Why information quality matters and how to convince users of the value of quality

Marydee Ojala

Editor, ONLINE: The Leading Magazine for Information Professionals Indianapolis, Indiana, USA marydee@xmission.com

Presented at INFORUM 2004: 10th Conference on Professional Information Resources Prague, Czech Republic, May 25-27, 2004

Abstract:

The notion of information quality is one of long-standing concern for information professionals. Established norms exist for evaluating information sources. Librarians know to look for reliable publishers, timely data, and relevant resources. We distrust startup companies offering "the latest and greatest"—at least until they prove themselves. We are skeptical of sources that purport to be authoritative, but may not be so in actuality. At the same time, our influence over both researchers and casual searchers in our organizations is waning. How can we, as information professionals, convince non information professionals to practice "safe search"? How can we lead them to authoritative sources? How can we convince them that information integrity is important?

Information is everywhere. It's not confined within library walls; it's not fenced off in high-priced, subscription-required online databases; it's not standardized; it's not regulated; it's not vetted. Not only is electronic information pervasive, everyone who can get an Internet connection going (and that's just about everybody these days) believes they are doing high quality searching.

What quality is all about

The best way to define quality in an online information context is to recognize it is a combination of authoritative, timely sources and searcher knowledge. Not only do searchers need to understand the context of searches, so that they can craft a workable strategy in an appropriate source, they must also be willing to direct end-users towards the goal of obtaining quality information. The traditional definitions of quality do not serve us particularly well, since they are aimed at the manufacturing process. Philip Crosby, for example, talks about quality as meeting certain defined specifications. More germane to information professionals is Joseph Juran's idea of quality as "fitness for purpose." Is the information we uncover sufficient for its intended use?

Information quality tends to be situational—a good piece of information for one purpose is useless in another situation. A research request, even if phrased

similarly, will be answered differently depending upon the level of expertise of the requestor, the department in which the requestor works, or the geographic location of the requestor. We must consider how the information is to be used, not just what the information request is. What action can be effectively taken as a result of data generated by an online search? Those who've been in the information quality trenches for decades—and there are many of us—are well aware that this is a "race without an end." Or perhaps the analogy is more akin to the Hydra myth. Solve one quality problem and another one springs up. The emergence of massive end-user searching, where the researchers probably don't even define themselves as researchers and may not know there are information professionals on staff ready and willing to lend assistance, further complicates the issue.

When information professionals consider the number of things that can go wrong when the information illiterate end-user is turned loose upon the Web, they shudder. End-users find outdated information masquerading as current, foreign exchange translation errors, language misunderstandings, perpetuations of erroneous information, deliberate placement of misinformation, urban legends, spurious virus warnings, and opinions pretending to be facts. Add to that information that was there yesterday, but gone today. Image searching in particular confuses end-user searchers. Why should a search pull up an image not remotely related to their query? The emergence of self-published materials, including Weblogs, adds to the confusion. Yes, there are search engines such as Daypop that search Weblogs, but they don't add a quality dimension to the search.

Causes of quality lapses are legion. Some are deliberate, which can be attributed to the creator having a political agenda, a desire to mislead, or a philosophical point of view that precludes objectivity of information; others can be chalked up to carelessness. Yet others are honest mistakes. These can occur even to experts in a field, such as reputable scientists who report erroneous data. What frightens information professionals is the naiveté of the end-users who can't distinguish between quality information and junk.

How much influence do information professionals have within their organizations? That is something each must answer individually. Those with a great deal of influence will have an easier time leading end-user searchers to quality sources and teaching them advanced search techniques. Those with less influence will have a harder time of it. However, establishing the information professional function as the epitome of search quality should raise the level of influence enjoyed within an organization by information professionals.

Safe search or death knell

The practice of what I've only somewhat facetiously dubbed "safe search" should be second nature for information professionals. It is not as common a perception for end-users. Information professionals have two deadly approaches they can take to convince searchers within their organizations of the importance of high quality searchers: Scare end-users to death or kill them with kindness.

Scare tactics include dire warnings about what could happen—and examples of what has happened—to those who rely on information that is incorrect, out of date, and/or incomplete. In business, this might mean missing a new product under development by a competitor, or financial statistics that have been misinterpreted, or an industry survey that overlooks salient data that skews the results. In medicine, it might be older data that calls into question the efficacy or safety of a particular drug.

Killing them with kindness, on the other hand, translates to the helpful hints that experienced researchers share with end-user colleagues. There are many ways to impart these random acts of kindness. Gone, however, are the days when you could run a full day seminar on searching for end-users, pulling them physically together in a training room stocked with computers. People just won't sit still for that length of time. First of all, they are too busy. More important, they tend to believe that search is so easy there's no real need for hours spent in learning search techniques. The fact that they don't perform particularly good searches is outside their consciousness—they are happy with the results, they don't realize they missed pertinent data, and they don't want to be told otherwise.

Communicate constantly and consistently to employees the most obvious places where information can go wrong and point out potential pitfalls with free Web information. Perhaps a "Technique of the Day" feature on the corporate intranet would reach people. Templating common searches for departments is useful. Personalize the Web research process to the degree possible. Pointing out consequences of bad data is a powerful means of bringing home the point that research in a work environment is serious stuff and not equivalent to finding downloadable MP3s. The knowledge management technique of storytelling can be effectively employed to transmit both the negative and positive aspects of safe search.

Focus on content quality, on reputable sources, on up to date reporting, and on critical thinking. Talk in positive terms. Find words and phrases that capture the essence of why your workplace needs quality information. Stress content intelligence. Highlight training opportunities. Emphasize the changing nature of Web sites. Concentrate on creating an information literate organization. Show some Googlebombs to really get their attentionj.

Should a contented searcher be considered a success? I've yet to find the exact equation that adequately takes into account happiness and quality. What I am convinced of is that procuring quality information sources with a decent interface that matches what a particular group of end-users need will increase the contentment level without sacrificing quality. Does that sound like a road without an end? Very likely.