

Information Audits: what do we know and when do we know it?

When doing a search on the Net for the phrase “information audit,” it was interesting to see what I found. There were web sites for how to get information from within your company out onto the Web for customers. There were MIS articles about managing files and information within a company. There were articles describing how to manage sales lead-tracking systems. And there were articles about how a company tracks its internal databases – keeping the right hand informed of what the left hand is doing and preventing the construction of multiple customer or vendor databases, for example – essentially audits of information systems. And there is information on ISO 9000 certification of quality management, which of course involves tracking processes and maintaining databases of information regarding quality systems. But there isn’t much on the related concept of how we analyze what information sources an organization *needs*, how it acquires them, how it manages them, and how it uses them.

If an organization is smart, it knows that reviewing key processes and assumptions regularly is critical to its success and ability to respond to changes in its environment. The questions can run the gamut from “Are we recruiting at the right places for our needs?” to “Are we going after the right customers?” Likewise, organizations need to examine their information needs to determine if they are acquiring, using, maintaining, and disseminating the most appropriate information resources.

Who’s doing the asking?

While it is sometimes the case that senior management instigates the examination of the flow of information within an organization, this is more often something that is driven by the manager of a library or information center. (While many “libraries” don’t refer to themselves that way anymore, for the sake of clarity I will refer to all information centers, information resource centers, knowledge centers, and so on as libraries.) A library manager may take on the not-insignificant task of an information audit for a number of reasons – to justify the library’s existence, to improve the flow of information within an organization, to bolster a proposal for a significant increase in the budget, to raise the profile of the library, even to push some of the information gathering on to the end users. It is often the library manager who instigates an information audit, and it is crucial that you get a champion within upper management before you proceed. To be done properly, an information audit is resource-intensive and time-consuming, and requires the support and cooperation of people throughout the organization. The commitment of people and money, not to mention the help and participation by information consumers, is much more difficult to obtain without the visible support of someone with clout.

It is assumed that the focus of an information audit will be primarily on external information rather than on the issue of managing and coordinating internal information such as human

resources records or the mechanics of installing and maintaining an intranet. Keep in mind, though, that libraries do need to look at their role in the design, creation and maintenance, coordination, and use of internal information sources, particularly resources such as competitive intelligence databases, sales leads information tools, product information resources, and pending or abandoned patent application databases. These resources would all benefit from the support of an information professional. It is also assumed that an information audit will look at the information needs throughout an organization, although the same process could be used for an audit of a single operating unit or practice group.

Keep in mind as you prepare for an information audit that this will be a snapshot of reality at one point in time. For this to be a truly useful exercise, you need to plan to revisit the issue every year or two, particularly given the dramatic changes in information technology and the availability of information through electronic media.

Asking the Right Questions

Before you can design a set of questions to ask participants (see the sidebar “Just a Few Questions...”), you need to decide on the ultimate goal of the information audit. Will the action plan to be prepared at the conclusion of the audit:

- simply describe current information needs and resources?
- propose an expansion of the library’s services and resources?
- evaluate information resources currently used and propose more appropriate sources as necessary?
- identify where the organization’s use of information is inefficient and propose alternatives?
- propose the elimination of redundant purchases of information?

Obviously, there can be several goals with an information audit; remember, too, that one of the side benefits is that the library will be seen as a proactive manager of information rather than a passive repository. Just getting people within the organization thinking about how they use information and what information they need can go a long way toward heightening awareness of the library and appreciation of the value of the information professionals.

An information audit needs to make a systematic examination of the information needs and resources of the organization. Before that can happen, be sure you understand your organization’s market(s). If you work for a law firm, does it need in-depth resources in intellectual property areas? International law? Medical information? Oil and gas resources? What specific information needs are implied in the subject specialization of the firm? Likewise, if you work in a corporation, what are the information needs specific to your industry – state regulatory sources? Consumer opinion polls? Chemical formulas? International standards?

An information audit also needs to examine how the organization is making information purchasing decisions. Does the information systems or MIS department purchase organization-wide resources because it seems like a good idea? Because peer firms have purchased it? Does your organization have Internet access on the desktop with the assumption that people will be

able to find the information they need on the net? What input has the library had up until now in development and recommendation of information resources?

Be sure to examine all kinds of information. Not only are you examining the organization's purchase of traditional information resources such as the U.S. Code, LEXIS-NEXIS or Dow Jones, but you are also looking at other ways people gather and use information:

- Net-based resources such as government agency home pages, Usenet newsgroups, up-to-the-minute news and company Web sites
- CD-ROM databases, including those purchased and kept at an individual's desk, those loaded onto an internal network and accessible by many, and those maintained within or under the auspices of the library
- online resources, including end-user formats such as DIALOG Select or LEXIS-NEXIS' Quick-Checks, specialized services such as Profound or Bloomberg, and hybrid Web products such as Wall Street Journal Interactive Edition
- internal databases available through an intranet, Lotus Notes, or other LAN-based resource-sharing arrangement
- clipping files maintained by individuals or groups within the organization
- books and consulting reports purchased independently of the library
- customized information provided by consultants or outside research services
- the "invisible college" or informal network of colleagues
- and, yes, the information resources available through the library

Along with questions about the information being acquired and used, it is important to ask why those specific sources were selected by the purchasers. Were they convenient? Considered particularly reliable? Cheap or free? Easy to use? A resource people are accustomed to using? These purchasing factors are often ignored at a library's peril. Libraries always have competitors, although they are not always seen as such. Understanding why people make the information choices they do goes a long way toward working with them to make the most cost-effective decisions toward the acquisition and use of information.

Looking at Information Flow

While sometimes difficult to ascertain, an information audit should look at how information flows within the organization. Is information seen as a key corporate resource or as an expense item to be managed along the lines of travel costs or professional development courses? Likewise, are there structural barriers to the dissemination of information? In some organizations, information is hoarded and considered proprietary to a particular group. At times this may be necessary, especially in the context of strategic planning research or pending patent applications. In other instances, though, it may simply be the corporate culture to keep information within a practice group or department.

There may be other bottlenecks to the free flow of information within the organization, and these bottlenecks need to be identified. Sometimes they are caused by financial barriers – charge-back systems that require up-front commitment of money or do not allow ad hoc internal "purchase"

of information between departments, limited budgets for information-related purchases, or cumbersome purchasing procedures. There may be “people barriers” – people may be reluctant to use the library, they may not feel comfortable using the available search engines on the intranet, they may trust their own information-gathering abilities more than those of intermediaries. Most librarians have encountered library users who cannot articulate their needs because they aren’t sure what they want, don’t know what the library can do, don’t like being put in a position of having to ask for information, or do not have confidence in the library’s ability to meet their needs. Related to these issues are the very real problems of library staffing. Do people resist contacting the library because they always get voice mail instead of a live person? Can they call an information professional directly or are the calls screened through a non-professional? Do all library staff members who have contact with the library’s client community inspire confidence in the users or do they often seem out of their depth? Does the library have (or have access to) subject specialists who are familiar with the technical jargon of the library users?

There are other barriers blocking access to information that need to be identified through an information audit. Those include physical or geographic obstacles, particularly in organizations that have more than one location. International offices may not be able to communicate directly with the library, because of lack of internal networks, language barriers or time zone differences. Field offices may not have ready access to a library located in the headquarters or to information maintained on an intranet. People who are on the road or working from home or clients’ sites may have no ability to send or receive electronic mail, or even hard-copy mail.

And sometimes there are more basic technology barriers. People may not be able to access all information sources from their desktop or terminal; they may have outdated computers that cannot satisfactorily run the software needed for access; they may not be able to print off the material they retrieve; they may not be able to receive attached files, limiting the methods by which the library can deliver information.

And perhaps the underlying factor that causes these barriers is the support given by upper management to maintaining access to information as a strategic objective. If information is not seen as a critical competitive tool, the resources to collect, manage and disseminate it will probably not be made available. All of these components need to be identified and evaluated during the process of an information audit.

Information Policies and Support

There are very few organizations that have specific policies or procedures regarding the acquisition, use and management of information. Most organizations do have informal policies, corporate culture, and management expectations that shape the practice of information use. While these implicit policies are difficult to identify, they can often be deduced; sometimes the act of articulating the policies will itself be an impetus to change them.

To identify the formal and informal policies regarding information, you need to look at the budget for information throughout the organization. Who has authority to pay for information resources? Are they encouraged or required to check with the library for guidance in selecting the best sources? If conflicts arise regarding the collection, management or dissemination of information, who has the final say? Most organizations have budget line items for books, outside research, periodical subscriptions, and online information services. With support of upper management, you should be able to find out the total amount spent by the organization for these line items. Knowing where and how much money is spent each year on information is one of the critical elements of the information audit and one of the focal points of the resulting action plan.

Obviously, part of an information audit involves identifying all the libraries within the organization. This includes not only established libraries with professional staff but also the more informal resource centers, often unstaffed, that practice groups or departments set up to support the information needs of their office. What input has the library had in the development of these resource centers? Is there ongoing support by the library in helping evaluate the information purchases? Were resource centers created as a response to an unmet need for information that could be filled by the library? If so, the information audit is an appropriate mechanism for exploring ways the library can get back in the loop by providing the specialized information services that practice group needs.

In the context of an information audit, you can also explore ways that individuals within a group disseminate and share information. Does a department have a single subscription to an important industry newsletter, which is then routed through the office? If so, there is the possibility that by the time the last few people on the distribution list see it, the information is no longer news. Or worse, is a department paying for one subscription and then making photocopies for distribution throughout the group? Copyright infringement is one of those issues that are difficult to explain to many people – the attitude sometimes seems to be “if the technology makes it possible, why can’t I?” Part of an information audit should be to address issues of copyright compliance and the mechanisms available to avoid copyright infringement, including site license subscriptions, redistribution rights such as DIALOG’s ERA program, and the routine purchase of multiple copies of critical information sources.

Who You Gonna Call?

Once you have identified the principal issues you need to address through your information audit, who do you go about asking the right people? While it may be tempting just to write up a survey, mail it out, and tabulate the results, this by itself will usually not elicit the type of information you need. There are some factual questions you need answered of the people being surveyed – job description, type of information used regularly, and so on – but the useful feedback comes from follow-up questions – “why do you use that source instead of this other one?”; “what experience lead you to decide to use the library for only these questions?” and so on.

The most successful techniques for eliciting useful information from participants is a combination of individual interviews and focus groups. Not only will the people being surveyed pay more attention to the questions and give more thought to their answers, but the surveyor will have opportunities to follow up on specific comments and concerns, respond to unexpected answers, and dig deeper in areas that seem to be of particular concern to each participant.

First, a few notes about *who* to interview. Be sure to include a representative sample of the population. In a law firm, for example, that means interviewing senior partners, junior partners, associates at several levels, paralegals from each practice group, and administrative staff. In a corporate setting, this would include upper management, professionals and paraprofessionals from each functional unit (e.g. R&D, MIS, marketing, finance, sales, product managers, human resources, and so on). Be sure to include those groups the library does not now serve – it is as important to find out what groups do their own information gathering (or *no* information gathering) as it is to survey the groups that already use the library for information. Remember, too, to include those people who do not see the need for information services, those Guy St. Clair calls “the information indifferent.”

When discussing participants’ information needs and uses, be sure to look at information that flows outside the organization. Are sales people providing regular news updates to clients as a marketing tool? Does your organization have an Internet site that provides access to financial information, press releases, product information, and related material? Who has ownership over that information? Is the web site updated regularly as other media? Is information being put on the web site that might not otherwise be provided freely to people outside the organization (e.g. competitors)? Is the information being provided consistent with the message the organization wishes to send to the public?

When you have identified the people to be interviewed, have your senior-management champion send (or at least sign off on) an introductory memo, describing the value and importance of the information audit and the need for each participant to work closely with the audit team. Note that surveys often have higher response rates when the participants are offered a summary of the survey results. Consider making the information audit action plan, or a summarized version, available to all who participate in the audit.

Expect to spend a half an hour per interview, allowing plenty of time for open-ended discussions on the information needs and concerns of each participant. Have a list of items that need to be covered, but resist the urge to turn the interview into list of yes/no questions. Keep questions open-ended – use WHY and HOW rather than DO YOU or WHAT. If possible, use a tape recorder so you don’t miss any of the comments. If this isn’t possible, be sure to write down *all* the responses.

Consider bringing in someone from outside the organization to conduct the interviews. This has several advantages:

- You don't need to commit valuable staff time to interviews.
- People may be more willing to express their concerns and criticisms to someone with whom they will not be working in the future.
- Someone outside the organization can bring a fresh perspective and is more able to question a participant's comment that "we've always done it this way."
- Interviewing is an art that not all information professionals possess. A consultant skilled in interviewing and surveying may be better able to listen to the participant's subtext, ask follow-up questions, and probe without being off-putting.

And be prepared for surprises. You will hear from people who think the only way to get an annual report from a company is to write a letter to the company. People will tell you that all they ever need is the one industry directory they've used for years. People will tell you that everything they need to know they can find on the Internet. Keep in mind that the interview is not the time for consciousness-raising or an in-depth exploration of the variety of information sources available; that will be addressed in the action plan at the conclusion of the information audit.

You will probably want to supplement the one-on-one interviews with focus groups comprising a single practice group or department. Sometimes the synergies of a group of people discussing their concerns will stimulate new ideas that would not have come out from individual interviews. These focus groups might be done in the context of a brown-bag lunch or other setting that feels somewhat informal.

Information Audit Action Plan

Once you have conducted the surveys and evaluated the results, where do you go? The entire exercise is pointless unless you can make recommendations on how the organization can better meet its information needs and then develop a strategic plan to implement those recommendations. Following is a summary of the issues that should be addressed in your action plan.

- Provide a summary of all the information acquired by the organization and an estimate on the total cost.
- Summarize the information practices of each group or department – do they do their own research or use the library? Do they purchase information sources independently? Do they repackage or disseminate information?
- What sources have the highest perceived value?
- Who is responsible for acquiring, maintaining and disseminating information within the organization?
- What information needs are not now being met by the library?

- What can the library do to address *all* the information needs of the organization? Does the library want to meet (or at least support) all the organization's information needs?
- What are the costs and benefits to the organization of individual groups acquiring their own information resources? Is there unnecessary duplication? Is there fragmentation or isolation of information? Is it more efficient for each group to purchase its own information sources?
- Are there economies of scale that are not being realized by fragmented purchases of information resources? What alternatives can the library propose?
- Are groups or individuals relying on information sources that, in the estimation of the library, are not the best, most appropriate or most cost-effective sources? What alternatives does the library recommend?
- Does the organization need more information delivered to the desktop? Would site-wide licenses to information services be the best use of the organization's information dollar? Are other alternatives better?
- Should the library introduce more Web-based end-user search services such as DIALOG Select or InSite Pro?
- Is there a need for more training within the organization? Are people using Net-based information sources most efficiently? Do users need training on how to evaluate information sources to decide when to use the Net, commercial online services, CD-ROM, or print resources?
- Are there areas that are not being adequately covered – market research reports, financial information, specialized technical or engineering information, medical resources?

And here is where you need to do some blue-sky thinking. What if you had enough staff and budget to address all the information needs within the organization? What would you be able to do? What would it take to get there? What intermediate steps can you take now to start bringing this about?

When writing the information audit summary and action plan, be sure to speak to your audience in their terms. While the issues are related to the information profession, the people who have the resources to enable you to put your action plan in play are usually not information professionals. Support your position with bottom-line benefits – this will save the organization \$X, or will avoid lost business opportunities, or will give the organization a competitive edge by enabling it to provide a service others cannot. Access to information, in and of itself, is not persuasive... immediate reduction of unnecessary expenses, or addition of services that can be billed out to clients is what gets the attention of upper management.

SIDEBAR:

Just A Few Questions...

It may not be feasible or necessary to ask all of the following questions, but they suggest the areas that need to be covered during information audit interviews. A combination of factual questions and more open-ended ones often works well to keep an interview lively and the ideas flowing. Be sure to test out the final survey on several people outside the library before rolling it out to all participants; inevitably at least one question will be interpreted in a way that was not anticipated.

- Describe your job and function
- What decisions do you make; on what information sources do you base those decisions?
- Is most of your professional reading done to keep up to date on issues in the industry? Focused on your current project?
- How do you scan the environment for emerging issues that may affect you and your department/practice group?
- Do you archive reports and other internal reports your department creates? In what format? Where? Is it accessible to others within the organization? Why or why not?
- Do you usually want to find information yourself or have others find it for you? Why? What barriers are there to whichever of these options you prefer?
- What format do you prefer when you need information? A summary of what's available? Everything on the subject? A synthesis of the material? Do you need or can you use information in electronic format? As an attached file via email? In hard copy form? In a spreadsheet format? In a groupware database?
- What internal sources (including the library) do you use to get information?
- What internal sources do you *not* use? Why?
- Which information resources do you value the most? Why? The least? Why?
- Do you have access to the Internet? Do you use it, and if so, what kind of information do you look for on the Net? Are you satisfied with what you find and the process of finding net-based information?
- Are you familiar with the following information sources? [Include internal databases, intranet resources, CD-ROM databases the library has purchased, etc.]
- How much time does it usually take you to find the information you need to begin a project?
- Do you usually believe that you found what you needed?
- How confident are you about the quality and reliability of the information you use?
- What other information do you need to do your job better?
- What do you think the organization's information strengths and weaknesses are?
- What is the one change you would like to see in the way information is managed in this organization?
- Do you consider yourself an early adopter of new technology and services, or a middle- or late-adopter who waits until things settle down before using a new resource?
- How do you stay updated on new information resources on the Net?

Additional Resources:

Cortez, Edwin M. and Edward J. Kazlauskas. "Information policy audit: a case study of an organizational analysis tool" *Special Libraries* v.87 n.88 Spring 1996. pp. 88 et seq

The Information Audit: an SLA information kit. Washington, DC: Special Libraries Association, 1995, 56 p.

Ribbler, Judith. "Delivering solutions for the knowledge economy." *ONLINE* v.20 n.5 Sept.-Oct. 1996. pp. 12 et seq

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