

## After the Research:

# Information Professionals'



**A**re you challenged by effectively communicating research results to clients and end-users? Do you find it difficult to effectively post-process and creatively package your findings while staying within budget parameters? Creating value-added deliverables has become a hot topic among many information professionals today, particularly those involved in serious research. The many variables and expectations can cause us to wonder: How do other researchers manage? What "tricks of the trade" do they use to deliver high-value research results after they've searched the Web and used traditional online sources?

Through detailed interviews, I surveyed the compilation and presentation strategies of expert researchers, both corporate librarians and independent information professionals, from the business, legal, patent, chemistry, and science and technology disciplines. Eighteen information professionals shared their insights and techniques about producing and delivering presentation packages. These help define best practice approaches.

Though not strictly a benchmark study, the information provided in this article can supply models for developing value-added deliverables. Many of the interviewees are on the cutting edge in their corporations and organ-

izations or as independent information professionals. Some have built legacies in their disciplines. They carefully serve clients, who rightly dictate what they provide. This is as it should be, since providing services that satisfy the user is a key goal for information professionals. Some of the interviewees work for corporations known for best practice or best-in-class initiatives in many disciplines, not just information research. Implementation of value-added deliverables and the examples they supplied are a reflection of leading-edge activities.

### **DELIVER WHAT THE CLIENT WANTS**

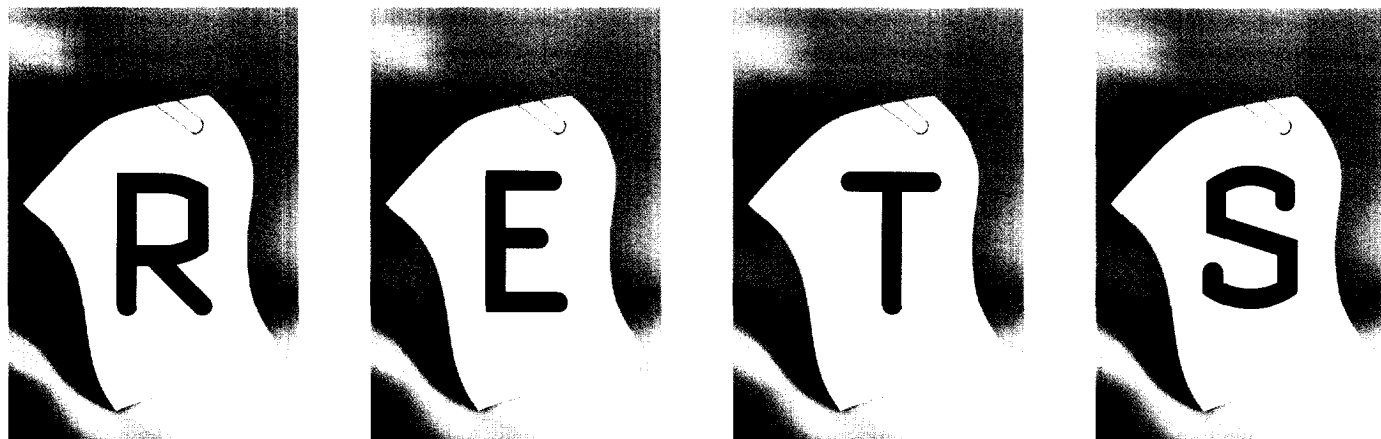
Requests for how to deliver the research findings are as varied as the queries. It's essential that the research information be presented in a format that is easy to interpret and utilize for key decision-making. Deliverables should be customized to the client's needs, which are identified during the reference interview. In addition to conducting a detailed reference interview, the interviewees recommend listening for clues of how the client is using the information. For example, if a client or end-user needs the research information for a presentation, summarize the findings into graphs or tables if the time and bud-

et allow. Be very clear with the client what the deliverable is—there should be no surprises.

"The deliverable is the real key to client satisfaction," explains Josh Duberman, an expert chemical and patent researcher and partner of Pivotalinfo, LLC, in Bellevue, Washington. "It is the tangible evidence of your work. It's the test of the fit between what the client needs and what you provide, which is based on your understanding of those needs and your ability to fulfill them. The deliverable is the culmination of your skills in conducting the reference interview, negotiating, communicating, and, of course, doing the research."

In the corporate arena, research requests come informally by e-mail, telephone, or Post-it Note, and more formally through an intake form or in-person visit. Receiving a generic research request, or not knowing what the research results will be used for, can leave an information professional somewhat handicapped. Formal request worksheets can be created using a team or committee effort and sometimes must follow company guidelines. For many special librarians, their audience is focused, and research request forms can be tailored accordingly.

Ford Motor Company's Research Library & Information Services offers



## for Delivering Results

an online Search/Reference Request form accessible via the company's intranet. To request an online literature search, the requestor completes the form fields and the information is forwarded to the appropriate Ford Information Group librarian. (See figure on page 28.)

### DELIVERABLE FORMATS

Some clients want to see an executive summary, overview, or report. Most of the independent professionals interviewed for this article provide an executive summary when a synthesis of the research is needed. Executive summaries present the salient research findings succinctly with bulleted key points using appropriate subheadings. The summaries are generally a few to several pages in length.

In addition to compiling an executive summary for her clientele, Pamela Wegmann, expert marketing and business researcher and president of INFORMATION MATTERS, LLC in New Orleans, Louisiana, frequently provides an executive overview. The executive overview is a high-level summation of the pertinent information located during the research process. Presented as several bulleted items, the overview highlights key trend or analysis points derived from the research. The subsequent execu-

tive summary expands upon the elements detailed in the overview. "Extract nuggets of gold and put them on their plate," describes Wegmann.

Executive reports tend to be more formal and narrative in approach, with references cited and footnoted. The Industry Analysis Briefs I provide my consulting firm clients tend to be written in this manner. Upwards of 20 pages or more in length, the Industry Analysis Briefs are a compilation of the online, Web, and primary research findings that answer the client's query. The backup information may or may not be included with the brief, depending upon the client's needs.

Clients hire an information professional to do the research and synthesis so that they don't have to wade through useless or peripheral information.

"Our consulting business depends on accurate, up-to-the-minute information about a prospective client's vertical market. We don't have time to wade through the limitless information out in cyberspace," explains Renée Montoya Lado, owner of Strategic Designs for Learning, a Colorado Springs-based business consulting firm. "Online Business Research's presentation of the research results as Industry Analysis Briefs allows us to view the salient information quickly. The articles provided as back-

up are used as a reference in case my clients have deeper questions."

### CORPORATIONS PREFER MEMOS

In the context of special librarians interviewed for this article, the deliverable is frequently a clear, concise, well-reasoned memo sometimes following company specifications. Due to the multitude of responsibilities and research requests and the short turnaround time required by requestors, quite often corporate librarians don't have time to create elaborate deliverables. Their memos include the major elements of identifying information: the date, the name of the researcher, the name of the recipient, and the project or subject names and corresponding reference numbers. Typically, the memo displays a company or department logo, or brief letterhead. Similar to the executive summary, the research findings are presented using bulleted key points under appropriate subheadings and can be a few to several pages in length.

There are other types of presentation packages. A deliverable can be as simple as e-mailing four patent family numbers or telephoning the name and contact information of an expert witness. Some clients provide a template or ask an information professional for input in creating one. Templates save





## Ford Motor Company's Research Library & Information Services' Online Search/Reference Request Form

Describe the information you need (in the space below) in narrative terms, as completely as you can. Include keywords, acronyms, or buzzwords which may be relevant. Define any special terms which may have special meanings in the context of your search. Also, list any terms or concepts to be excluded.

We will forward your request to the appropriate Ford Information Group library.

*Online literature searches involve the expenditure of Ford funds. Consequently, only questions pertaining to legitimate Ford business are accepted.*

**INFORMATION NEEDED** (Please include known authors or papers, if applicable):

**DATABASES/SOURCES YOU HAVE CHECKED:**

**TIME PERIOD TO BE SEARCHED:**

- \_\_\_\_\_ to \_\_\_\_\_  
 All available

**LANGUAGES OF RETRIEVED ITEMS:**

- English only  
 All languages  
 Other (specify): \_\_\_\_\_

**HOW BROAD A SEARCH WOULD YOU LIKE?**

- A few good articles  
 Review articles  
 Comprehensive search

**HOW MANY ARTICLES DO YOU EXPECT ON THIS TOPIC?**

- 1-10  
 11-25  
 26-50  
 51-100  
 >100  
 Don't know

**PREFERRED FORMAT OF RESULTS:**

- Brief citation  
 Citation with abstract  
 Full text (if available)

**LITERATURE TYPE:**

- Don't limit  
 Limit to journal articles  
 Limit to patents

**DELIVERY OPTIONS:**

- Company mail  
 Pick up at Library  
 E-mail  
 Fax

**SPECIFY DATE RESULTS ARE NEEDED:**

- 3 days  
 1 week  
 2 weeks

*Components of Ford Motor Company's Research Library & Information Services' Search/Reference Request form. Drop-down menu defaults are represented here in boldface and with a solid bullet.*

the client valuable time because the research results are presented in a form that usually requires minimal editing for subsequent use. Tracy Primich, supervisor of Ford Motor Company's Research Library and Information Services (RLIS), and her staff use a template as one form of delivering research findings. It has a department logo on the first page and identifies who did the research and how to contact them. The template also brands the research for RLIS's customers, standardizing the delivery format.

Though e-mail is popular, many information professionals still send the user a printed document. A bound copy helps provide information originating

from hard copy sources, or as a back-up to e-mail. It is important to divide the information up logically. A confidential report can be encoded and sent via a secured delivery, or posted in a secured place such as an extranet. Finally, technology now allows excerpts of information to be sent to various hand-held devices. There is currently much creativity and thought going into how to make seamless deliveries via these sophisticated mechanisms.

### USABILITY MATTERS

Amelia Kassel, in her article "Value-Added Deliverables: Rungs on the Info Pro's Ladder to Success" (*Searcher*, v. 10, n. 10, November/December 2002,

pp. 42-53), outlines why deliverables are important:

[Value-added deliverables] appreciably help users and are important for:

- minimizing or preventing users' exposure to information overload
- increasing customer use
- bringing in new business

In my interviews, special librarians echoed the view that synthesizing comprehensive results enhances value and productivity, both for the user and the company. Some information users, however, prefer to review and synthesize the results themselves. One suggestion is to include, at mini-



mum, a cover letter that summarizes the way in which the results answer their question. Consider functionality for the client.

Interviewees offer these tips for making any presentation package more useful:

- Highlight, bold, underline, or insert asterisks around key terms, search terms, and/or salient information.
- Include an effective table of contents to help the user find the information they want in the results presented.
- Present research findings in order of relevancy or in reverse chronological order.

### DELIVERABLE CONTENT GUIDELINES

Whether a special librarian or independent, the information professionals interviewed shared common key elements in their presentation packages. The following are elements to include in a best practice deliverable:

*Summarize and give contact information.* Include a cover page with the deliverable. The components of identifying information of a cover page are

similar to those included in memos previously discussed in this article. Give the date, the name of your company, the name of the consultant/researcher and their title, the recipient's name, and the project name. Add contact information for follow-up.

As another form of identification, insert a footer on every page with your company and contact information and project name. An example may be flush left for project and contact information and flush right for page numbers. Consider including a hyperlink to your e-mail address for the client's convenience.

*Restate the search query.* Restate the original search question(s) as a reminder to the client.

*Review sources consulted.* Provide a summary of the databases used. Consider including a description of the databases—their content, coverage, and date ranges. Don't forget to detail the Web, Intranet, trade, and government sources you examined.

*Explain search strategy.* Lay out the structure and mechanics of your search strategy. Describe the decisions made regarding setting up the strategy. Detail search term synonyms and note what wasn't researched. If you had to limit the database and search terms because of time, budget, or format constraints specified by the client, say so.

*Reiterate key findings.* Summarize your salient research findings into an executive summary or report. Source the bullet-point summations by footnoting them in the summary. Include additional information that might be useful to the client. Explain the results when the client asks about X, but you find Y. Clarify the client's perception of what the answer should be and what it actually was.

*Make recommendations.* Make recommendations based on the research results. Suggest how to narrow the search if needed. Provide ideas to extend the search, if necessary, by adding databases and search terms. This creates an opportunity to close another sale. For example, if a client has asked about U.S. distribution possibilities for a new product, suggest looking into international channels if this is a viable option. Suggest primary research if it is a logical next step.

*Include full research results.* Appendix search results, including full-text

articles, abstracts, titles, or bibliographic data. For chemical or patent research, it is sometimes necessary to offer as a follow-up the abstracts that were not included—the "irrelevants." Include hard copy information derived from library sources. Provide details of your interviews with subject matter experts. Attach graphs, tables, and other illustrations. Hyperlink relevant Web sites.

Consider including other components that add value to the deliverable:

- Disclaimer and copyright notice
- Table of contents
- Introduction
- Web sources
- Graphics and illustrations
- Primary research results
- Bibliography
- Document delivery order form
- Evaluation form

### GRAPHICS AND ILLUSTRATIONS

Including tabular or graphical data and incorporating screen shots of tables and Web pages can noticeably enhance a deliverable. Clients are using more photos, charts, and graphs than ever before. Not only is an illustration easier to interpret than raw numbers, it can easily be integrated into a client's final report or presentation. New technology and tools have been developed or are being built into existing software as a new feature to create or integrate graphics quickly.

Graphics and tables are excellent ways to represent competitive intelligence and market research information and can be used to display data for a myriad of other applications as well. Market share and market size can be displayed using pie charts. So can the prevalence of a disease for a medical research project. Photos or diagrams can be downloaded from the Web using cut-and-paste and other software including SnagIt, CatchTheWeb Solo, Paint Shop Pro, FullShot, and Adobe Photoshop. The Microsoft line of products allows an information professional to inexpensively display data graphically.

Debbie Hunt, principal of Information Edge in Alameda, California, specializes in competitive intelligence and market research for the business, bio-science, and engineering sectors. Because the bioscience fields can generate a great deal of statistical data,

## Graphics Software

### ADOBE PHOTOSHOP 7

Price: \$600

[www.adobe.com/products/photoshop/main.html](http://www.adobe.com/products/photoshop/main.html)

### BIZINT SMART CHARTS

Price: Biz Int Smart Charts for Patents—

Single copy \$5,000

See Web site for additional products and prices

[www.bizcharts.com/](http://www.bizcharts.com/)

### CATCHTHEWEB SOLO

Price: \$295

[www.catchtheweb.com](http://www.catchtheweb.com)

### FULLSHOT 7

Price: Standard \$49.99, Professional \$79.99,

Enterprise \$149.99

[www.fullshot.com](http://www.fullshot.com)

### PAINT SHOP PRO 7

Price: Download \$99, Boxed \$109

[www.jasc.com/products/psp](http://www.jasc.com/products/psp)

### SNAGIT

Price: \$39.95

[www.techsmith.com/products/snagit/default.asp](http://www.techsmith.com/products/snagit/default.asp)

### STN EXPRESS WITH DISCOVER!

Price: Single User \$205,

Shared User (1-5) \$525

[www.stn-international.de/](http://www.stn-international.de/stninterfaces/stnexpress/stn_exp.html)

[stninterfaces/stnexpress/stn\\_exp.html](http://stninterfaces/stnexpress/stn_exp.html)

Hunt includes tabular or graphical illustrations when necessary and available. She uses Microsoft Word's draw feature to incorporate and manipulate screen shots of tables and Web pages, or she creates her own graphs and charts using Microsoft Excel. "I use the data to directly support what I've included in the executive summary," explains Hunt, "because a picture really is worth a thousand words."

### PRIMARY RESEARCH

Alongside online databases and Web sites, primary research is an important third leg in the research triangle. Including primary research results in a deliverable adds significant depth to the package. One interviewee includes either a general review or specifics of conversations with subject matter experts, including authors, trade association analysts or specialists, or government experts.

Another respondent delivers transcripts of interviews that can sometimes be hundreds of pages. As a value-added service, he provides a summary or synopsis of the interviews when possible. In my Industry Analysis Briefs, I usually include the interviewee's name, title, company, contact information, and why they qualify to be interviewed. I note the day and time we spoke. With competitive intelligence research and other delicate situations, one has to be careful not to disclose a name or other information that should remain confidential.

### VARIATIONS BY DISCIPLINE

It is only reasonable to assume that deliverables will vary according to the discipline served by the information professional. Consideration of some leading-edge compilation and presentation techniques employed in the following three fields of legal, patent, and science and technology is not only instructive but can suggest some best practice approaches.

#### Legal

Ross Financial Services, Inc. (RFS) is a private investigative firm serving legal and business communities nationwide. Owner Larry Ross is licensed as both an attorney and as a private investigator. RFS locates and analyzes intelligence needed to make informed decisions, reduce risk, and

resolve business disputes. Its deliverable is based primarily on secondary research of online databases and primary research of public records.

"The nature of the services we provide makes it very difficult to adhere closely to a report model," explains Ross. "Our reports, printed on letterhead paper, begin with a 'Summary' and end with a 'Recommendations and Conclusions' section. The body of the report contains whatever internal headings we believe will assist the client in following the content of the report—'Business Entities,' 'Litigation,' 'Liens.' Our reports are narrative, and we use Microsoft Excel and Microsoft Visio to further explain and illustrate complicated relationships."

RFS does utilize a small amount of boilerplates. For example, each report has a "Confidentiality" paragraph and a "Report Policies" section. Thus, clients are made aware of what supporting documentation they can expect to receive and what they will not be receiving. The "Policies" section also informs the client about RFS's document retention practices.

RFS's reports are produced on regular stationery that has its logo and contact information on the first page and the logo alone on the subsequent pages. Most of the presentation packages are short, averaging about four pages. However, additional follow-up reports are not uncommon. RFS bolds and/or italicizes various subjects of the investigation for easy identification.

#### Patents

In addition to presenting research compiled from patent sources, some patent searchers include information derived from technical or business literature and occasionally government and news sources as well. Coalescing and presenting results derived from multiple databases, and in many cases including analysis, can require finesse. There are a handful of post-processing software products that help display technical patent information, including BizInt Smart Charts and STN Express.

Nancy Hiebert, patent search consultant in Saint Paul, Minnesota, specializes in engineering patent searches, including mechanical, civil, optics, manufacturing processes, telecommunications, and medical

devices. Hiebert's service offerings include patentability, novelty, infringement, and validity research.

Her reports include the key elements previously described in this article. The cover page includes a disclaimer and contact information. The "Sources Investigated" section covers descriptions of source databases, their time and country coverage, as well as their update codes. Including this information is important if subsequent updates to the search are needed. Her "Strategy" section includes the search strategy, along with an explanation of what has been intentionally excluded if the search was too broad or if there were multiple research approaches.

The bibliographic records are appended. The contents of the records depend on the source database, but generally include a title, publication number and date, application number and filing date, assignees and inventors, and an abstract. Copyright statements are embedded in the source material. As a value-added service, she provides these three items:

- A printout of the search strategy
- A table of country codes
- Sources for full-text documents

Patent drawings are sent as PDF attachments, hyperlinks to the Web page, or as images in Word files. She uses Microsoft Excel to create tables and bar graphs that illustrate patent trends and numbers of citations.

#### Science and Technology

Librarian Martha Lorber is an International Trade & Technology analyst for The MITRE Corporation and works under the Department of Defense Federally Funded Research and Development Center that the company operates. She works with a small, customized research group serving her department. Lorber's research relates to applied science and technology, and she often works on long-term projects. Her preferred online database or information source depends on the topic of research. MITRE's research group most frequently uses the Web, news databases (such as Nexis, the Foreign Broadcast Information Service), and online hosts (such as Dialog and STN).

When researchers from her group perform a reference interview, they record the details of the end-user's re-



quest on a standard form. They use this intake form to track their research path, record the location of files, and brainstorm search strategies within the group.

"Our initial synthesizing of results is usually quite rough," explains Lorber, "since we use the first search as a way to talk with the client to further refine keywords and concepts. Even in these early stages, we define the provenance and currency of all information, in order to verify the extent to which it is authoritative. We categorize results in a way that is most helpful for answering the end-user's question or that provides a concise overview of the topic."

## The final format depends on the end-user's time frame, the type of project, and the data source used.

Here is an example of the way in which results might be organized:

- A primer or overview of the technology
- The most recent technical details about the technology
- Common applications of the technology
- Market information

MITRE researchers have a standard template for providing a summary of their research. This template is formatted as a memo and includes the name of the client(s), the name of the researcher(s), the date, and the subject of research. Lorber presents a concise summary of the results and how the results address the end-user's question. Her reports include a disclaimer at the end of the summary which states that the research is not "exhaustive," and that more research could be done. This is important because the Center wants end-users to understand the inherent limitations on the results they may provide. The

reports are primarily narrative but may include bulleted points.

The researchers may formally or informally provide end-users with the search strategy (especially if there are questions and concerns), a list of sources consulted, and suggestions of avenues for further research. For a final deliverable, complete citation information is provided so that the end-user can locate the document independently (this includes citations for information found on the Web, which also includes dates of access or path to find a document that may not have a unique URL).

"Some end-users ask us to analyze our findings, and some end-users pre-

fer to analyze the data themselves. We may include a cover letter that summarizes the way in which our results answer their question. Less formally and perhaps more frequently, we may annotate and highlight our findings and underscore how we think that certain pieces of information bear on the question, or how the information raises other problems. We generally try to present ideas and options for further research. The extent to which we interpret data is highly dependent on the project, the client, or the stage of the project. In general, we work in an iterative and collaborative manner with end-users," adds Lorber.

The final format depends on the end-user's time frame, the type of project, and the data source used. Content is the most important aspect of the research for their clients. They try to make the end product look consistent and to organize products for easy use. Graphs and tables are usually created using Microsoft Excel, but they always include the raw data as well. They use

several techniques to help the end-users read the results efficiently. These include highlighting search terms and significant passages, using Post-it Notes as markers, and making notes in the margins of the materials.

### DELIVERING THE GOODS

When I began this project, I thought my interviewees would provide sufficient similarity that I could propose best practices in delivering research results. This proved elusive. Delivering patents research results differs from presenting a client with a market study. Those operating independently have different styles than those working within corporations. Nevertheless, it is apparent that information professionals think research presentation skills are important.

By creating value-added deliverables, you provide your client with the important information needed to make a business decision. Even if you can't produce a formal deliverable every time, due to time and budget constraints, strive to do this at every opportunity. Not only is it highly beneficial for the client, it further illuminates your skills and allows you to gain more visibility within your company or profession.

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*Comments? E-mail letters to the editor to marydee@xmission.com.*

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