

ANALYZING THE ANALYSTS

AN INFORMATION ARCHITECTURE ANALYSIS OF
TOP BUSINESS ANALYSTS' WEB SITES

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INTRODUCTION

In the winter of 2001 Argus Associates, Inc., evaluated the information architecture elements of six top business analyst web sites for the purpose of doing a comparative analysis of their information architectures. The sites we examined are:

- Delphi Group (www.delphi.com)
- Forrester Research (www.forrester.com)
- Gartner (www.gartner.com)
- Giga Information Group (www.gigaweb.com)
- IDC (www.idc.com)
- META Group (www.metagroup.com)

We selected these six analyst sites because of their excellent reputation for insightful research and analysis of the IT world. We assumed that these sites would be exemplars of strong information architecture and web site design.

In conducting our analysis of these sites, we looked solely at information architecture. This included an examination and analysis of the global, local, contextual and supplemental navigation systems, search, top-down and bottom-up organization, and labeling. For each criterion we methodically examined each site, asking specific questions and looking at specific details of the implementation.

For example, when evaluating local navigation we looked at the clarity of the labels, if the local navigation system was consistently applied throughout the site, how the expand/collapse mechanism of options worked, and if access to all areas of a section was provided. Once each site was evaluated we went through it again to look at it as a whole and make sure our analysis was complete.

While we were going through each site we did not consider visual design, editorial quality, business objectives or any other aspects of the web site aside from information architecture. Since we viewed all of the sites as guests, there were some advanced features (such as enhanced search) on some of the sites that weren't available for us to evaluate. We also assumed that the research offered on the sites is the most important aspect of the sites, and that this should be reflected in the sites' information architecture strategies.

SUMMARY OF RESULTS

As a whole, we were disappointed in the sophistication of the information architecture of the analyst sites. Considering that large corporations look to these companies for leading-edge e-business strategy, we expected them to understand the importance of a strong information architecture strategy and set the example towards which other companies look for guidance.

The analyst sites understand the most basic elements of information architecture, such as global navigation and search. However, deeper information architecture concepts such as leveraging metadata in searching and browsing and connecting content through contextual navigation seem to elude most of them. These are the components of information architecture that, when used effectively, can give a company a nearly invisible competitive advantage.

Table 1. Summary of the Analyst Sites Examined

ANALYST SITE	ANALYSIS
Delphi Group www.delphi.com	Delphi Group was the biggest disappointment of all. All aspects of their information architecture, from navigation to labeling to overall organization, need major improvements.
Forrester www.forrester.com	Forrester has the best information architecture of all the analyst sites we looked at. They still have problems though, especially with consistently applying navigation and integrating research reports and briefs with the rest of the site.
Gartner www.gartner.com	Gartner does a lot well on their site, especially with supplemental navigation. It's hard to get to their actual research though, except through search and "Focus Areas." They also overuse jargon and buzzwords in their labels.
Giga www.gigaweb.com	Giga's information architecture is good and solid. While they don't stand out, they do the basics well. They have a few areas that need improvement, such as a better integration of the eShop with the rest of the site.

ANALYST SITE	ANALYSIS
IDC www.idc.com	IDC's information architecture is pretty average. They do try to go above the basics in their search functionality and results, but it still needs refining. They also have a problem with confusing and inconsistent labels.
META Group www.metagroup.com	META Group appears to have a thought out information architecture at first glance, but as you get more experience with the site it is clear that the overall organization and navigation are especially poor.

GLOBAL NAVIGATION

Global navigation consists of the navigational elements that are persistent across the entire site. It is often presented as graphical links at the top of the page, but it can also include textual links or appear on either side of the page. Sites with graphical global navigation at the top of the page often repeat the links as text at the bottom of the page, as a way to meet accessibility guidelines.

Global navigation is important because it provides branding and helps users set the boundaries for a site. It should be consistent across the site and allow access to the major content areas, and the most important tools and features offered on the site, such as login, search, help, supplemental navigation and the shopping cart.

Table 2. Global Navigation Analysis Summary

ANALYST SITE	ANALYSIS
Delphi Group	There are no position indicators or access to supplemental navigation. Many labels are unclear, misleading and do not match the areas they lead to.
Forrester	Navigation is clear, consistent, and comprehensive at the top levels of the site, but inconsistencies develop as users move deeper into the site.
Gartner	Navigation is consistent, clear and provides access to all areas of the site. The lack of position indicators and the placement of elements at the top and bottom of the page are a problem.
Giga	Navigation is clear, consistent, and comprehensive throughout the site. Some labels are unclear.
IDC	Navigation is consistent and provides access to all areas of the site. Some labels are confusing, such as the “Resources for...” links.
META Group	The global navigation offers access to the different content areas, but there is no access to supplemental navigation and the position indicators do not follow accepted conventions.

Global navigation is solid and usually consistent on most analyst sites.

With the maturity of the web today, it's not surprising that the sites we looked at understand the importance of global navigation and use it effectively. All of the sites have a global navigation bar that allows users to access the main content areas of the site and supplemental navigation (when available), and to go back to the main page of the site.

Forrester provides a representative example of good global navigation. See Figure 1. Users can access the main content areas of the site (e.g., "Products & Services," "Press Releases," "Investor Information," "The Company"), supplemental navigation (e.g., "Site Map") and other features of the site (e.g., "Search Our Research," "Contact Us," "Help," "Register/Login"). Forrester even includes audience access in their global navigation through their "Become a Forrester..." links at the bottom of the bar.

However, as users move deeper into the Forrester site, inconsistencies develop that can lead to confusion. For example, when going from the site home page to the page about becoming a client, the biggest change is relatively minor: the search box becomes a search label. While this may cause some users to pause, it probably won't pose a problem for most users. However, when users get into the research database, the change in the global navigation is more dramatic and potentially problematic. Some elements disappear, such as "Products and Services," while some move to a different location, and new elements are introduced for the first time. See Figure 1. These changes can cause confusion and frustration for users. Elements they are used to seeing are no longer available. Also, they may not know how to get back to an area they were just in. Some elements, such as the "Full Research List" and "Glossary" are not available via global navigation in any other area of the site. Inconsistency such as this is a common problem among the sites we reviewed.

Figure 1. Forrester: Global Navigation as One Gets Deeper Into the Site



Position indicators are used effectively by only half of the analyst sites.

Forrester, Giga, and IDC include position indicators in the global navigation that show users the content area they are currently in. Position indicators can take the form of a highlighted label, arrow or some other simple indication. This can be a helpful way to give users a high-level view of where they are in a site. When users do not have these simple clues, it can be difficult for them to tell which part of the site they are in, especially if there is nothing else on the page to tell them. This often happens when users are deep within a site.

META Group has little triangles that serve as position indicators in their global navigation. However, these triangles do not function as users would normally expect. JavaScript powers META Group's navigation and the triangles change as users click through the navigation. But once users reach a content page, the triangles go back to their default position. In Figure 2 below, it is impossible to tell if you are in the "Research Library," "Products & Services," or the "Store." We actually arrived at this page through the "Products & Services" link. If the triangles were implemented correctly, the triangle for "Products & Services" would be turned down in the example below.

Figure 2. META Group: Lack of Position Indicators



Delphi Group misuses position indicators in a different way. They highlight the link "Global Partnerships" on every single page, no matter which section of the site users are in. See Figure 3. This defeats the purpose of position indicators and is confusing since it gives misinformation about a user's location.

Figure 3. Delphi Group: “Global Partnerships” Highlighted on “Insight Research” Page

Global Thought Leaders for e-business
USA • Australia • Canada • Europe • Japan • Latin America • New Zealand

Insight Research Service

When your organization needs to deepen its practice in e-business and knowledge management, Delphi Insight Research is the proven source for informed perspective and thought-provoking original research.

Insight Research Service Navigation:
[Overview](#) | [Insight Research Components](#)
[Vendors Covered](#) | [Technologies Covered](#) | [Purchasing](#) | [Request More Information](#)

Single Reports Available:
[Business Portals](#) | [Corporate Portals Today](#) | [e-Learning Report](#)

Search

Global Partnerships

Top Of Delphi

Gartner does not use position indicators in its global navigation.

LOCAL NAVIGATION

Local navigation changes between content areas, allowing users to browse within a content area, such as products or services. Local navigation is necessary when an area is important, complicated, or contains a lot of content. Local navigation should be consistent within an area, but it may vary from area to area. It is important that the local navigation reflect the needs of the current section, while working in a consistent manner so users do not have to learn a new system for each area of the site.

Local navigation often provides links to the “local home page” of a section and “sibling pages” (i.e., pages on the same level of the hierarchy). E-commerce sites often do this by allowing users to see the product hierarchy or classification. Well-done local navigation can keep users from having to “pogo stick” back and forth from an index page to all of its lower-level pages by making all of the options available from every page. Like global navigation, it can also use position indicators to show users where they are in relation to the other content that is near-by.

Table 2. Local Navigation Analysis Summary

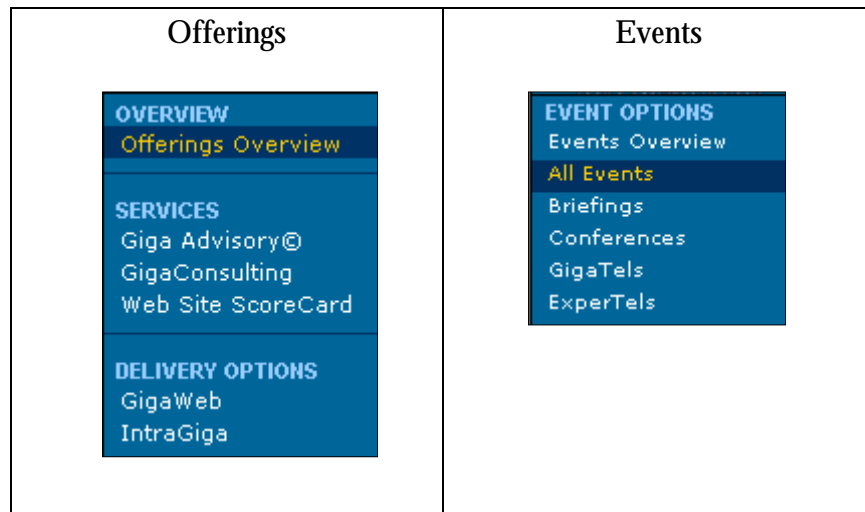
ANALYST SITE	ANALYSIS
Delphi Group	Local navigation is poor. It does not provide access to all content in an area, is not consistently applied throughout the site, there is no expand or collapse mechanism, and many of the labels are poor.
Forrester	Forrester’s biggest problem is consistency. Some pages have the local navigation at the top of the page, while others have it on the left side and others have it both places.
Gartner	Local navigation uses colors effectively to differentiate the various areas of the site. Navigation is consistent as the user drills down into the site.
Giga	Good local navigation is consistently applied and implemented throughout the site. It is clear what content is nearby in each area and where the user currently is.

ANALYST SITE	ANALYSIS
IDC	Local navigation is okay at the high levels of the site, but it disappears on the most granular levels. The navigation changes as users move from section to section in the site.
META Group	Local navigation is poor since it is tightly integrated with the global navigation and is hidden in JavaScript at the top of the page rather than being located on the page itself.

Few analyst sites offer consistent and clear local navigation.

Giga and Gartner provide solid local navigation that allows users to move around each content area on the site. Giga uses position indicators to show users which area they are currently in. See Figure 4. Clear labels let users access all of the content within an area of the site. Users have a clear understanding of where they are and what is nearby. Notice that while the specific options in the Giga example vary, the look and feel of the navigation is the same. It is consistently located on the left side of the page throughout the site. Users don't have to relearn a new system for each section of the site.

Figure 4. Giga: Local Navigation in “Offerings” and “Events”



Many analyst sites suffer from poor local navigation.

Lack of consistency in local navigation is the biggest problem we found on many of the sites. Some sites, such as IDC, have good local navigation on higher levels but it disappears as users drill down deeper into the site. It is important that the local navigation stay with users as they move through the site.

META Group closely integrates their global and local navigation systems. See Figure 5. From any page in the site users can access local navigation for any section. While this sounds like a good idea, it doesn't work in practice. The local navigation is hidden within the JavaScript at the top of the page. For example, to find a document in the "Research Library" users would begin by clicking on "Research Library" from the global navigation. However, users aren't taken to a "Research Library" main page, as they might expect. Instead, the page remains the same with the exception that a second row of choices appears below the global navigation options (e.g., "Profiles Matches," "By Type," "By Service"). Users must now choose one of these new options. Clicking on "By Type" causes a third row of navigation to appear (e.g., "Deltas," "Latest META Fax," "Presentations"). When users select one of these options they are at last taken to a new page.

Besides being confusing, META Group's local navigation fails because it is not on the page itself. The only way users can see what is nearby is to go back to the global navigation and drill down through all the options again. Users have no way of knowing what section of the site their current page is in since there are no position indicators or other clues indicating where they are. (See discussion of position indicators on page 8.) This problem is compounded for users who arrive at a content page via a "back door," such as search, where they do not have the context of having drilled down through the global navigation.

Figure 5. META Group: Integrated Global and Local Navigation as Users Click Thought It



CONTEXTUAL NAVIGATION

Contextual navigation allows users to browse among related content spread out across the site. On e-commerce sites this is known as cross-selling, up-selling, comparison and coordination shopping. On content driven sites like the analyst sites we looked at, it could be links to related research and services. Contextual navigation shows users information they may not have thought to look for on their own.

Table 3. Contextual Navigation Analysis Summary

ANALYST SITE	ANALYSIS
Delphi Group	There is little contextual linking, and what is there is inconsistently applied and not always relevant.
Forrester	Does an okay job of linking items together. They could do a better job if they had more contextual navigation and made it more obvious.
Gartner	“Focus Areas” do an excellent job of bringing together different types of content from throughout the site into one place. There is little contextual linking outside of these areas though.
Giga	The site’s contextual linking is appropriate; there just isn’t enough of it.
IDC	“Research for...” areas do an excellent job of pulling together content for a specific audience. There is linking in other areas of the site, but it needs to be refined and made more consistent.
META Group	Does an okay job of linking items together. They could do a better job if they had more contextual navigation, it was more obvious and it was consistent for all document types.

There are isolated examples of excellent contextual navigation among the analyst sites.

A few sites offer excellent contextual navigation, but typically in only one area of the site. Gartner’s “Focus Areas” and IDC’s “Research for...” sections are excellent examples of this. See Figure 6 for an example from the Gartner site. These special sections pull together content from a variety of different areas on the site (e.g., events, news, research reports) all on a single topic, or for a particular audience. This allows users to make connections between content objects they might not have thought of before. Unfortunately, both Gartner and IDC do not extend this throughout their site. There is relatively little contextual navigation on the rest of their sites.

Figure 6. Gartner: Contextual Navigation in the E-Business Focus Area

E-Business	
<p>Research</p> <ul style="list-style-type: none"> ➤ The Hottest E-Marketplaces During the Next Two Years ➤ Does the Internet Really Change Everything? <p>You may need to register or sign in to access or purchase the research listed below.</p> <ul style="list-style-type: none"> ➤ Evaluating the Web Store for Shoppability: An Analytical Framework ➤ European E-Business Czar Agenda 2001 <hr/> <p>Web Site-ings</p> <p>Some companies see warranties as a necessary evil. This week, Web Site-ings looks at three sites that show how standing behind their products is quite simply good business.</p> <ul style="list-style-type: none"> ➤ REI.com ➤ Coach.com ➤ LLBean.com 	<p>In the News</p> <ul style="list-style-type: none"> ➤ Gartner Survey Shows even Among "Pure-Play" Online Retailers, Name Brands Won the Holiday Sales Race ➤ Gartner Survey Shows Most U.S. Holiday Shoppers Bought at Only a Select Few Online Retailers ➤ Gartner Survey Shows Many U.S. Internet Users Think File Sharing Services Over the Internet Violate Copyright Laws <hr/> <p>Upcoming Events</p> <ul style="list-style-type: none"> ➤ IEB Europe 2001 20-22 February 2001 Olympia, London ➤ Midsize Enterprise Summit: Managing in an E-Business World

Contextual navigation doesn’t work on most analyst sites.

Many of the analyst sites we looked at are missing opportunities to link related content together. Smaller reports could be linked to bigger, more expensive ones, and a general report could link to a more thorough discussion of the topic. META Group tries to do this through their “Related Articles” and “Related Topics” links. See Figure 7. While we applaud their efforts, the implementation needs refining. META Group’s implementation is not consistently applied throughout the site. Users cannot be sure when they will find related articles and when they will not. Some articles have many related

links while others only have a few, leading users to wonder if they are seeing all of the related content. To compound the problem, these links are located in the bottom right of the screen, which often means they appear “below the fold,” where users may not even see them.

Figure 7: META Group: Contextual Navigation on a Report Page



Linking articles to the corresponding authors and vice versa is another form of contextual navigation that all of the sites should include. Users should be able to go from a report to the biography of the author who wrote it. Letting users learn more about the author adds credibility to the author’s analysis. Many sites do this, such as Forrester and Giga. Likewise, the author’s biography should link to all of the articles that the author has written. Most of the sites fail in this regard.

SUPPLEMENTAL NAVIGATION

While the previous types of navigation exist alongside the content on the page, supplemental navigation provides users with “outside the box” ways to access content. Site maps, tables of content, indexes and guides give users a way to navigate a site without having to drill down through the primary hierarchy.

Supplemental navigation is most useful when it gives users with a specific goal direct access to what they need. But supplemental navigation can also provide an overview of the site, allowing users to feel more comfortable with what is (and is not) there.

Table 4. Supplemental Navigation Analysis Summary

ANALYST SITE	ANALYSIS
Delphi Group	There is no supplemental navigation on the site.
Forrester	Includes a site map. Labeling and appropriateness of items is good, although some sections of the site are not included.
Gartner	Includes a site map and guides. Both are well implemented.
Giga	Includes a site map. Site uses consistent labeling, but doesn't include the eShop, which is a big problem.
IDC	Includes a site map, but is not well made. Labeling is inconsistent, granularity of items is inappropriate and it lacks comprehensiveness.
META Group	There is no supplemental navigation on the site.

Analyst sites commonly use site maps, but often implement them poorly.

Site maps and tables of content allow users to see the structure and content of the entire site from a high level. Site maps are a graphical representation, while tables of content are textual. The terms are often used interchangeably. Both of these tools show users the main content areas of the site, as well as subcategories. The items included in a site map should have the same level of granularity or be from the same level of the site hierarchy, and its labels should match the labels used elsewhere on the site.

Gartner has a good example of a site map. See Figure 8. They call it a “Site Index,” but it is actually a site map/table of contents since it is not an alphabetical listing of all of the items on the site. The Gartner site map includes all of the main content areas of the site, including the subcategories for each of those areas, and even shows sub-subcategories when appropriate. The hierarchy is apparent from the use of bullet points. The labels used in the site map match the labels used elsewhere on the site, although at times the ordering of the elements is different.

Figure 8. Gartner: Site Map



The site maps of the other sites lack comprehensiveness, consistency in labeling, and appropriate granularity of items. For example, IDC uses different labels on their site map than in other places on their site. For example, the label “Hot New Research” is used on the site map, but on the rest of the site the same area is labeled “Press Center.” Giga divides the content of their site into two areas: the main site and the “eShop.” The “eShop” is where all of their research documents reside. Unfortunately the “eShop” is not included on the site map, which is unfortunate because it is otherwise a very good map. It is impossible for users to get to the “eShop” or to see what the research categories are from the site map.

Delphi Group and META Group do not offer a site map or any form of supplemental navigation on their site.

There are many opportunities for more types of supplemental navigation.

Site maps and tables of content are just two types of supplemental navigation. Only a few of the analyst sites offer any other form of supplemental navigation. Gartner, for instance, is the only site to offer guides, a site tour and online training. The guides are particularly valuable as they teach users how to utilize the different features and tools that are available on the site. Gartner, META Group and Forrester all include a glossary of business and information technology terms. While useful in their own right, these glossaries also could be turned into an index, pointing users to content on each topic included in the glossary.

SEARCH

Well-implemented search can allow users to jump right to the specific piece of information they are interested in. Like supplemental navigation tools, search gives users alternative ways to access site content. The search results page is an important part of the effectiveness of the search system. Allowing users to filter, sort, and refine search results is important when queries yield too many hits.

Table 5. Search Analysis Summary

ANALYST SITE	ANALYSIS
Delphi Group	Very basic search. Limited amount of functionality and it is difficult to change the default settings.
Forrester	Search results lack information and functionality. It is unclear how the thesaurus improves search.
Gartner	Search is good, but there is so much functionality it almost overwhelms users.
Giga	Good basic search. eShops has a separate search, so it is impossible to locate research reports from the main site.
IDC	The only search that obviously uses metadata. The large number of options may overwhelm inexperienced users.
META Group	Good search functionality and results page.

Many analyst sites do not fully exploit conventional search functionality.

All of the sites that we looked at included a search feature. The searches offered on the sites usually include the basic functionalities users have come to expect (e.g., keyword searching, phrase searching). Features such as limiters, wildcards, Boolean Operators, thesauri, and specialized searches were found on some of the sites, but not all, and no site offered all of these features.

Better indexing and use of a controlled vocabulary or thesaurus could improve the search on all of the sites. A controlled vocabulary helps ensure that

documents are tagged consistently with the same terms. It also helps to match up the terms entered by users with the terms used by the indexer. Even the sites that have a thesaurus (e.g., Forrester, IDC, META Group) could improve it. For example, Forrester uses its thesaurus to broaden a search by including synonyms to the search query. The alternates found for the query “B2B” were “b2b,” “b-to-b,” “b2b,” “b2b,” and “btob.” The thesaurus lists “b2b” three times as an alternative (even though it is identical to the query term), yet it fails to include obvious terms such as “business to business” or “business-to-business” in the list of alternatives.

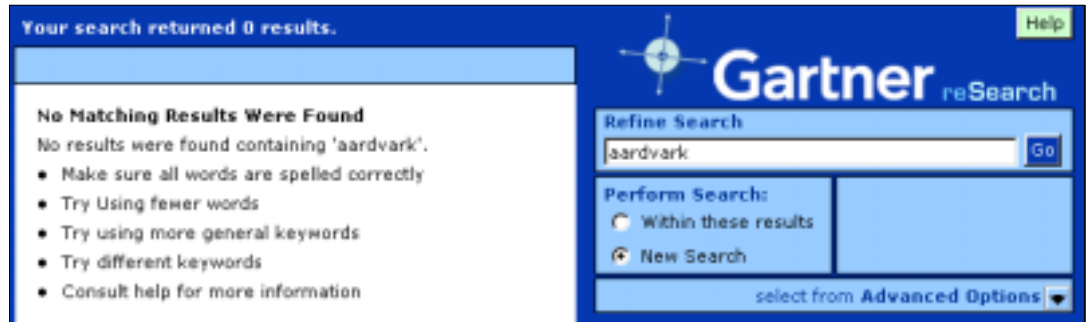
Being able to search the entire site, not just the research documents, is important. IDC and Giga are the only sites that allow users to search all areas of the site. This is especially important if the analyst site is trying to sell its consulting services as well as its research. IDC allows users to choose which areas of the site they want to search -- “Research Documents,” “Press Releases,” “IDC.com.” Giga, because the content of their site is split into two sites, offers two separate searches. The search on the main site searches only the content found there, while research documents can only be searched from the “Search eShop” link. This requires users to conduct two separate searches if they want to check the entire site’s content.

Analyst sites provide decent, but limited, search help.

All of the sites except Delphi Group offer help or tips on how to use the site’s search. This is extremely important since search engines vary so widely in their capabilities and commands. Including example queries is an easy way to help users understand how to use the site’s search. Including an example next to the search box lets users quickly see if they should include quotes, operators, or other special symbols. Some of the sites that offer help include examples as part of the help.

Gartner and Giga are the only sites that include help when a search yields no results. See Figure 9 for an example from the Gartner site. A message explaining why the query didn’t return any results is helpful for users. It gives them ideas on how to tweak their query so it can be more successful. Adding intelligence to the search engine, such as correcting spelling mistakes or offering suggestions of what users may have meant, is a way to help prevent null result sets in the first place. None of the sites we looked at do this.

Figure 9. Gartner: A Null Search Results Page



Search results pages vary in information presented and functionality.

Search results pages should give users enough information to help them decide which results will match their needs, while not presenting so much information as to be overwhelming. The following type of information could be included: the title of the document, a brief summary, keywords, date, size of document, and author. Users should also be able to sort results in the way that is most meaningful for them.

IDC offers a lot of functionality in their search results. See Figure 10. They include basic information such as the title of the document, summary, author, date, type of document, and relevancy to the query. Users can sort the results by six different factors (e.g., "Relevancy," "PubDate," "DocType," "Author"). The entire query is displayed at the top of the page. It includes detailed information, such as the Boolean Operators used and specific fields that were searched (e.g., "PUBDATE"). IDC is the only site that shows users the query in this high level of detail.

Figure 10. IDC: Search Results Page

Search and Results Summary: 1 2 3 4 5 6 7 [Next] [Refine this Search](#)

Search criteria: "(web design)<AND>((PUBDATE>=02/01/1999)<AND>(PUBDATE<02/22/2001))"

Rel	Doc	PubDate	DocType	Title	Author	Hide Abstracts
0.95	New Entrants to the Internet Services Market	by Bitten Olesen				
	Q121F	December 1999	Report			
This report examines the different professional organizations from outside the traditional IT industry that are entering the Internet services market. The focus is on the latest breed of Internet service providers, such as advertising agencies, ...						
0.91	Education Markets Research Update: May 1999 (Part I)	by Sau Lau, Riley McNulty				
	19615	June 1999	Newsletter			
The education portal allows individual instructors to create private and public "CourseSites" and will soon offer access to institutional courses provided by Blackboard's college and university customers. Blackboard.com provides instructors ...						

Delphi Group provides basic search results pages with little functionality. One feature they do include, however, is highlighting the search query in the results. See Figure 11. This gives users a way to quickly evaluate the returned results, since they can scan the list to see where their term appears. None of the other sites offer this feature.

Figure 11. Delphi Group: Search Results Page with Query “Intranet” Highlighted

Number	Relevancy %	Title and Description
1.	100%	<p>Article-Intranets: The Way to a Wider Tomorrow</p> <p>change process and fully appreciate the ultimate benefits, we instinctively know this is a change for the better. In the case of intranets, this instinctive drive is especially strong. The rate of acceptance and growth is unprecedented. Consider that intranets</p>

TOP-DOWN ORGANIZATION

For most sites, there is a key set of content that is crucial to the site’s success. For e-commerce sites, the products are most important; for the analysts’ sites, it is the research. A good classification scheme for the research will help users find what they are looking for quickly and easily. The classification scheme also represents how the analysts describe the “intellectual space” they work in, and in essence becomes part of their brand.

The top-down classification of research provides the high-level framework for browsing. The goal is to break up the research into categories that make sense to users so they can drill down to the specific piece of research they are interested in.

Table 6. Top-Down Organization Analysis Summary

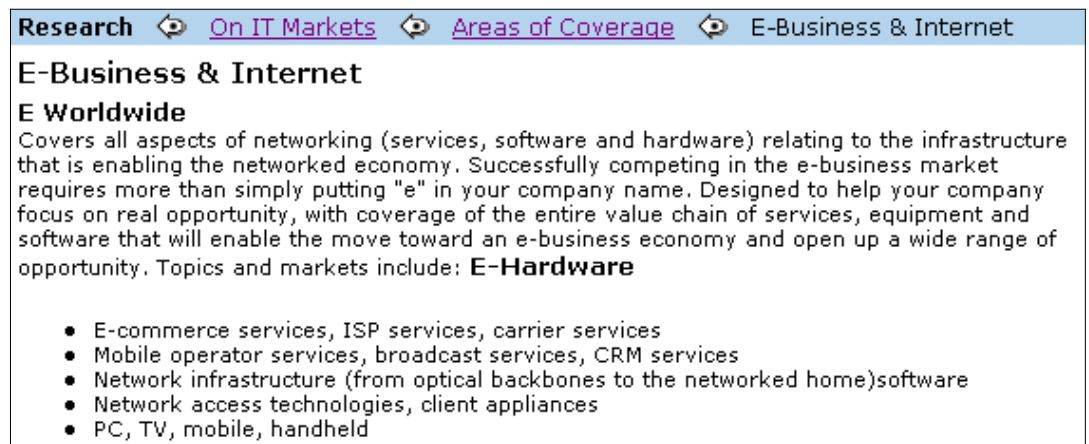
ANALYST SITE	ANALYSIS
Delphi Group	Poor organization and labeling of the topics included on the site.
Forrester	Good implementation of categories and subcategories for research. Categories include multiple facets or aspects of a topic, as well as research types, which aids users in finding relevant items.
Gartner	High-level organization is good, but it is poorly linked to the individual reports and other low-level content items.
Giga	Very basic and clear classification of topics. Research topics are only available from the eShop page, and it would be better if they were integrated with the rest of the site.
IDC	Organizes content by audience. While this is good, users who do not identify with an audience cannot access the research from a product or topic focus.
META Group	High-level categories are unclear and it is difficult to tell the difference between them.

Most analyst sites use products and services as access points into their research.

Most of the analyst sites are organized around the products and services they offer. They allow users to browse the products and services as a simple way to get an overview of the research they offer. Users learn about the topics the site covers and can then proceed to the actual research documents themselves.

The notable exception is Gartner. Like the other sites, users can browse the different services and topics that Gartner offers. However, these topic overviews are “dead-ends.” Users cannot get to a research document from the overview pages. They must navigate to a “Focus Area” or initiate a search in order to get to any research documents. Gartner’s “Focus Areas” are discussed on page 15. Below is an example of an overview page with no links to research documents.

Figure 12. Gartner: Example of a Dead-end Overview Page



Most analyst sites ignore access by audience.

When organization by audience is done well, it matches users’ self-perceptions and allows them to focus on just the content they need. When done poorly, users do not trust the site structure. They may have a feeling that they are missing something important, so they either explore all audiences or ignore the audience categories altogether and go straight to the products section.

IDC is the only site that organizes their content by audience. They provide three levels of audience support though:

Sub-sites: IT Professionals have their own portion of the IDC site called “IT Advisor.” Most of the content for this audience is contained within this area and there are few links to other parts of the site.

Gateways: eBusiness Executives have some content written specifically for them, but the deeper content is accessed by links into other parts of the site. For example, each product includes a “Published Research” link into the “Research Store.”

Virtual: The Investment Professionals “Hardware” research area is simply a link to the IT Suppliers hardware research area. These two audiences share the same content.

While we applaud IDC’s use of audience organization, IDC pushes their users too much into thinking in terms of audience. Users who do not identify with an audience should still be able to access the content. IDC appears to do this in their “Products” section. However, even here IDC organizes many of their document types (e.g., written research, e-flashes/telebriefings, research libraries) by audience. Users must still select one of five audiences, which takes them to that audience’s section of the site, where they can finally view the document type they are interested in.

Most of the other sites either ignore audience access completely or only give it marginal coverage.

The analyst sites lack sophisticated classifications for their research.

Many of the sites we looked at do not implement a sophisticated classification or organizational scheme for their research. The classifications are either very basic or rudimentary, such as Giga’s, or they are too complicated and confusing, such as Gartner’s.

Forrester is one of the few sites that uses a clear classification for their research documents. They support different facets or attributes in their classification that allow users to access the research from multiple perspectives and in multiple ways. “Coverage Areas” are organized into the general topics covered in the research and include many different types of research such as “Strategy Research” and “Technographic.” In the example below, the “Coverage Areas” are divided into four main sections: “Industries,” “Regions,” “Skills/Technologies,” and “Customer Segments.” See Figure 13.

Figure 13. Forrester: Coverage Areas

Industries	Regions	Skills/Technologies	Consumer Segments
Automotive Business-To-Business Consumer Packaged Goods Financial Services Government Healthcare Media Retail Telecommunications Travel	Canada Europe France Germany United Kingdom	Applications & Services Consumer Technology Customer Service Digital Marketing Infrastructure Internet Economy Net Policy & Regulation Organization & Skills Site Technology Web Design	Affluent Consumers Young Consumers

Forrester recognizes that users may want to access the content by the type of research (e.g., “Strategy Research,” “Technographics”). Each research type is also classified into different topics. Forrester uses the same categories in the research type classification as in the “Coverage Areas.” For example, “Strategy Research” re-uses the “Industry” and “Skills” categories. Because the “Strategy Research” area has a finer level of granularity, they are able to subdivide it more. See Figure 14. Two regional divisions, “European Strategy Research” and “Country Strategy Research,” are then further subdivided into common industries, such as “Media” and “Financial Services.”

The fact that Forrester reuses categories across different classifications is good. Through using the site, users understand what the categories are and the type of information they are likely to find (e.g., “Media” means the same thing in “Coverage Areas” and “Strategy Research”). They understand that they can access the same documents no matter where they are in the classification. There are, however, some inconsistencies in the way Forrester uses some terms. A minor example is that the labels “B2B” and “Business-To-Business” are used interchangeably. While this may or may not pose a problem for users, it shows a lack of a full controlled vocabulary.

Figure 14. Forrester: Strategy Research

Strategy Research	European Strategy Research	Country Strategy Research
INDUSTRY MARKET FOCUSES <u>Automotive</u> <u>B2B</u> <u>Consumer Packaged Goods/Netquity™</u> <u>Financial Services</u> <u>Healthcare</u> <u>Media</u> <u>Retail</u> <u>Telecom</u>	EUROPEAN MARKET FOCUSES <u>B2B Europe</u> <u>Financial Services Europe</u> <u>Media Europe</u> <u>Mobile Commerce Europe</u> <u>Retail Europe</u> <u>Telecom Europe</u>	CANADIAN MARKET FOCUSES <u>Canada</u>
TECHNOLOGY MARKET FOCUSES <u>Applications & Services</u> <u>Infrastructure</u> <u>Site Technology</u>	EUROPEAN CORE SKILLS <u>eCommerce Europe</u>	GERMAN MARKET FOCUSES <u>B2C Germany</u> <u>Financial Services Germany</u>
CORE SKILLS <u>Customer Service</u> <u>Digital Marketing</u> <u>Internet Economy</u> <u>Net Policy & Regulation</u> <u>Organization & Skills</u> <u>Web Design</u>		UK MARKET FOCUSES <u>Financial Services UK</u> <u>Media UK</u> <u>Retail UK</u>
		UK CORE SKILLS <u>eCommerce UK</u>

A bigger inconsistency can be found in the “Skills” category. In the “Strategy Research” classification, “eCommerce” is listed as a skill in both the European and UK categories. However, “eCommerce” is not included as a “Core Skill” under “Strategy Research.” It is also not included as a “Skill/Technology” in the “Coverage Area” classification. Users expect to be able to access the content from anywhere in the classification, yet in this example, they can only get to eCommerce skills from “UK Strategy Research.”

BOTTOM-UP ORGANIZATION

Bottom-up organization is based heavily on meta-information: the fields that are assigned to the documents and the specific values for those fields. A site's bottom-up classification is often most visible during browsing and in the search process through the use of search zones, limiters, and sorting options. Bottom-up organization also incorporates how the low-level objects are integrated with the high-level concepts of the site.

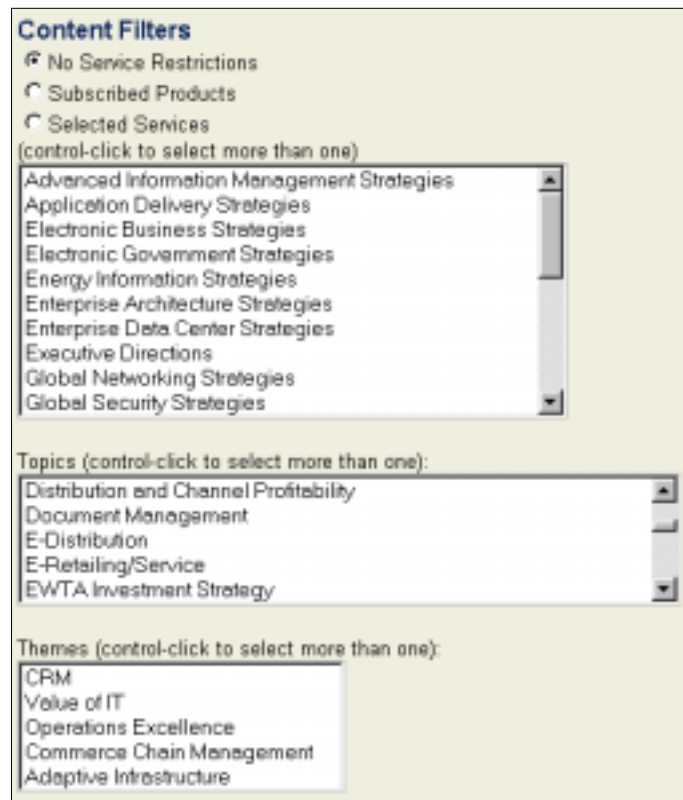
Table 7. Bottom-Up Organization Analysis Summary

ANALYST SITE	ANALYSIS
Delphi Group	Poor integration between bottom-up and top-down concepts. Document types are handled poorly.
Forrester	It is hard to understand the difference between the document types. Document types are also used as a major organization system at the bottom level, which is not the most appropriate implementation.
Gartner	Indexes each research document with a variety of tags, but fails to leverage those tags in a useful and meaningful way. Document types are clear and are used to aid in searching.
Giga	Bottom-up and top-down topics are well integrated. Good handling of document types. They are used to aid users in understanding search results.
IDC	Excellent integration of top-down and bottom-up topics. Relationships between index terms are mapped to specific queries to greatly improve the recall of search results.
META Group	Good indexing of documents by a variety of different fields. This indexing is leveraged through search and browsable indexes.

Few analyst sites use meta-information to support searching and browsing.

META Group clearly indexes its documents with a variety of different types of meta-information. The “Power Search” allows users to refine their search by specifying some of those fields (e.g., “Services,” “Topic,” “Theme”). See Figure 15. META Group has also integrated their top-down and bottom-up information architecture well. “Services,” “Topic,” and “Theme” are also browsable indexes on the site.

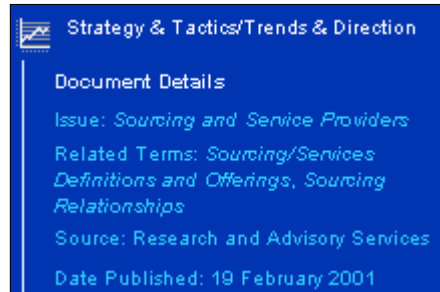
Figure 15. META Group: Power Search Options



Gartner also tags their documents with meta-information, but they do not integrate it as well as META Group does. At the top of each Gartner research document is a standard set of meta-information (e.g., date published, source of the document, related terms). See Figure 16. This information is plain text. Gartner is missing many opportunities to leverage the related terms. The terms are not links, so users cannot click on them to browse more documents tagged with the same term. Users must initiate another search to find similar documents. Gartner does use these terms to power their “More Like This”

feature in the search results. However, allowing users to do this once they have found a document saves the time and hassle of starting a new search.

Figure 16. Gartner: Meta-information for a Research Document



IDC is one of the few analyst sites to provide some of the advanced vocabulary control needed for full bottom-up integration. They do not support a full thesaurus, but research keywords are mapped to specific queries to improve results. For example, the “optical drives” link retrieves research based on alternate terms (“semiconductor storage”) and even authors who specialize in the topic. See Figure 17.

Figure 17. IDC: Search Query

```
Search criteria: "(storage <AND> mechanisms<OR>optical <AND> removable)<OR>(semiconductors<AND>storage)<OR>
((AUTHOR<CONTAINS>Schlichting)<OR>(AUTHOR<CONTAINS>Puce))<AND>((PUBDATE=>09/01/1999)<AND>
(PUBDATE<02/26/2001))"
```

None of the analyst sites handle multiple document types very well.

Document types are usually not a crucial organization scheme, but they can be useful as a fine-grained filter. They represent one of the more subtle ways to classify research, and thus are a sign of a more sophisticated site.

None of the six analyst sites did an above-average job with document types for their research collections.

Giga provides the best implementation because it is the only site that provided a description of its document types. The description was hard to find and was incomplete, but at least it clarified the difference between an “IdeaByte” and an “IdeaBundle.” The document types are presented consistently and effectively in the product listings. Giga also uses research document types to

help identify different documents in the eShop search results. See Figure 18. Users can clearly see what type each result is.

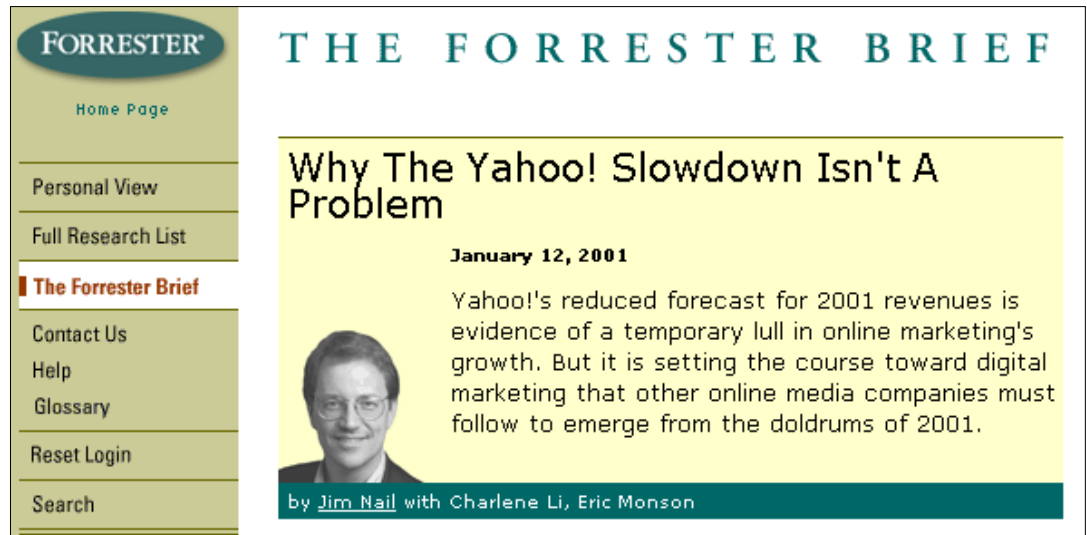
Figure 18. Giga: Document Types in eShop Search Results

The screenshot displays three document listings from Giga's eShop. Each listing includes a document type label on the left, a title and price in red text, a brief description, and two buttons on the right: 'More Info' and 'Order Now'.

- Planning Assumption:** **A Buyer's Guide to ASP's (Pascal Matzke) - \$499.00**
IT management is coming under increasing pressure to investigate the advantages of application service providers (ASPs). However, clients should be careful about rushing to an ASP; the ASP model is still immature, and the proposed cost benefits remain, to a large extent, unproven.
- Idea Bundle:** **A Global Perspective on E-Business Solution Opportunities (Andrew Bartels, et al) - \$250.00**
Giga analysts take a comprehensive, incisive look at opportunities for e-business around the world. Includes a table of most promising markets/countries, examines potential problems and solutions.
- Research Digest:** **A Model for Assessing Vendor Risk, Applied to Leading EJB Application Server Vendors - \$599.00**
Giga's Research Digest is a terrific way to follow the key themes emerging from Giga's Research community. Published monthly, each issue includes an in depth cover story tackling a key issue, Giga Position statements taken right from recently published Planning Assumptions, a selection of relevant Ideabytes as well as a complete index of the Ideabytes published for the month.

Forrester's document types are simple and straightforward (e.g., "Report," "Brief," "Forecast," "Interview"). However it is up to users to figure out the difference between the different types. Forrester is the only site that tried to turn their document types into major sections of the site. Each document type has its own branding at the top of the front page of a research document. See Figure 19.

Figure 19. Forrester: Example of a Brief



Forrester's branding of document types does not work though. The only time users sees the document type is on the search results page and on the front page of the document. There is no way to find research by document type elsewhere on the site. Forrester should add top-down access to their document types, such as through a brief index, or else demote them like the other analyst sites do.

LABELING

Labeling is important at all levels of a site. At a high level, labels include those used for global navigation elements, product categories, and site features. At a low level, labeling systems include labels of individual products, chart column headings, and contextual navigation links for specific reports.

No site had consistently outstanding labels at all levels, nor did any site use consistently weak labels at all levels. However, even the better sites had significant labeling issues that deserve special attention.

Table 8. Labeling Analysis Summary

ANALYST SITE	ANALYSIS
Delphi Group	Labels in the navigation systems often do not match the labels in the page titles and page headers.
Forrester	Labeling is generally clear and consistent throughout the site.
Gartner	Makes good use of scope notes along with links so the meanings of the labels are clear.
Giga	There are consistency problems in many of the labels. Some are clear while others use jargon and are not descriptive.
IDC	Page titles are inconsistent, labels in the navigation do not always match the page headers, and some labels on the site map do not appear anywhere else on the site.
META Group	Granularity of labels is often mixed, page titles are often blank, and jargon and confusing labels are not defined.

Many analyst sites use unclear and non-descriptive labels.

A label should provide lots of information and be concise, while being clear and descriptive of the content behind it. Unclear and non-descriptive labels do not fully describe what's behind them. Most problems with labeling fall into this category.

The link “Top of Delphi” on the Delphi Group home page does not tell users that this link will bring them back to the main page of the site. Using the label “Home” or “Delphi Home” instead would make it clear to users what the link does.

One of the six different research types offered by META Group is the “Delta.” It is impossible to tell what this document type is and how it differs from the other types of research META Group has, such as “Presentations,” “Research Reports,” and “Interactive Reports.” See Figure 20. To compound this problem, we were unable to find a description of each of the research types anywhere on the site.

Figure 20. META Group: Document Type Labels



Misleading labels cause confusion on some analyst sites.

Misleading labels appear to have a clear meaning, but turn out to be something unexpected. This is slightly different from unclear labels. An unclear label gives users no idea of what’s behind it. Misleading labels give a clear idea that turns out to be incorrect.

IDC has a section in their global navigation labeled “Services for Corporate Management.” However, this section only contains information about human resources. In fact, the title of the main page of the section is “Human Resourcing Strategies.” Users will come to this section expecting to find information about corporate management and find a completely different subject instead. “HR Professionals” or “HR Managers” would be a more appropriate label for this section, as it is in keeping with the audience focus.

Most analyst sites have problems with inconsistent labels.

Inconsistent labels occur when the same page is referred to in slightly different ways. While this may seem like a minor issue, inconsistent labels are sloppy and can make a good site feel poor. Use of a controlled vocabulary can help prevent this.

The Delphi Group uses five different labels for the same program on a single page: “Partnerships,” “Global Partnerships,” “Partner Area,” “Delphi Partnership Program,” and “Global Partnership.” One label should be used consistently throughout the site. See Figure 21.

Figure 21. Delphi Group: Inconsistent Labeling



A few analyst sites include inappropriate labels.

Inappropriate labels use jargon or language unfamiliar to the target audience. While we recognize that analysts often create new words for new concepts, they must be careful that users are able to understand what the new terms mean. Scope notes are a simple and effective way to convey the meaning of new terms.

“GigaFLASH” does little to help users unfamiliar with the Giga web site understand that this is the area where breaking news is highlighted on the site. Including a short scope note explaining what is available in the section, would clarify this use of jargon.

SUMMARY

In this paper we looked at the core components of information architecture: global, local, contextual and supplemental navigation, search, top-down and bottom-up organization and labeling.

Our analysis was not complete by any means. The overall usability of the site, the shopping experience, and personalization and customization tools are just some of the elements that were beyond the scope of this paper. We did not do any testing with representative users, nor did we examine the specific business needs of each organization to see where the information architecture was supporting (or not supporting) the corporate goals.

As a whole, we were disappointed in the sophistication of the information architecture of the analyst sites. They have the basics of global navigation and search, but beyond that, there are a lot of opportunities for these sites to improve their information architectures. Considering that large corporations look to these companies for leading-edge e-business strategy, it would appear that either the business analysts themselves do not have a handle on the more advanced information architecture concepts, or this advanced knowledge is not showing up on their own web sites.

Our recommendation for all of the analyst sites is to think more strategically about the information architecture of their sites. Specifically:

- Find more opportunities to leverage contextual navigation to better support serendipitous browsing of and learning from their research collections. Each of their bodies of research represents tremendous learning opportunities that are not being realized (and we suspect sales will improve as well).
- Undertake a holistic review of access methods for their sites to see where supplemental navigation (like a site-wide index) could help fill in some of the access gaps.
- Focus more internal efforts on overcoming the top-down and bottom-up integration problems that persist across all of the sites. There are too many examples where it is obvious the “right hand does not know what the left hand is doing.” The ramifications from this improved integration will improve the usefulness of the top-down organization, the quality of the bottom-up meta-information, and the effectiveness of search.

ABOUT THE AUTHORS

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