceful enough in pressing their point of view. For example, journalists know the importance of a fact-checking function, but how successful are they in getting the resources to do it?

• Too much lobbying. Creators and proponents of a particular neologism are emotionally invested in it. An attack on the word is often felt as an attack on the individual. As a result, staff waste time on “religious wars” where different groups vie to get their world view accepted. Even worse, relying on a neologism may make staff members less eager to go to the effort of explaining the underlying idea. They may subconsciously believe that the word is so catchy and self-explanatory that it simply needs to be repeated a few times and everyone else will get it.

How to manage neologisms
Neologisms can not only waste time and money, but they can jeopardize an organization’s very existence. Because we work in a system of specialists and struggle to cope with the effects of rapid change, we rarely think about the downside of neologisms, much less about how to manage them. Yet they do need to be managed, because they are both necessary and dangerous.

The first step is to put the issue on the knowledge management agenda and encourage honest discussion about it. Other suggestions include:

• Avoid “religious wars” over terminology by focusing on business objectives and practical ways to achieve results. Gather information on how proposed strategies have worked in other organizations. Use end-user development tools that allow employees to design and tweak their own information workspace.

• Hold an annual symposium. Once a year, hold an internal symposium to allow managers as well as information specialists to report on trends and new developments and discuss their implications for the organization. The event should be sponsored by senior management, not IT. If that isn’t feasible, the agenda should be organized to emphasize strategic business objectives, not technologies. The business dog should always wag the technology tail.

• Encourage boundary spanners. In most organizations there are people whose experience and interests bridge two or more functional specialties and who work informally to promote the flow of information across organizational boundaries. Find, encourage, and reward them. Ideally, there should be at least one boundary spanner for each information specialty: IT, library science, journalism as well as the various general management specialties (i.e. finance, human resources, production, marketing, R&D).

• Expand the “governance” concept. Too often, the word is narrowly defined to mean the creation of a committee that sets guidelines for the use and management of a particular program or technology (e.g. SharePoint). This isn’t a bad place to start; in fact, it may be the only place to start. Ultimately, though, we need a decision-making framework in which technology is subservient to governance and that includes processes to evaluate competing technologies, assure information quality, create and implement an information strategy, and meet the changing needs of users.

• Avoid silver bullets. There are still people who think that adding a taxonomy or installing a new search engine will solve all of an organization’s retrieval problems. Neologisms encourage such thinking because they obscure the complexity of information systems. It is almost impossible for a single product or vendor to meet all of an organization’s needs because people and external socioeconomic factors are involved.

Conclusion
Neologisms are useful in helping to bridge the gap between the current world view and those factors that are changing it. The IT community is responsible for many of the neologisms related to knowledge management, probably because it is immersed in the process of software development, which may require new models and practices. But new words, especially those borrowed from other disciplines, can be costly because they can oversimplify business problems, waste time in terminology battles, introduce errors in development and implementation, and misuse human capital.

Neologisms need to be managed, but this task can’t be left to a “taxonomist” or indexer. It requires a team effort driven by business strategy, a regular educational and awareness program, and support for boundary spanners who facilitate informal internal information flows.