Findability
The Art and Science of Making Content Easy to Find
About the Research

As the non-profit association dedicated to nurturing, growing and supporting the Enterprise Content Management community, AIIM is proud to provide this research at no charge. In this way, the education, thought leadership and direction provided by our research can be leveraged by the entire community. Please feel free to share this research with a friend or colleague.

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While we appreciate the support of our underwriters, we also greatly value our objectivity and independence as a trade association. The results of the survey and the market commentary made in this report are independent of any bias from the vendor community.

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For over 60 years, AIIM has been the leading non-profit organization focused on helping users to understand the challenges associated with managing documents, content, records, and business processes. Today, AIIM is international in scope, independent, implementation-focused, and, as the representative of the entire ECM industry—including users, suppliers, and the channel—acts as the industry’s intermediary.

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Introduction

This AIIM Market IQ is focused on a genre of technologies—some old, some new—and related content management models that establish an enterprise approach to searching, navigating, discovering, and retrieving content—in a word, Findability.

AIIM used two main sources to construct this report. The first was the accumulated experience and ongoing market analysis work performed by the AIIM Market Intelligence group. The second was a survey AIIM Market Intelligence developed and administered. The survey was taken by 500 individuals between April 28 and May 9, 2008.

It should be noted that the survey results are reported in aggregate (i.e., both AIIM members and non-AIIM members), except in cases where the opinions of these two groups were polar enough so as to render the aggregated responses as non-indicative of either group. These instances are specifically noted in the body of this Market IQ, and separate graphs are provided. Further survey population demographics can be found in the Appendix.

This Market IQ covers the concept of Findability from multiple perspectives, providing a thorough education on the topic. In order to achieve a balanced understanding of Findability, the reader is encouraged to read the report in its entirety, in the order presented. The report, however, has been structured into six sections, each providing a specific perspective on Findability. These sections are:

Section 1  Defining Findability in the Information Age
This section introduces the subject, provides a definition of Findability, and introduces a framework for defining a Findability strategy.

Section 2  Technology Complements and Alternatives
This section identifies point solutions that, collectively, potentially comprise Findability. Each component technology is defined and positioned within a Findability framework. This includes users’ awareness of and opinions on the value and use of each component technology.

Section 3  Why Findability Matters
This section looks at the high-level business drivers behind the need for Findability in the enterprise and at the technology trends that are shaping user expectations for Findability. It includes insight into the effect that Internet-based search experiences are having in shaping enterprise expectations for Findability.

Section 4  The State of the Market
This section benchmarks the reality of Findability in the enterprise. It provides a view into the current usage, experience with obstacles, funding models, deployment models, overall attitudes, and adoption rates of technologies in organizations with regard to Findability.

Section 5  Conclusions & Developing a Findability Strategy
This section provides advice on how to leverage the knowledge presented within this Market IQ. It offers a framework for evaluating and mapping organizational needs in order to define a Findability strategy that best fits your organization’s needs.

Appendix  Methodology Used & Survey Demographics
This appendix provides an explanation of the methodology used in developing the market research, along with survey population demographics.
Findability is the art and science of making content findable. The science is library science; the art is language arts and user interface design.

Content without access is worthless. To come to a conclusion before the market is defined and assessed is perhaps a bold way to begin a Market IQ. In the case of Findability, however, it is warranted because the ability to effectively find content is a universal issue.

With the advent and maturity of the Internet, what was once exclusively the domain of libraries and the private collections of enterprises (Note: This report is focused exclusively on online collections) is now a broadly understood issue.

Case in point: Moments ago, I entered the word “Findability” into an online search tool that indexes the Internet. More than 543,000 individual bodies of content were retrieved. Eureka—Findability solved, right? With a simple search, I am able to retrieve “all” of that content. No. The rules of the game have changed—significantly.
Models for organizing and accessing content (e.g., file-shares and simple word-based query tools) are dated. Providing access to content in a shared repository with a loosely defined naming convention all too often results in smaller sub-collections that are no more easy to navigate and retrieve content from with any degree of effectiveness and timeliness.

Applying simple search to the problem does not make the situation much better. There are many reasons for this, all discussed in this report, but the simplest to point to as means of introduction to the issues is the scenario introduced above: A simple search for “Findability” on the Internet results in 543,000 hits found. While the search may narrow down the overall collection, the sheer volume of content renders this naïve form of selection useless. It does not provide a level of granularity low enough to meet my particular needs and perspectives.

Given the volume of online content that exists within enterprises today, it is no longer enough to simply retrieve all content in response to a simple query. The amount of time knowledge workers spend reviewing “irrelevant material” is growing at a phenomenal pace because the amount of digital content being stored is also growing at a phenomenal pace.

Effective Findability retrieves content in context. Therein lies the crux of Findability. It cannot be attained simply by search—even a powerful search. Findability provides intuitive interaction between the user and the content. It provides multiple ways at getting to content, each tailored to a specific type of retrieval need, which includes necessary controls over security. (Content Security is the focus of the Q4 2007 AIIM Market IQ report.)

Defining Findability
To achieve Findability levels that equal or exceed those on the Internet, organizations need to address Findability directly and strategically. Our research shows, however, that most organizations do not take a strategic approach to Findability. (See Section 3: Why Findability Matters for more detail.)

In fact, most organizations have a lack of understanding and appreciation for Findability. Only 17% of the individuals polled believed that Findability was well understood and addressed in their organization.

More importantly and telling, however, is the fact that 30% believed that their organization did not understand the difference between Findability and search. Therein likely lies the most powerful reason why most users feel that retrieval of content in the organization is ineffective and time-consuming. (See Section 3: Why Findability Matters for more detail.) This lack of distinction between standalone search and Findability leaves many to believe that if they have a search tool (or in many cases several search tools), then Findability is being adequately addressed.

The reality is, however, that applying search tools in an ad hoc manner often does not result in effective Findability that in turn often leads to a belief that the ineffectiveness of Enterprise Findability is the fault of a poor search engine. In reality, the search tool may be more than adequate for what it has been designed to do, but the design behind its deployment is flawed.

So what is Findability, if not simply search?
Succinctly put, Findability is the art and science of making content findable.
Findability

Section 1: Defining Findability in the Information Age

The science referred to in this definition is library science, at the heart of which lie the issues of precision and recall. (See sidebar for more detail.) Effective Findability should provide reliable and complete retrieval of content based on user need (recall) while simultaneously returning only that content (precision), thus eliminating the review of irrelevant content by the user. (See Figure 1 for detail on the level of this problem in the organization.) This facet of Findability potentially utilizes tools and technologies such as tagging, taxonomies, and indexing.

The art referred to in the definition is really two arts: language arts and the art of user interface design.

A Findability strategy should include a level of understanding of the language of the content (this can be multiple written languages as well as multimedia “languages”). In this manner, the content can be analyzed and a level of sensitivity to the content is developed that can provide intuitive, instinctive, and informed decisions regarding how and if content is related to a user’s focus—far beyond an indexed search or word-based search. (In the last AIIM Market IQ on Enterprise 2.0, some of these approaches were introduced; they include emergent intelligence systems that track how separate bodies of context are used by a preponderance of users—e.g., users that read this also read that.) Findability technologies can include any number of linguistic and semantic analyses. (See Section 2: Technology Components and Alternatives for more detail on individual technologies.) These functionalities allow the system to be more responsive to the user, to provide a level of insight perhaps not expressed by the user query, and/or add a level of insight not yet spotted by the user community.

The art of language is powerfully complemented by the art of the user interface. Effective Findability provides access and interaction with content in a variety of means. The interface can be static or highly dynamic and autogenerated. Findability systems can incorporate sensitivity to individual user habits, preferences, and depth of knowledge. In this manner, the Findability experience can be potentially different not only for each user, but for each user’s interaction with specific bodies of content, or content in a given business setting. This is personalization to the nth degree, which is now practical because of the inherently dynamic nature of e-based approaches to content access. Findability interfaces and levels of functionality are invoked dynamically based on the user and the business issue at hand.

Figure 1. How Well Is Findability Understood in Your Organization?

<table>
<thead>
<tr>
<th>Level of Understanding</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well Understood and Addressed</td>
<td>17%</td>
</tr>
<tr>
<td>Vaguely Familiar</td>
<td>31%</td>
</tr>
<tr>
<td>Not Sure How This is Different from Search</td>
<td>30%</td>
</tr>
<tr>
<td>No Clear Understanding</td>
<td>22%</td>
</tr>
</tbody>
</table>

Figure 2. The Basic Components of Findability

Library Science

Language Arts

User Interface
The ultimate Findability challenge is to strike a balance between precision and recall. Recall focuses on the robustness of the system. Its ability to provide access to any and all content relevant to the user’s focus, i.e., everything relevant, has been recalled.

On the other hand, effective Findability should also provide precision. Precision focuses on pinpointing only content that is relevant to the user’s focus. Taken individually, these goals of Findability are relatively easy to achieve. Total recall can be achieved by returning every document for every search. The problem here, of course, is the time wasted reviewing irrelevant content.

Precision can be very tightly tuned, returning documents that only expressly contain an exact word, for example. The problem this creates is the exclusion of “smoking guns” simply because their relevancy is not specifically spelled out in exact terms. In addition, this approach does not support in any manner software-based approaches to trend analysis or dynamic discovery of relevant content.

A Findability strategy comprised of several technologies and methodologies can offer a balance between these two somewhat diametrically opposed metrics. The ability to adjust these parameters within the context of specific user interactions can be extremely powerful.

Distinguishing Findability from Search
A fundamental difference between Findability and its predecessor and component, search, is where the burden of effort lies. Under Findability, the burden of intelligent content processing is placed on the content itself. It is the content that is made “findable” in any number of scenarios. It no longer takes asking the “right question,” or having intimate knowledge of what you are seeking in order to execute an effective search. Findability strategies establish content that is aware of its potential value in any number of settings, and leverage art and science to respond to these settings.

The Findability requirements of a system designed to support e-Discovery, for example, are grossly different than one designed to support inventory control. Each of these business scenarios should be supported with an effective approach to search, but through a common strategy that does not duplicate the underlying content and/or basic functionality components of a Findability strategy. Without a Findability strategy, it is likely that an organization, with the best intentions, will create multiple individual search platforms to support its needs.

Indeed, our research found that multiple search engines are the norm in most organizations. Search (and by association Findability) is all too often viewed as application-specific, resulting in search silos in many enterprises. There is a separate search solution for e-mail, Web content, wikis, Blogs, ERP systems, CRM systems, intranets, File shares, and so on. This leads to user frustration with enterprise search. (See Section 4: State of The Market for more detail.)

One might argue that Findability is not separate and distinct from search, that it is simply a methodology or approach to deploying search. This is incorrect. Again, search is a fundamental component to Findability, but it is not the sum total of Findability. (See Section 2: Technology Complements and Alternatives for more detail.)
For too many organizations, Findability is synonymous with search, or is limited in functionality due simply to an ignorance of what alternative technologies can provide.

In Section 1: Defining Enterprise Findability it was pointed out that Findability is not a single technology but instead a genre of technologies that can be integrated and deployed in an orchestrated fashion to provide a point of interaction between the user and content. Under a comprehensive Findability strategy, the burden of finding is placed on the content, and not on the user.

While it should be appreciated that Findability is more about a well-defined and executed strategy model than it is about technology, it is nonetheless prudent to have a working knowledge of technology alternatives before embarking on a given course. For too many organizations, Findability is synonymous with search (see Figure 1), or is limited in functionality due simply to an ignorance of what alternative technologies can provide. Indeed, as highlighted later in this section of the Market IQ, there is predominately a dearth of knowledge regarding Findability technology components in the market. Alternative tools are grossly underutilized, accounting for much of the current disappointment among enterprise users. Before organizations can embrace the state-of-the-art in Findability, they need to have an appreciation of what is and is not possible.

Perhaps more so than many other ECM components (e.g., Enterprise 2.0, Content Security), Findability is about technology. Incentive and culture, though important, are not nearly as necessary to consider, as enterprise knowledge workers have a natural inclination to look for content. This inclination accounts for the tolerance of systems that require iterative searching and reading through numerous “false hits,” as reported in Section 4: The State of the Market.
As a means of introduction, primary point technologies that can comprise a content security strategy are briefly described and positioned here. It is also important to note that many of these point technologies are provided through a single product. The point of a Findability strategy is to first determine the features and functions required for the enterprise, select the smallest number of products that meet all of those needs, and then combine those products under a single interface. Enterprises may opt to deploy multiple Findability platforms, but this course should be driven by business strategy, and not be merely an accommodation for multiple sets of siloed tools. (See Section 5: Conclusions & Developing a Findability Strategy for more details on building such strategies.)

Defining and Positioning Findability Component Technologies
This list is not exhaustive, but provides a good primer on the technologies and techniques most prevalently available today.

Agents
Behavioral Search
Clustering
Concept-based Search
Controlled Vocabularies
Data Dictionaries
Emergence/Trends Analysis
Entity Extraction
Federated Search/Universal Search
Free-text Search
Multimedia-based Search
Natural Language Processing/Query
Ontology
Parametric Search
Relevancy Ranking
Semantic Search
Sentiment Analysis
Tagging
Taxonomies
Text Analytics
Thesaurus

Agents are a form of user-created perpetual queries that run in the background. The underlying functionality of the agent is determined by the type of search engine(s) it supports, and can include parametric search, full text search, and concept search. These software-based queries notify their respective owners about the existence of or changes to an area of interest.

Behavioral Search, also known as social search, is a form of emergence/trend analysis that specifically monitors users’ interaction with a Findability platform. Search terms they use, paths they take, and, most importantly, the ultimate action they make (e.g., download a specific document), are collected and analyzed. In this manner “popular” approaches and content are determined. This insight is used to provide dynamic links to the “right” content and/or affect relevancy ranking.

Clustering dynamically categorizes collections of content. Clustering looks for commonalities and differences between individual bodies of content. Many different types of algorithms are used to make these determinations. There is no standard set of functionality provided in a clustering tool. Therefore, clustering tools should be evaluated individually, and selected based on an approach that best mimics the way a given community would categorize its content. Clusters can be defined dynamically (e.g., discovered through behavioral search or user tagging) based on a user’s queries, or in static fashion wherein a body of content is analyzed and a group of clusters emerge. Clusters can be used to provide finer precision to a search either in the back-end or as a front-end navigational aide.

Concept-based Search is a form of free text search that uses text analytics and semantic analysis to locate and retrieve content based on its overall meaning or on concepts contained within it, as opposed to the occurrence of specific words and/or phrases. Concept-based search can utilize clustering models.

Controlled Vocabularies are a finite set of terms imposed on a collection of content. Controlled vocabularies can be deployed at various levels of granularity. For example, at the low end, the controlled vocabulary can limit the values, or entities, entered into a document’s meta-tag (see Tagging, below, for more on this). At the high end, a controlled vocabulary can be used to dictate how subjects are discussed within a body of content. Controlled vocabularies can be integrated with thesauri and data dictionaries.

Data Dictionaries do not contain any data or content themselves per se, but provide a centralized roadmap to the schemas or formats of individual repositories. In this manner, a single query can map into several separate
collections of content despite inconsistencies in naming conventions and tags. Data dictionaries can be fundamental to concept-based search and federated search.

**Emergence/Trends Analysis** is a genre of technologies that monitor and analyze the actions of many users and discover the trends that emerge. Folksonomies, link analysis (e.g., PageRank), and behavior search are examples of functionality based on emergence/trends analysis. Emergence/trends analysis leverages the wisdom of the user community as a whole to influence the ranking of search results, clustering, and the categorization of content. (See the AIIM Market IQ on Enterprise 2.0 for more detail on Emergence/Trends Analysis.)

**Entity Extraction** is a form of text and imaging analytics where the software identifies particular values within a body of content (e.g., a document) and extracts the value automatically for further processing. Entity extraction can be used to automatically tag content (i.e., values extracted are used to populate the documents’ meta-tags). Extracted entities can be used to display a list of values associated with a collection of content (e.g., a list of all corporations named in a collection can be provided automatically). Entity extraction can also provide a high degree of precision (e.g., a user query into a collection of documents asking for “who is the parent company of ACME Corp?” can result not in a list of documents that are relevant to the query, but the specific name of the parent company, automatically determined and extracted from the content.) Content values extracted through these tools can also be automatically passed to a decision support tree or workflow tool.

**Federated Search/Universal Search** is the ability to provide a single search interface across multiple repositories that each have their own search interface. Federated search is a single point of search. The user interface provides a means to capture a request, pass it to the underlying search tools, collect the returned content from each underlying search, de-duplicate the list (in some cases), and present the list of returned content to the user. Relevancy ranking may be a feature of this system, but the one employed will be the ranking algorithm of the federating tool. (See the description of relevancy ranking in this section of the Market IQ for more detail.) The federating engine does not enhance the search capabilities of the underlying search tools. Thus, results can be somewhat inconsistent across sites, as the individual sites may utilize different approaches to search and concept-based search.

A form of federated search known as universal search provides a different approach. Under this method, a single engine is positioned as the preferred search processing engine. This engine bypasses others and directly indexes all of the content collections itself. When a query is posed through the universal engine, it executes across all sites providing a single response similar to federated search, but the end result is completely under the domain and quality control of the one universal engine. While this eliminates any potential inconsistency associated with federated search, it does place all emphasis on the functionality of the universal search tool and its effectiveness in each repository.

**Free-text Search** is a popular form of search on text content. At the highest level, what they have in common is functionality that can locate and retrieve unstructured text content (e.g., a word-processing file) based on a user query that specifies topics and/or words of interest. Many methodologies and specific technical approaches exist to process the query and the content and render a response. Differences among free-text search tools are significant enough that they warrant investigation and appreciation before strategically positioning one into a Findability strategy. The methodologies and technologies used range from simple word indexes to sophisticated pattern recognition and text analytics.

**Multimedia-based Search** refers to any number of approaches to searching and retrieving non-text-based content, including images, videos, and audio. Multimedia-based search is often performed through tagging and parametric searching. At the high end, however, multimedia search can provide technology that analyzes multimedia content in its native form. This includes facial recognition, image recognition, video recognition (including story board frame change), and audio recognition.

**Natural Language Processing/Query** is a form of text and semantic analysis that interprets user queries for content in a natural language. Natural Language Query eliminates query command languages. The approaches used to provide natural language query vary widely. At the low end, the process would string the words in the query together with a Boolean “or.” At the high end, methodologies similar to those used in concept-based retrieval would be leveraged to interpret the meaning of the query, and not simply retrieve results based on stated words.

**Ontology** is a form of organizing a collection of content and intelligently linking content resources by declared relationship types. Ontologies can be used to create knowledge maps, a network of relationships that tracks how sources of knowledge relate to one another. For example, a “lives at” link or “works for” link in ontology would be used to track these relation-
ships for listed individuals. Ontologies are similar to thesauri and taxonomies, but support the definition of contextual, customizable, self-describing relationships. An ontology is the framework of the semantic Web. It permits intelligent navigation through a body of content and can be used to support entity extraction.

**Parametric Search** (metadata-based search) is search based on meta-tags. If content is associated with one or more tags (i.e., data values associated with a body of content but not necessarily stored within the content itself such as a date, author name, or contract number), parametric search enables the query and retrieval of the content based on user specific values within the meta-tags. For example, "Retrieve all documents published between January 2007 and January 2008," is a parametric search leveraging a published date tag. (See **Tagging** for more detail.)

**Relevancy Ranking** is a genre of methodologies and technologies used to display a list of retrieved content in some type of prescribed order. Relevancy ranking is adjunct functionality to a multimedia or full-text search, as it lists retrieved content in descending order of the level to which it is pertinent to the query statement. There are no standard approaches to relevancy ranking, so the inclusion of this functionality in a Findability strategy warrants an analysis of all potential tools to establish the exact approach each one uses to determine ranking. Methods range from ordering content by publishing date to establishing a relevancy quotient of content to query based on semantic analysis, text analytics, and/or clustering techniques. Relevancy ranking encourages broad recall (i.e., retrieve anything and everything remotely relevant to a user query), but simultaneously provides precision by allowing the user to interact with the content in this order, and thus make an informed personal decision about when the level of relevancy has dropped off.

**Semantic Search** (Semantic Analysis) incorporates the analysis of meaning in text, identifying concepts and their relative importance to the subject of the content and to each other. These utilities can form the basis of concept-based search, natural language processing, cognitive understanding, and text analytics.

**Sentiment Analysis** is a form of semantic analysis that determines the perspective (i.e., positive or negative) a body of content has on a particular subject. Sentiment analysis can be integrated with agents (e.g., alert me when something negative is posted about my subject) or relevancy ranking (e.g., rank positive sources first) and could be utilized in situations such as e-discovery, where an automated and timely determination of positive versus negative sources can be insightful.

**Tagging** in its simplest form is the intersection of databases with content management. It is the ability to assign meta-tag values, also referred to as facets, to any and all stored bodies of content. Tags can range from simple things like an author’s name, to user-specific values such as “favorite bookmarks.” The challenge of tagging is determining what tags to define, and then populating the tags. (Entity extraction can help in this regard.)

The value of tags lies in how they are utilized within a Findability strategy to support taxonomies, ontologies, parametric search, and relevancy ranking. Tags can be used a primary search vehicle (see **Parametric Search**), or as an adjunct to a full-text search, providing added precision.

Tags can also be used in an emergent fashion. For example, folksonomies are a form of tagging in which individual users tag content themselves as a way to sort, store, and retrieve content, but simultaneously the tags used across all users are analyzed to look for common themes, rendering a folksonomy. (See the **AIIM Market IQ on Enterprise 2.0** for more detail on folksonomies.)

**Taxonomies** are a hierarchical or poly-hierarchical listing of topics or subject categories. A taxonomy may not contain a definition of the topics it covers, but only the hierarchical relationship of the topics to one another. A taxonomy can incorporate content from a thesaurus and an ontology. There are no standard file formats or approaches to taxonomy construction.

Findability strategies can include technologies that create a taxonomy (based on text analytics and semantic analysis), provide a framework in which a taxonomy is manually built, and/or automatically associate individual bodies of content with a node of the taxonomy (automated categorization), based on text analytics and semantic analysis.

The taxonomy can be used as a navigational front-end to a body of content. It can also be used as a back-end to search (providing more precision in retrieval), or as a form of input to a clustering engine. Taxonomies can also be leveraged as a front-end to search, providing structure to the way retrieved content is arranged and presented. This taxonomical display of retrieved content in response to a query provides greater precision and a customized, in-context navigational aide through a body of retrieved content.

**Text Analytics** is a combination of semantic analysis, linguistics, entity extraction, tagging, pattern recognition, lexical analysis, and other forms of artificial intelligence used to infer meaning from bodies of textual content. Text analytics is a form of data min-
ing on textual content and can be an integral part of a Findability strategy, complementing search and/or extracting data from documents. It provides business intelligence (BI) and data mining within the realm of textual content.

**Thesaurus** refers to a network of words and word meanings and relationships used to put conceptual definitions into context. It defines a lexicon and the relationships between words and phrases in that lexicon. A thesaurus can be used to enhance the intelligence and effectiveness of a taxonomy and/or full-text search by providing insight into word meanings and term relationships. A thesaurus, when integrated into a Findability strategy, can enhance precision and recall. Thesaurus construction is governed by ANSI standard Z39.19.

**Market Awareness of Findability Technologies and Topics**

Our research measured the state-of-the-industry in many ways. The bulk of these findings and insights are the focus of Section 4: The State of The Market. Two of the findings, however, are discussed here in the context of the technology discussion to provide a benchmark on technology awareness and appreciation in the market, and how this affects Findability strategy.

Survey respondents were asked to rank their level of understanding of Findability technologies and the importance of these technologies to effective Findability. This is a case where an affiliation with AIIM had a significant effect on survey responses.

**Figure 3. How Important Are the Following to Effective Findability? (non-AIIM members)**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Imperative</th>
<th>Significant</th>
<th>Average</th>
<th>Minimal</th>
<th>Not at All</th>
<th>Don't Know</th>
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<td>Natural Language Processing/Query</td>
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Survey respondents were asked to rank their level of understanding of Findability technologies and the importance of these technologies to effective Findability. This is a case where an affiliation with AIIM had a significant effect on survey responses.
Overall, AIIM members exhibit a far higher level of familiarity with Findability technologies than the general public survey respondents (i.e., non-AIIM members). This in turn resulted in far less clarity among non-AIIM members regarding what constitutes effective tools for achieving Findability. Non-AIIM member survey respondents failed to position any single technology as imperative or significant to effective Findability. (No single technology received more than 50% ranking as imperative or significant.)

On the other hand, among AIIM members, who exhibited greater levels of familiarity with many technologies, several tools were ranked by a majority of respondents as imperative or significant to effective Findability: free-text search, relevancy ranking, metadata search (parametric search), tag-based search, thesaurus, controlled vocabularies, and federated search.

A relationship clearly exists between technology familiarity and inclusion of technology within a Findability strategy. There is an apparent and understandable tendency to ignore that which you do not understand. For this reason, the general business public would be well served by a greater awareness of what is available within the domain of Findability technologies. The level of understanding need not be technically intimate, but enough to appreciate the impact a technology or feature can have on the business side of the organization. Indeed, even AIIM members (being more technical and enterprise content management astute than the general public) could benefit from further education on some technologies and features.

That said, it can be argued that not everyone in an organization needs to appreciate a given Findability technology to benefit from it. But someone within each

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**Figure 4. How Important Are the Following to Effective Findability? (AIIM members)**

<table>
<thead>
<tr>
<th>Technology</th>
<th>Imperative</th>
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organization must have a fairly sophisticated grasp of the available options. As discussed in Section 1: Defining Findability in the Information Age, Findability is not about any single technology or random combination of technologies. It consists of a strategic deployment of targeted technologies to address targeted intersections of users and content. (See Section 5: Conclusions & Developing a Findability Strategy for more detail.)

This lack of appreciation and understanding of technology options likely accounts for a very slow uptake of more advanced Findability technology and features within the enterprise. (See Section 4: State of the Market for more detail.) Indeed, a curious situation currently exists where the technology available has far outpaced the uptake of that technology inside the firewall, versus outside the firewall.

Most survey respondents agreed that Findability was more effective on the commercial Web than within their respective enterprise environments. (See Section 3: Why Findability Matters for more detail.) The reason for this could be that a rich and wide variety of Findability tools and techniques are being strategically leveraged. on the commercial Web, Organizations such as E-bay, the Apple i-Tunes Store, and Amazon, to name just a few, understand why Findability is fundamental to their success—it is a function of their underlying business model. If prospective customers cannot find what they are looking for, they will not make purchases. Thus, a great deal of emphasis is placed on Findability strategy. Commercial Web-based search tools such as Yahoo and Google also utilize many different Findability tools and techniques in order drive-up user satisfaction, which translates for them into a gain in users and advertising revenue.

Figure 5. How Familiar Are You with the Following Functions and Concepts? (AIIM members)
While organizations seem to understand at a high level that Findability is critical to business inside the firewall (See Section 3: Why Findability Matters for more detail), they do not yet appreciate that Findability is not a matter of having multiple search tools, but of having the specific strategy to effectively deploy multiple Findability technologies to targeted business needs. Indeed, a majority of survey respondents stated that there was no focus on Findability within their organization. (See Section 3: Why Findability Matters for more detail.)

It is interesting to note that “security” ranked very highly in awareness level and importance to effective Findability among both AIIM members and non-AIIM members. Once inside the firewall (i.e., enterprise Findability versus Web-based Findability), the issue of security becomes paramount. This may directly or subliminally lead to a further reluctance to embrace Findability-enhancing technologies (i.e., we should not make it easy to find content we are trying to protect.). The focus on security can be very powerful and may likely be one factor that accounts for a low percentage of enterprise content currently being made searchable (See Section 4: The State of the Market for more detail.), let alone exposed to an effective Findability strategy.

While survey respondents are correct in targeting security as part of a Findability strategy, they may fail to realize that this is not a black-and-white issue. Effective Findability should include dynamic and effective controls to access, not simply block access. (A targeted assessment and treatise on strategies and technologies that enable enterprise content security and balance access with control is provided in the AIIM Market IQ on Content Security.)

Figure 6. How Familiar Are You with the Following Functions and Concepts? (non-AIIM)
Findability is broadly applicable across the enterprise. It potentially impacts virtually everyone in the organization as well as most forms of content.

Findability is not a new concept to businesses. As introduced in Section 1, its fundamentals can be traced back to library science. From a technology perspective, Findability finds its roots in database search optimization, meta-data schemas and full-text search, which are decades old. At the same time, these roots serve as both assets and liabilities when establishing Findability strategies in the enterprise.

On the positive side, virtually every business professional understands Findability at a high level. The advent of the Internet and success of Web search engines have established an appreciation for the applicability of search and the basic fundamentals of the technology (i.e., issue a text query, get back a list of “relevant” content sources). Search is a way to find stuff on the Web—and now on enterprise intranets as well. Search boxes exist in e-mail systems, corporate Web pages, and in online help systems.

The downside to this, however, is that it gives too many business professionals a false sense of accomplishment and understanding: “Findability, sure I know Findability, it’s search. We have search in our organization, it’s the three, four, five, or six search tools we use.”
But, as explained in Sections 1 and 2 of this Market IQ, Findability is not just about search. It includes many other technologies as well. More importantly, Findability is ultimately not about technology as much as it is a targeted strategy for integrating, positioning, and leveraging multiple technologies in very specific business settings. (See Section 5: Conclusions & Developing a Findability Strategy for more detail.) For that very reason, user experiences on the Internet can be very different than user experiences inside the firewall. What are the specific business settings that drive requirements for Findability within the enterprise?

**Findability Is Strategically Poised**

Analysis of the business drivers behind Findability begins with an assessment of current perspectives concerning the strategic nature or criticality of Findability to organizational goals and successes. Survey responses offer a positive and compelling picture in this regard. When asked the degree to which Findability is critical to their overall business goals and success, 62% of respondents indicated that it is imperative or significant. Only 5% felt it had minimal or no impact on business success.

![Figure 7. How Critical Is Findability to Your Organization’s Business Goals and Success?](image)

Further inspection of this data sheds an even more positive light on the criticality of Findability to enterprises. As introduced in Section 2, technology awareness and appreciation ranked higher among AIIM members than among the general survey population. Among the more technology-aware AIIM members, 87% indicated that Findability is imperative or significant to their overall business goals and success. Thus, amongst those that have a better appreciation or level of understanding of the technologies that comprise Findability, there is a much-heightened respect for its criticality to business success.

Meanwhile only 35% of the non-AIIM members indicated that Findability is imperative or significant to their overall business goals and success, and 9% felt it had minimal or no impact. Thirty-eight percent indicated they simply do not know. Perhaps handicapped by a general unfamiliarity with Findability technologies, these individuals were unable to determine the exact level of impact that Findability can have on the organization. But there were intuitive enough to appreciate that this does not translate into “no impact,” only that they are unqualified to form an opinion.

![Figure 8. How Critical Is Findability to Your Organization’s Business Goals and Success? (AIIM vs non-AIIM members)](image)

Findability is broadly applicable across the enterprise. It potentially impacts virtually everyone in the organization as well as most forms of content.

When asked to rank the criticality of Findability to specific applications and functional areas in the organization, AIIM members predominately positioned Findability as imperative or significant across all applications.
Similar to their ranking of the criticality of Findability to overall business goals and objectives, non-AIIM members predominately claimed that they do not know the criticality level of Findability to specific applications and functional areas, likely again due to a general lack of awareness. Among those who were able and willing to give an opinion, there is a preponderance of belief that Findability is imperative or significant to most if not all business applications, a feeling aligned with that of the AIIM members.

Figure 10. Rank the Criticality of Findability to the Following Applications/Functional Areas (non-AIIM members)
In light of how strongly Findability is identified as a critical component to many vertical and horizontal business applications, it is worth examining the degree to which current software providers approach this need.

Many solution providers have targeted Findability at specific applications and verticals, e.g., Business Intelligence, e-Discovery, and compliance. This is not a bad idea, especially in cases where the solution provider actually provides specialized for requirements associated with that application or functional area.

The potential risk to taking this approach, however, is in the enterprise approaching and implementing Findability as a feature inside a series of siloed environments. Enterprise Findability is then also siloed, fractured into many non-integrated pieces. Cross-enterprise Findability is not supported, which inhibits collaboration, knowledge-sharing, and discovery. Users potentially become frustrated by having to jump between and learn the interfaces to multiple search tools. This likely accounts for the degree to which users continue to characterize enterprise Findability as difficult and time-consuming. (See Section 4 for more detail.)

As is discussed in more detail in Section 5: Conclusions & Developing a Findability Strategy, it behooves the organization to address the design of Findability holistically. A top-down and inter-application approach to strategy development best serves the universal requirement for Findability across the organization. If specific tools or features are needed for particular applications, these may be supported (potentially) by a specialized tool. But that does not necessarily infer that the Findability for that application area should be implemented and presented as a separate and distinct capability, but rather as part of an enterprise competency, which is fine-tuned to special collections and processes dynamically in context.

The same philosophy or approach to Findability design also holds true with regard to content type. When asked to identify which content types should be effectively findable within their respective organizations, survey respondents indicated all types—to one degree or another.

**Figure 11. Within Your Organizations Which of the Following SHOULD BE Effectively Findable?**

Not surprisingly, text and data were ranked most frequently as being imperative or significant; video and audio least frequently as imperative or significant. This ranking is likely because in most organizations today, the majority of content exists in the form of text and data. (See Section 4: The State of the Market for more detail on current availability of content by type in organizations.)

As content types such as video and audio proliferate and increase in volume in organizations, it is likely that the criticality of making them effectively searchable will also increase.

Also, no type of content received a significant percent of “not at all” ratings from respondents.

(It is interesting to note how highly respondents ranked people or expertise as a content type requiring effective Findability. This is a powerful statement regarding the increased attention Knowledge Management and Collaboration have received from the market. It also further strengthens the premise made here that Findability is critical to any and all content types within the organization.)
Findability Lacks Strategic Focus

Organizations position effective Findability as a crucial trait across applications and content types. Given this level of importance, it would follow that Findability is likely to have the attention of management and is being acted upon strategically. But our research unveiled a paradox in the market. Although Findability is considered strategically essential, nearly half of the surveyed organizations (49%) claim to have no formal plan in place.

Figure 12. Which of the Following Comes Closest to Your Goal for Enterprise Findability?

The remaining 51% of respondents are evenly split across different types of goals. No single best practice or predominant Findability strategy emerges. Indeed, when asked to characterize their strategy, 26% stated they had none at all, while another 26% indicated their approach was predominately or exclusively one of ad hoc usage—i.e., there really is no strategy.

Figure 13. How Would You Characterize Your Findability Strategy?

So while Findability is viewed as critical to business success, many organizations have yet to appreciate that achieving it requires a formal strategy and a deliberate approach to providing access to content.

Among those organizations that indicated they did have a strategy, the approaches to and depth of their strategy differ. Twenty percent of respondents approach Findability at the application level. This is likely related to the focus of search on a particular business application, as discussed above. While this may provide an adequate (or better) solution for the targeted application, such a strategy can be behind the reported frustration users have with Enterprise Findability. (See Section 4, The State of the Market, for more detail.)

The organizations that approach Findability at a departmental level versus enterprise-wide are nearly equal in number (33% and 32% of the survey population, respectively). While having a department-level strategy is much better than no strategy or one focused on applications, it is interesting to note that the 32% reporting an enterprise-wide Findability strategy are almost equal to the 27% who disagreed with the statement “Finding the information I need to do my job is difficult and time-consuming.” (See Section 4, The State of the Market for more detail.)
Those who have a strategy at either an enterprise or departmental level are likely driven by a keen appreciation for the full potential of Findability; the depth and breadth of its application in the Enterprise. This conclusion is based on the fact that the great majority of respondents rated all of the potential Findability goals listed in the survey as primary targets of their strategy.

It is imperative to point out, however, that more so than in any other case, there is a marked difference in opinion between AIIM members and non-AIIM members. While AIIM members generally reflect the overall findings of the total survey population (i.e., a high degree of significance across all potential goals of a Findability strategy), the less technically savvy non-AIIM members are mostly of no opinion regarding the focus of a Findability strategy.

Although these respondents exhibited a similar level of appreciation for the various benefits and goals of a Findability strategy, they never did so to a significant degree. Again, it appears a lack of adequate appreciation for the technologies and functionality associated with Findability leads to a lower expectation or general ignorance to what can and should be accomplished by a related Findability strategy.

Lastly, among those organizations that have developed an enterprise Findability strategy, there is an appreciation for the fact that such a strategy warrants ongoing maintenance. The intersection of content community and context highlighted in Section 1: Defining Findability in the Information Age, and discussed further in Section 5: Conclusions and Developing a Findability Strategy, is dynamic. It is prudent to therefore update the Findability strategy as business needs and environments change. The same culture and inclination that lead some organizations to develop a strategy in the first place apparently lead to an understanding of the need to keep the strategy current. Only 2% of survey respondents that had a strategy felt the strategy was done and need not be looked at again.
Our research sought to determine where the expectations for Findability were being set. Having just completed the AIIM Market IQ on Enterprise 2.0, in which it was found that the advent of Web 2.0 technologies was a primary motivator behind the adoption of these technologies within an Enterprise 2.0 environment, we wanted to see if the exposure to Findability on the commercial Web was in any way similarly influencing expectations for Findability within the enterprise. We found that it does.

In fact, in one of the strongest findings in the research, 89% of respondents agreed that user experience on the commercial Web has impacted expectations for enterprise Findability. (Note: This issue is explored in more detail in Section 4 of this Market IQ, including the degree to which the bar has been raised for expected or desired functionality and features for Findability within the enterprise. In this section of the Market IQ, we focus on the degree to which the commercial Web is a driver of adoption of Findability technologies, and the research indicates that it is a major force.)
It is interesting to note that the Findability technologies deployed on the commercial Web are fundamentally no different than those available for enterprise Findability. In fact, in some cases they are the same technology products and platforms. Yet users claim to see a difference in the level of Findability experienced on the Web versus on the corporate Intranet. The commercial Web sites do not have better tools and technologies available to them. Adoption and strategic deployment of the tools and technologies account for the difference. As previously reported in Section 2: Technology Complements and Alternatives, within the enterprise there is a general lack of awareness and use of technology beyond simple search and simple tagging (i.e., favorites). Statistics regarding the rate of adoption of Findability technologies within the enterprise are provided in Section 4 of this Market IQ.

![Figure 18. Experience with the Consumer Web Has Created Demand for Improved Enterprise Findability](chart)

Security Matters, Language Does Not

Our research targeted the need for two specific features of Findability within the enterprise and found that one, multi-language support, is not considered important to enterprise Findability, while the other—security—is crucial.

Despite the fact that 47% of the individuals surveyed work in a global organization (see the Appendix for more detail), 46% of respondents indicated that support for multiple languages was either minimally or not at all critical to enterprise Findability. Only 22% indicated that such support was imperative or significant. Our experience in Knowledge Management strategy provides some insight into why this relatively low ranking of multi-language support prevails, even in the case of global organizations.

Often corporate cultures evolve to manage or compensate for multiple languages in global organizations. Approaches range from teams of translators that make content available in multiple languages, to formal adoption of a single language as the official language of business. Thus the need for specific handling of multiple languages in emerging applications is viewed as unimportant because the community of users has already dealt with the issue in some way. While technology can be used to facilitate Findability in a multi-language environment (through automated translation of text, multi-language thesauri, and so on), these tools are viewed as not nearly as needed as more basic functionality still lacking in many Findability strategies. Many global organizations likely feel that the primary task is getting Findability to work effectively in one language before worrying about porting the functionality and/or content to other languages.

![Figure 19. How Critical Is Support of Multiple Languages to Findability in Your Organization?](chart)
Security, on the other hand, is viewed as most important to enterprise Findability. Sixty-six percent of respondents indicated that security was either an imperative or significant component to their enterprise Findability strategy.

While the promise of Findability is easier access to content, and enterprise Findability is provided within a closed and controlled community and body of content, security is nonetheless viewed as critical. With the same degree of intuitiveness exhibited regarding the importance of Findability to business goals and success, users appreciate that security must be in place within the enterprise. Indeed, recall that security was the most highly ranked and recognized Findability component by survey respondents. (See Section 2: Technology Complements and Alternatives for more detail.) Compliance, risk, and simple good business practices mandate this.

It is important, however, that organizations not position security so strongly that they err on its side in the balance of security versus Findability. Security versus Findability is not a black-and-white issue. The two can and should be handled symbiotically in a dynamic and intelligent manner. (See the AIIM Market IQ on Content Security for an in-depth treatise of this aspect of Findability strategy.)

Figure 20. How Critical Is Security as a Component of Your Organization’s Findability Strategy?

Despite the level of importance placed on security, the level of security targeted by the enterprise is relatively low. The focus is predominately at the document, repository, and functional level. It is likely that the lack of perceived need for more sophisticated forms of security, i.e., the ability to redact portions of a document, to secure electronic sticky notes and other forms of commentary on a document, and the securing of search-related indices, is grounded in the overall lack of awareness of Findability technologies (See Section 2: Technology Components & Alternatives for more detail) and a general market immaturity in regard to sophisticated enterprise Findability implementations versus an educated decision.

It is likely that as the use of more sophisticated technologies and strategies for enterprise Findability emerges and provides unprecedented levels of access to content of all forms, the need for more intelligent, dynamic and granular forms of security will also emerge. (See the AIIM Market IQ on Content Security for more detail).

Figure 21. What Level of Security Is Important to Your Findability Strategy?
Matters Beyond Functionality

We also asked our survey respondents what was critical to the selection of Findability technology beyond its features and functionality. The survey provided a mix of implementation, cost, and architecture issues. Users demand ease of implementation at low cost and with strong scalability, security, and technical support. No surprises here, but it is interesting to note that no single issue was significantly ranked above the others. All issues are apparently viewed at the same level of importance.

Role of Standards

This discussion of the drivers behind the development of Findability strategies concludes with an assessment on the influence of related industry standards. Survey respondents were asked to identify which Findability-related standards are being used within their organization.

Based on the responses, standards have little influence on the formation of Findability strategy. With the exception of ISO 11179 Dublin Core, there was a general lack of awareness of standards among survey respondents. “Not sure what this is” was the single most popularly ranked option for each specified standard, with the exception of Dublin Core. The number-two response in each case was “no,” i.e., the standard is not being used.

There is a general lack of awareness of Findability-related standards. These standards play a minimal role in developing or shaping Findability strategies.
Without clear ownership and personnel driving forward the need to improve, Findability is likely to remain a low priority in organizations.

The State of the Market

Having established a definition of Findability and the business drivers behind it, we will now examine the state of the market. While the various technologies associated with Findability, particularly search (or information retrieval, as it was originally known) have been available for some time, they are not universally known or deployed.

The survey provided a series of questions whose collective responses provide insight into the reality of Findability deployments, including the perceived and actual adoption rates, obstacles, funding models, decision-makers, and level of strategic application.

The State of the Adoption Lifecycle

Our Q1 2008 Market IQ on Enterprise 2.0 saw most respondents place Enterprise 2.0 technologies as primarily being used by Innovators and Early Adopters (a finding reflective of “pre-Chasm” technology from Geoffrey Moore’s “Crossing the Chasm” terminology).

In contrast, respondents from AIIM’s membership largely believe that the technologies/concepts associated with Findability are either straddling the Chasm or have successfully crossed. The Chasm is the “pit of despair” where solutions (and companies) either successfully “make the leap” and reach the mass audience of buyers, or fall into the Chasm and become the “Betamax tape” of their solution space. Given that “to Google” is essentially synonymous with search (and was added to the Oxford English Dictionary [OED] on June 15, 2006), at least the awareness of Search and awareness of User Interfaces (frequently a Web browser, but not exclusively) as a component of Findability have indeed hit the mainstream by being adopted by the Early Majority and Late Majority.

Of the terms and phrases that are most adopted across the industry/marketplace, the User Interface (whether delivered on the Web or the varieties of interface styles deployed via other means), Search, Information Architecture (as an organizing framework to implement Findability), Tagging (coming from the “participative web” of Web 2.0 and Enterprise 2.0), and Taxonomy are the most widely understood. No single term, including Search, has complete saturation and acceptance as witnessed in the downward slope of the Late Majority and Laggards perception and 15–35% of responses that Don’t Know where the market might be.
In contrast, among non-AIIM members the runaway response to most of these terms and phrases is simply “Don’t Know.” There is, however, still a peak in the same location at the “Early Majority” mark, but the terms are co-mingled and at essentially the same response level. For the market at large, people are not aware of the technical details of Findability, and know merely that there are mechanics at work that enable it, with Search being the best known and earliest adopted.
When AIIM members weighed these terms and phrases from the perspective of their own organization’s adoption, they generally felt they were lagging in comparison to the industry at large. This is very typical, based on responses to our previous Market IQ. The majority of individual responses fall in the Late Majority to Laggards area, indicating that they are adopting more slowly than most. However, Search, User Interface, Information Architecture, and Taxonomy garner a collective response of 30–40% in the Innovators, Early Adopters, and Early Majority portion of the adoption lifecycle. The two major standouts for the data are Auto-Classification and the idea of the Semantic Web, which, according to respondents, are universally lagging in awareness and adoption.

Non-AIIM members’ responses for their own organization’s adoption versus their perception of industry adoption is essentially identical, with the “Don’t Know” being the primary response, and a slightly elevated belief that their organization is otherwise in the “Early Majority” portion of the chasm.

Comparing AIIM members to non-AIIM members on these responses, is this the “Curse of Knowledge?” Is ignorance bliss? In general, this points to the fact that the general business population is largely unaware of the details that enable Findability.
Views of Findability’s effectiveness are in flux at this time, with a curious dynamic at hand. On the one hand, if we isolate the statement “Finding the Information I Need to Do My Job Is Difficult and Time-Consuming” and combine the “Strongly Agree” (12%) and “Agree” (37%) responses, it results in 49% of respondents despairing that their jobs are suffering as a result of poor Findability.

On the other hand, when asked whether they agreed with the statement “Finding the Information I Need to Do My Job Has Become Easier and More Effective Over the Last Two Years” the “Strongly Agree” (11%) and “Agree” (41%) components add up to 52%. How can 49% say that their Findability is poor, yet 52% say that it has essentially gotten better recently?

This all comes back to the adoption lifecycle where we began this section of the report. Findability in the enterprise is not a lost cause—we are simply still relatively early in the adoption lifecycle despite the near universal use and recognition of the benefits of search on the Web. Information-seeking problems have not disappeared, but as the above findings show, while finding information is still difficult and time-consuming, the pains of Findability have lessened in the last two years.

Findability is not yet perfect, nor will it ever be, but it is improving. Of course, the question is whether the pace of improvement is increasing. We will measure that again in a future study to see what the delta is over time.

Addressing Findability begins with an assessment of where your own organization stands with regard to awareness of the term, the concerns wrapped around Findability, and implementation of solutions. How well is the topic understood? Considering the length of time that search/text retrieval has been available, one might expect that Findability itself would be quite well known. Unfortunately, a mere 17% responded that Findability was “Well Understood and Addressed” and between “No Clear Understanding” (22%) and uncertainty with regard to its differences from search (30%), more than 50% of respondents do not have a clear understanding of Findability as a systemic and holistic experience.
Given that search leads as the perception of Findability, examining exactly how search is intended to be used in the enterprise is key. Are organizations taking advantage of the ways in which it can be used?

The most prominent response was an equal split between targeted/broad search (44%), indicating the dynamics of these two aspects of search are beginning to be understood.

However, there is a bias in the direction of "Targeted Search" (41%) meaning that people are looking for information they believe (or know) to be available versus "Broad Search" (15%), which is oriented towards discovering information through the use of methods such as concept search, faceted navigation, "see also" references, dynamic clustering techniques, and so on.

In many situations, targeted search may indeed be what is needed. However, many applications of search—most notably e-Discovery—must be able to flip between targeted and broad search to ensure all relevant evidence is found. Without an experience built to provide this ability, however, it can be difficult to accomplish this switch easily—which is again why we consider Findability overall as a more appropriate topic than search in and of itself.

For example, pursuing e-Discovery with a toolset that allows only targeted search can result in potential danger and high costs because the task of scouring repositories with specific queries, yielding either too little or too much information, involves the most costly resource of all—people. The risk involved if your organization over- or underdelivers on the results provided as a result of e-Discovery requests can also be quite significant, literally winning or losing the case in the most obvious outcome, but also in potentially exposing information that should never have been provided. It is worth considering whether the business needs you have are truly supported by the tools and systems that have been implemented within your Findability infrastructure, and whether the mix between broadly useful tools and systems that are oriented to specific, unique needs is adequately addressed.
Awareness of the sub-components that are impacting the ability to find the right information within an organizational setting varies widely between AIIM members and non-AIIM members. AIIM members are much more focused on technology (poor search functionality at 71%) and metadata (inconsistency of tags at 59% and lack of adequate tags at 55%), with a near tie in “information not available electronically,” “poor navigation,” and “don’t know where to look” (48–49%). Non-AIIM members’ primary responses relate to a general sense of information overload, with “don’t know where to look” and “information changes constantly” ending up tied for first place (21%).

As we will see in upcoming figures, the irony of AIIM members having multiple search interfaces (and even more repositories) at their disposal and “poor search functionality” being the primary impediment, indicates a major conceptual failure in search implementations. Having more search is not the answer. The issue, based on our experience in training and consulting on these topics, is that search is not well-integrated enough to provide the full context of Findability per the needs of the Community, Content, and Context of use needed within organizations.

Later in this section, the ability to search across repositories from one interface will be seen as a tremendous need/desire (60%) from the survey respondents.

It is interesting that the lowest perceived impediment across both communities was a “lack of skills.” While people trained in library sciences may bemoan the fact that most users are not Boolean search experts (or “sophisticated” with search in general), the reality is that business people should not have to be search experts in order to find the information they need to do their jobs. That does not, however, excuse the designers/owners of the Findability experience from paying attention to such details. Systems should be designed to support and augment the people who have to use them, rather than the reverse.

Figure 32. What Are the Impediments to Finding the Right Information in Your Organization?

<table>
<thead>
<tr>
<th>Impediment</th>
<th>AIIM Members</th>
<th>Non-AIIM Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor Search Functionality</td>
<td>71%</td>
<td>15%</td>
</tr>
<tr>
<td>Inconsistency with How We Tag Content</td>
<td>59%</td>
<td>14%</td>
</tr>
<tr>
<td>Lack of Adequate Tags</td>
<td>55%</td>
<td>10%</td>
</tr>
<tr>
<td>Information not Available Electronically</td>
<td>49%</td>
<td>14%</td>
</tr>
<tr>
<td>Poor Navigation</td>
<td>48%</td>
<td>14%</td>
</tr>
<tr>
<td>Don’t Know Where to Look</td>
<td>48%</td>
<td>15%</td>
</tr>
<tr>
<td>Information Changes Constantly</td>
<td>37%</td>
<td>21%</td>
</tr>
<tr>
<td>Don’t Have Access to the Systems I Need</td>
<td>30%</td>
<td>21%</td>
</tr>
<tr>
<td>Don’t Know What I am Looking For</td>
<td>22%</td>
<td>12%</td>
</tr>
<tr>
<td>Lack the Skills to Find Information</td>
<td>22%</td>
<td>9%</td>
</tr>
</tbody>
</table>
Turning directly to enterprise Findability, we find an interesting dynamic between AIIM members and non-AIIM members. When asked how many search tools they use in a typical week, 14% of non-AIIM members respond (alarmingly?) use no search tools (apparently, search within e-mail or on the desktop does not count to them), and by the time responses have hit two search tools, 66% of respondents have already weighed in.

Contrast that with AIIM members, who peak in the majority of responses between 1–3 tools, and have a “Long Tail” extending to more than 10 search tools. These differences are likely due both to heightened awareness of the tools and systems in place within AIIM members’ organizations, which tend to be content and information-focused, and which have invested in multiple systems due to the wider and more complex variety of information they deal with.

How do responses to “number of search tools” correlate with the “number of internal repositories” used in both of the responding communities? Non-AIIM members search only one repository per week (49%), the leading answer by a large margin when compared to the next highest response of two repositories (21%). By contrast, 36% of AIIM members said they search more than five internal repositories (36%), with the second highest response at three repositories (20%). Clearly, AIIM members have a wider variety of systems containing information, and ways in which they can search within them. It is not the lack of search capability that is causing frustration in this case, but the fact that there are so many options (typically in siloed/individual repositories) which cause Findability failings.
If siloed information is part of the problem, and an ability to search/find across multiple systems is part of the cure, how many respondents have the ability (and tendency) to search across systems? The vast majority of respondents do not have this capability, but wish they did (60%), while a small percent (9%) both have and utilize such a capability frequently. This ability, frequently known as Federated Search or Universal Search, is not entirely new but clearly has not been adopted at the rate that users would prefer.

Figure 35. Can You Search Across These Multiple Repositories with a Single Query?

One way to measure Findability’s effectiveness is to track the amount of time employees need to find information. For non-AIIM members, the majority of responses (51%) spend four hours or less per week looking for information. For AIIM members, responses are tightly clustered at two to four hours (28%), four to six hours (27%), and eight or more hours (24%), with the majority combined response being between two and six hours per week. Again, this is not due to a lack of systems that store information in (e.g., a repository such as a file server) nor in search tools to access repositories. The lack of an overall Findability experience that makes the system work for the user, rather than the user having to work the system, is a major issue within organizations.

Figure 36. How Many HOURS per WEEK Do You Spend Looking for Information?

Incidentally, while a decrease in time spent looking for information is typically what you would want, for people who need to do exhaustive research it may be unavoidable (and undesirable) to spend minimal time seeking information. On the flip side, for those who need information in an emergency (e.g., such as an emergency room doctor, the pilot of a plane with a failing engine, or similar but non-“life threatening” emergencies), clearly the right information, instantly, is what is needed.

With that in mind, respondents were asked how often they found the information they were looking for on the first try. The results were essentially uniform across the AIIM and non-AIIM respondents. The majority of responses was 25–50% of the time (38%), followed closely by 0–25% of the time (30%). A mere 10% of respondents found the information they were looking for in the first pass most of the time.
Searching for a known item should be among the easiest of searches to accomplish successfully (assuming you recall some specifics that will aid your Findability efforts, such as author, title, or contents of the information), although determining which repository and search tool to use can easily frustrate a user’s success. This is an area where “more sophisticated” search may or may not be warranted. If your call center needs to be able to look up account information based on a phone number, the system should enable search by such targeted information rather than assume that “full-text” search against all information is the appropriate tool.

**Figure 37. What Percentage of the Time Do You Find What You Were Looking for on the First Search?**

For time-sensitive Findability needs, clearly one would expect to get “the answer” to an information request as quickly as possible and, again, in some situations, every second counts. Regardless, even for a “researcher” role such as R&D, or in the legal realm of e-Discovery, someone (or more likely, a team), spending the majority of time weeding through irrelevant information is generally not seen as a productive use of time.

As we can see in the following figure, even in the worse case Findability has not failed entirely as only 2% of respondents said their search activities resulted in irrelevant information 76–100% of the time. However, the fact that people are spending 25–50% (41% of responses) and 51–75% (an additional 15%) of their time reviewing irrelevant information is a sign of much work left to be done. It will be quite some time before the enterprise Findability experience is so finely tuned that people will universally find the information they are looking for without any wasted effort—but the efforts made to maximize success do not have to be terribly burdensome or expensive.

The differential in responses between success on the “best case” first pass of search (76–100% of the time from 10% of respondents), and similar “best case” of minimal time reviewing irrelevant information (0–25% of the time from 42% of respondents) would seem to indicate what has been stated in usability literature/discussions for many years now. Success on the “first hit” is ideal, but barring that, providing hooks that connect users to the “scent” of their ultimate destination lowers the perception of failure in Findability (see http://en.wikipedia.org/wiki/Information_foraging and discussions on “information scent”). Providing ways to refine/expand search or discovery with relative ease is a primary method to increase success in Findability.

**Figure 38. What Percentage of Your Time Searching/Locating Do You Spend Reviewing Irrelevant Information?**
In Section 3: *Why Findability Matters* we analyzed responses to what content types should be findable in organizations (text and data are the most frequently targeted, but everything “should be”). In the following question, we find that the reality of Findability for each type largely corresponds with the relative importance assigned in the prior figure. Given that audio and video content are still not a mainstay of most organizations (despite the rise of “User Generated Content” [UGC] and Web 2.0), that they rank last to this question is not all that surprising. The main problem for Findability, then, is not that certain types of content can’t be found, but rather that all types of content suffer from poor Findability. Although different techniques can be used to search on content such as audio or video (e.g., “find a video clip that looks like this” or “identify the person speaking based on a 10-second sound bite”), the same general tools and techniques can easily be used regardless of the content type.

Figure 39. Within Your Organization Which of the Following ARE Currently Effectively Findable?

The fact that 69% of respondents say that less than 50% of the information is searchable online is a troubling statistic for anyone concerned with improving Findability. Finding content digitally is only possible if pointers to content or the content itself are in digital format, made available for indexing by search and/or accessible by Information Organization and Access (IOA) techniques such as taxonomies, tags, and bookmarks. If needed information in your organization is not directly online (and instead stored on paper, film, fiche, or simply as “knowledge”) or is in an inaccessible repository (due to security concerns, licensing conditions, or a lack of integration and connectors), this situation must be addressed in order to achieve Findability.

Figure 40. What Percentage of Your Organization’s Information Is Searchable Online?
Looking at satisfaction with Findability at the lower levels of Search, Interface and Taxonomy, we can see that very few respondents are “very satisfied.” For AIIM members, nearly half of respondents state they are “Not Satisfied” or “Very Dissatisfied” (46–53% of responses), with roughly one-third being neutral (29–31%). This is in contrast to non-AIIM members, who are primarily “Neutral” (49–69% of responses), but tend to be more satisfied (21–40%) than dissatisfied (9–11%). Such individuals—who are likely not as familiar with Findability’s various components—appear more inclined to be marginally satisfied with these components than to condemn them outright. Many may have also chosen “neutral” due to their lack of awareness, to be on the safe side. In any case, Search leads in satisfaction scores, and is the primary means for Findability.

**Figure 41. What Is Your Level of Satisfaction with the Following Components of Findability in Your Organization? (AIIM members)**

**Figure 42. What Is Your Level of Satisfaction with the Following Components of Findability in Your Organization? (Non-AIIM members)**
Components of Findability

Findability is not just search, but it is the most popular method used in finding information among both AIIM members (79%) and non-AIIM members (39%).

It is interesting to see the variety of techniques chosen by AIIM members is much more varied and significant (total of 185%) than non-AIIM members (101%). This aligns significantly with the differences in awareness shown in the adoption lifecycle charts for AIIM members and non-members respectively (see Figures 24 and 25 at the beginning of this section).

Taxonomy (pre-defined navigation schemes, in most use cases) and Bookmarks (flagging content for later, personal retrieval) are nearly evenly split among AIIM members (32% and 34% respectively), while non-AIIM members tend to favor Bookmarks (24%) and Tags (12%) over more traditional/formal means such as Taxonomy (5%) for navigating their information systems.

Whether navigation is handled more formally (Taxonomy) or free-form (Tags), AIIM members appear to put more stock in providing organization and access techniques beyond raw search as a means to find enterprise information.

Figure 43. How Do You Typically Navigate Your Information Systems?

When looking at the ways in which people navigate information systems, it is interesting to see that Agents/Alerts ranked last across all respondents, although the non-AIIM respondents rated Taxonomy (a term not well understood outside of fairly technical realms, as seen in Figure 26 in the beginning of this section) the lowest (5%) and for Agents, edged slightly ahead (8%) of AIIM members (7%).

Taxonomies have enjoyed a rising level of awareness in the last 10 years, but again, as seen earlier in this section, non-AIIM members are largely unaware of Taxonomies as a concept, and are unaware how they are being used (51%). The most typical use case among AIIM members for Taxonomies is indeed for Navigation (21%). However, 22% of AIIM members is that “They’re Not” (being used), the highest response by a thin margin. That being said, for situations where Taxonomies are not overtly used as navigation schemes (any multi-level navigation scheme is a Taxonomy of sorts), it may be hard to detect that they are being used unless you are intimately familiar with the design of the system behind the scenes.

Taxonomies applied to "Enhance Search" (18%) is the next most significant response, providing such benefits as a means to re-rank search results based on the placement of content within a taxonomy (difficult to detect, but should provide “more intelligent” search results), as a way to provide folders or categories that search results are sorted into, or as a way to expand/refine the search query to enable more fine tailoring to the desired precision and recall.
The next two most significant responses, to “Map Content into Web Sites/Portals” (12% and 7%, AIIM vs non-AIIM) and “Cross-reference Repositories” (8% and 11%, respectively) are very similar, and somewhat more advanced use cases of taxonomy. Meta-layers are important constructs in the quest for improved Findability—whether using federated search, ongoing search agents (cutting across, or running within silos), and taxonomies that allow one to either bridge between systems (cross-references) or to peer into systems from a level up (a portal view providing a single point of access into underlying systems/applications)—they again take the workload off of the individual in connecting the dots between systems, or searching repeatedly in various silos, and use differing techniques to minimize or eradicate the barriers between the information needed, and the user seeking it.

Figure 44. How Are Taxonomies Used in Your Organization?

When asked how many Taxonomies were used, “Don’t Know” was again the most significant response (52%), followed by zero (16%) (either because they are explicitly not used, or are hidden within search, used as portal frameworks, and so on). Just 2% of respondents said their organizations have four taxonomies, and a combined 7% reported having five or more. For those who are using Taxonomies, it appears that less (or fewer) is more. Indeed, anyone who has created and maintained a Taxonomy of any complexity knows that using a small number (1–3) of overlapping and connecting ones is a much more sustainable model than a single “uber-Taxonomy.”

Figure 45. How Many Taxonomies are Available Within Your Organization?
Taxonomies do not build themselves, and as seen earlier in this section (see Figures 26 and 27), auto-classification technologies are not widely deployed—that leaves individual people to apply the metadata/tags that provide “hooks” and enable Findability via navigation schemes, “see also” pointers, and so on. In this regard, AIIM members have a variety of likely candidates for classification of content, primarily the “Authors” of content (40%), but also Records Managers (29%), and Subject Matter Experts (25%) as the top three responses.

Non-AIIM members overwhelmingly “Don’t Know” (37%) who classifies content (and hence the dependence on search), with IT at 18% being the secondary response, and tied in third place, Authors and SMEs (11%). Even though metadata is stored via technological means, the fact that IT stands out as the most known choice for this task is not a good sign for Findability. A certain degree of expertise in the content itself, and in techniques for adequately organizing information is needed—unless there are IT staffers available with familiarity and skills in Findability techniques, and the time to address the volume of new and changing content, this is likely to become a bottleneck that hampers Findability.

**Figure 46. Who Tags and Classifies Content in your Organization?**
Turning to the less familiar techniques, we need to recall that Findability is more than search, even if search is first and foremost in the mind of most respondents. Search itself is more than a set of functionality that requires the user to come to the system to issue a query every time he or she is seeking information. Why not provide a means for information to find the user?

For people who do not have a need to issue repeating queries against their systems (i.e., updates to your sales pipeline, competitive intelligence alerts based on news coverage, status alerts tripped on high/low thresholds), perhaps there is not much use for Agents or Alerts. For ongoing research purposes, however, they are tremendously useful.

As has been mentioned many times in this report, the design of the Findability experience should remove as much of the burden from the user as possible (without being expensively over-designed). The ability to have content find you is one way to remove that burden, and is another technique that could be combined with a federated search approach to let you know of the odd changes occurring in a system that you wouldn’t otherwise normally spend much time in.

For the majority of users who are using a separate search interface for each repository, agents running within each repository could provide something approaching a federated search capability, albeit an inelegant hack.

Figure 47. Do You Use Agents (Searches That Run 24/7 and Issue Alerts)

The majority of respondents do not use Agents (72%), but among those who do, the focus of these repeating queries focus on specific topics (43%), a specific repository (32%), or a specific project/team (31%). Targeted queries are the key, as it can be quite easy to put Agents in place that could easily overwhelm your e-mail inbox (if using e-mail notifications), or that overpopulate a portal/dashboard interface to the system.

Figure 48. What Do You Use Agents to Track?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Updates and Additions Regarding a Specific Topic</td>
<td>43%</td>
</tr>
<tr>
<td>Activity in a Specific Repository</td>
<td>32%</td>
</tr>
<tr>
<td>Activity in a Specific Project/Team Area</td>
<td>31%</td>
</tr>
<tr>
<td>Activity of Named Individuals/Experts</td>
<td>18%</td>
</tr>
</tbody>
</table>
AIIM members appear to have fairly limited choices regarding interfaces used for Findability, with the traditional view of Folder-based Hierarchies (i.e., such as Yahoo! directories) and Tree-style Views (i.e., Windows Explorer) at 71% and 38% respectively. More advanced methods of visualizing result sets or navigating information spaces remain largely unknown (22–53%) or unavailable (33–55%) for the majority of responses, although the use or availability of these techniques is not entirely absent. Business Intelligence (BI) Dashboards are becoming an intersection point for the traditional world of “structured” information (data from databases and ERP systems, for example), and “unstructured” information (such as commentary associated with a client file or notes on an insurance claim). Similar to the portal interfaces of the past, dashboards provide another meta-layer interface that allows information to flow to the user in context rather than forcing the user to find it themselves. We will have to see over time how such interfaces begin to be adopted, but it is clear that Business Intelligence for the masses has not yet arrived.

In comparison, non-AIIM members have even fewer options, with the vast majority of responses being "Don’t Know" (56–72%) or Not Available (13–21%). Of those interfaces that are in use, the ranking is similar to AIIM members, being very tightly split between Folder-based Hierarchies (21%), Tree-style (15%), and Business Intelligence Dashboards (14%). Again, search rather than navigation/discovery seems to be the primary Findability method for non-AIIM members.
What is it that people are trying to do when employing Findability techniques? The obvious responses are to find the answers to a given question, discover know what we know about a topic, person, product, or service.

Beyond the obvious, what more advanced techniques are people employing?

We have once again broken out responses across both AIIM members and non-AIIM members, although the answers are largely the same across both populations. Many respondents either have No Experience (ranging from 44–62% for AIIM members and 25–49% for non-AIIM members) with various advanced Findability technologies, or stated they did not know what a given one was (ranging from 24–42% for AIIM members and 43–52% among non-AIIM members).

AIIM members are more likely to be aware of the techniques we listed, but for the most part both populations are not using them. Among the technologies being used actively or experimentally, “Analyzing Customer/Public Sentiment” (sometimes called “Buzz Analysis” and with an emphasis on use by marketing departments), Detection of Emerging Topics, and Real-time Problem Analysis ranked highest. These techniques, you may notice, tend to take advantage of Agents/Alerts and Dashboard-like functionality, which per previous findings are not enjoying a tremendous amount of uptake. While they are more on the cutting edge, they are not entirely vaporware. But it will clearly take more time before people are even aware that these solutions exist, let alone deploy them in their organization.

Figure 51. Rank Your Experience with the Following Advanced Findability Techniques (AIIM members)

<table>
<thead>
<tr>
<th>Technique</th>
<th>No Experience</th>
<th>Don't Know What This Is</th>
<th>Experimenting</th>
<th>Currently Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyzing Customer/Public Sentiment</td>
<td>27%</td>
<td>43%</td>
<td>13%</td>
<td>8%</td>
</tr>
<tr>
<td>Detection of Emerging Topics</td>
<td>29%</td>
<td>52%</td>
<td>16%</td>
<td>8%</td>
</tr>
<tr>
<td>Real-time Problem Analysis</td>
<td>26%</td>
<td>53%</td>
<td>14%</td>
<td>8%</td>
</tr>
<tr>
<td>Detect Fraud</td>
<td>24%</td>
<td>64%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td>Wisdom of Crowds</td>
<td>35%</td>
<td>48%</td>
<td>14%</td>
<td>4%</td>
</tr>
<tr>
<td>Sentiment Analysis</td>
<td>42%</td>
<td>49%</td>
<td>7%</td>
<td>2%</td>
</tr>
<tr>
<td>Analyzing Customer/Public Sentiment</td>
<td>33%</td>
<td>62%</td>
<td>3%</td>
<td>2%</td>
</tr>
</tbody>
</table>

Figure 52. Rank Your Experience with the Following Advanced Findability Techniques (non-AIIM members)

<table>
<thead>
<tr>
<th>Technique</th>
<th>No Experience</th>
<th>Don't Know What This Is</th>
<th>Experimenting</th>
<th>Currently Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Real-time Problem Analysis</td>
<td>44%</td>
<td>50%</td>
<td>16%</td>
<td>12%</td>
</tr>
<tr>
<td>Analyzing Customer/Public Sentiment</td>
<td>47%</td>
<td>51%</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Detection of Emerging Topics</td>
<td>50%</td>
<td>52%</td>
<td>12%</td>
<td>10%</td>
</tr>
<tr>
<td>Wisdom of Crowds</td>
<td>51%</td>
<td>51%</td>
<td>13%</td>
<td>7%</td>
</tr>
<tr>
<td>Sentiment Analysis</td>
<td>52%</td>
<td>49%</td>
<td>19%</td>
<td>6%</td>
</tr>
<tr>
<td>Analyzing Voice-streams</td>
<td>49%</td>
<td>43%</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Detect Fraud</td>
<td>43%</td>
<td>43%</td>
<td>6%</td>
<td>3%</td>
</tr>
</tbody>
</table>
A decidedly more technical examination comes in the form of how the Information Architecture (the components that create the entire Findability experience) has been deployed. The traditional model for software/hardware solutions is the "licensed software" model—typically some combination of a per-user fee and/or the number of servers the solutions is being deployed on (or indexing against, as the case may be). As the longest running business model for solution purchases, it is not surprising that it is by far the majority response in both communities (71% vs. 46%). That said, the non-AIIM community is embracing alternative deployment methods such as SaaS (Software-as-a-Service—a hosted/rental model), Open Source ("free" although typically with commercial support or integration services being provided as a fee-based service), and appliances (pre-configured, stand-alone solutions that come on their own hardware, with no additional server required for the solution itself). The SaaS and appliance approaches seem to be popular approaches for organizations that have fewer repositories to connect with, less complicated environments, and in general, less sophisticated Findability needs. This does not mean that SaaS or an appliance would not work in more complicated or sophisticated situations.

Figure 53. How Has Your Information Architecture been Deployed?

<table>
<thead>
<tr>
<th>Deployment Method</th>
<th>AIIM Members</th>
<th>Non-AIIM Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Licensed Software</td>
<td>71%</td>
<td>44%</td>
</tr>
<tr>
<td>SaaS</td>
<td>5%</td>
<td>12%</td>
</tr>
<tr>
<td>Open Source</td>
<td>14%</td>
<td>22%</td>
</tr>
<tr>
<td>Appliance</td>
<td>10%</td>
<td>20%</td>
</tr>
</tbody>
</table>
Frustrations and the Consumer Web Impact

Given that the broad market is not as aware of the components and techniques of Findability, what drives their satisfaction and dissatisfaction with it, both inside the enterprise and in the consumer Web realm?

The following figure was discussed in Section 3, with a focus on the motivation for users. Now we will discuss how high the bar has been raised when looking at Findability from an enterprise standpoint.

Some 82% of respondents “Agreed” or “Strongly Agreed” that “Experience with the Consumer Web Has Created Demand for Improved Enterprise Findability”—which one might anecdotally expect, given the amount of time we collectively spend on the Web and the past 10 years of adoption of the Web as a primary user interface on our home and work computers.

Figure 54. Experience with the Consumer Web Has Created Demand for Improved Enterprise Findability

Perhaps more telling than the general Web experience for Findability and its impact on enterprise uses, is the finding that 50% of respondents believe Findability in their organization is “worse” to “much worse” than their favorite Web sites.

Figure 55. How Does Findability in Your Organization’s Internal Sites Compare to Findability on Your Favorite Web Sites?

Not every system can compare to the best of the best however, and the pairings are not always apples-to-apples. Still, in a more direct comparison of their organization’s own systems, 40% responded that internal systems were “worse” to “much worse” than the Findability of their own organization’s consumer-facing sites.

While the raw underlying infrastructure is often run by corporate IT, the experience clearly varies inside versus outside. If it’s not the technology itself (the same technology could be made available to audiences and communities on both sides of the firewall), then there must be other factors at play here.

Figure 56. How Does Findability on Your Organization’s Internal Sites Compare to Findability on Your Organization’s Consumer-facing Web Sites?
The consumer-facing Web has a number of clear guidelines for success in Findability such as the impact on revenue, costs, and brand awareness. Sales and increased revenue are the main measures of success, and are easily quantified, as are improvements such as shortened customer support resolution times; increased trials of subscription services and conversions of trials to full purchases; brand “buzz” as measured by press/media/blog mentions, and so on. In the enterprise, Findability success is more difficult to come by, partly due to a lack of formal goals and strategy, as described in Section 3: Why Findability Matters.

Beyond relative success or failure, and rather than simply accepting that the consumer Web is having an impact on expectations for Findability in the enterprise, respondents were asked to rank the effectiveness of both “Commercial Web Search Tools” (pure or dedicated Web search engines and directories) as well as “Commercial Web Sites” that are known for commercial success as a result of their use of Findability techniques to drive adoption, revenue, and awareness.

The “Commercial Web Search Tools” list included more established sites such as Ask, Dogpile, Google, and Yahoo! as well as newer “2.0” offerings such as Mahalo, Technorati, and Wikia. Does the “old guard” compare well to the newer startups?

Google (Web search) has the highest ranking as “Most Effective” at 43% vs 8.2% for the second highest response, which was for Yahoo!—two of the oldest and well known search engines on the Web. In the “Above Average” data slice, Google and Yahoo! are nearly tied at 33.4% and 32.8% respectively. Beyond the initial extreme differential, the majority of tools are ranked as “Above Average” or “Average.” Even though the consumer Web experience is an improvement over many enterprise deployments, perfection has not been achieved, based on this data.

The fact that A9 (from Amazon), Answers.com, Clusty (from Vivisimo, an enterprise search provider), Dogpile (a “meta-search/aggregator” solution), Mahalo (a “human-powered search engine”), Technorati (a blog search engine), and Wikia (an “open source Internet search engine” created by Jimmy Wales of Wikipedia fame) range from 50% to 77.3% in the “Don’t Know” category, is an indication of just how limited the variety of tools are that people are using on the consumer Web when it comes to finding information.

Figure 57. Rank the Effectiveness of the Following Commercial Web Search Tools
On the “Commercial Web Site” front, Amazon, Wikipedia, and eBay rank highest as the “Most Effective” or “Above Average” for their Findability effectiveness. In this case, there was no runaway “Most Effective” choice. It should not be terribly surprising that Amazon and eBay got top ranking, as these are among the most successful e-commerce sites on the Web where subtle (or major) changes to improvement in Findability reap tremendous revenue benefits. Interestingly, from a “pure” usability standpoint neither site should be as successful as they are. Amazon, with its cluttered interface, and eBay, with its stripped-down interface, no quality control on the content, and layouts of content created independently by those selling items, are far from “best practices” for Web usability. The end results however, while not perfect, continue to drive revenue to the organizations. The combinations of search, taxonomies, related information, statistics on who is buying what, at what price, and their reputation, are among the methods employed to create “sticky” sites that ultimately lead to sales.

On the flip side, Wikipedia is perhaps more closely aligned to the variety and scale of a large Web-enabled enterprise information collection. Being a hypertext-enabled encyclopedia, and having the benefit of thousands of contributors and editors, the linkages and references between pages on Wikipedia is among the richest of any single site on the Web. Combined with the sheer volume of content within Wikipedia, searches that may begin on Google or Yahoo! frequently end up directly on a page within Wikipedia, which is essentially "perfect precision" (from the standard search discussion of precision vs. recall).

What is somewhat puzzling is that among search, usability, and user interface (UI) aficionados, Flickr, NetFlix, and the iTunes Music Store (iTMS) are hailed as exemplars for Findability. Yet when respondents were asked about the effectiveness of Findability on those sites, most had no idea (“Don’t Know”) ranging from 45–68% of responses. These are all newer services than Amazon and eBay, and so do not have a lengthy brand awareness history behind them. However, all are easily experimented with and make commendable use of search, tagging, facets, and recommendations or related information within the context of their interfaces.

Figure 58. Rank the Effectiveness of Findability on the Following Commercial Web Sites
**Ownership and Vision**

As discussed in Section 3: *Why Findability Matters*, respondents indicated that there was either no Findability Strategy (26%) or a "Balanced Approach" (33%) between strategic and ad hoc usage in their organizations, which essentially states that there is no overall Findability strategy. That said, who are the drivers for some aspect of strategy? Mid- to low-level IT personnel (32%) is the primary response, followed closely by No One (26%). Given that Findability needs to be deployed as an integrated system and experience if it is to be successful, having the strategy driven purely by technical personnel (or no one) is likely to result in more pointed, single-purpose tool deployments, such as the overdependence on search as the one and only tool in the toolbox. It is heartening to see Line of Business Managers (21%) and the CIO (18%) as the next highest responses, as they are more likely to look across a department or multiple business units to solve the needs of their business (although of course that is not a guarantee).

**Figure 59. Who Drives Your Findability Strategy?**

- IT (not CIO): 32%
- Line of Business Managers: 21%
- CIO: 18%
- Records Manager: 14%
- Users: 13%
- Other: 9%
- Corporate Librarian: 4%
- Other CxO: 5%
- No One: 26%
In the end, when respondents were asked to choose a single, primary driver for their Findability strategy, “No One” (27%) edges out IT (22%), with the CIO (13%) and Line of Business Managers (11%) dropping to half that of IT. Suffice to say that a broad strategy for Findability is not found terribly often at this point in time. Interestingly, in both figures, Users ranked fairly low as a driving factor, particularly in contrast to the findings we experienced in the Market IQ on Enterprise 2.0 where Users and Management were seen to be the two primary drivers (having the exact same response level).

While the impact of the “Consumer Web” as discussed in Figure 54, showed that 82% of respondents “Agreed” or “Strongly Agreed” that “Experience with the Consumer Web Has Created Demand for Improved Enterprise Findability”—apparently they are not voicing a strong enough opinion on the matter to actually drive change.

Figure 60. Who is the PRIMARY Driver of Your Findability Strategy?
Who makes the final call on Findability? At this point, IT seems to “own” it, and the decision would appear to be made purely on a technical basis—on platforms supported, systems that would need to be crawled and indexed, and so on. Both AIIM and non-AIIM members are in rough synchronicity on this front although the non-AIIM members’ single largest response was that they had no idea who made the final decision regarding Findability solutions (45%). Without clear ownership and personnel driving forward the need to improve, Findability is likely to remain a low priority in organizations.

Figure 61. Who Makes the Final Decision Regarding Findability Solutions?

With a lack of ownership, there is correspondingly a lack of awareness (62%) as to what budget is available for implementing Findability-related functionality, and for the most part, relatively meager ($0–$50,000) budgets set aside (15%). Responses did spread across the entire range of options, in roughly equal proportions (between 3–5%) from $50,000 to $1,000,000+. Spending appears to vary widely, a sign that Findability is likely not well understood. Otherwise, there would be a more consistent grouping of responses, and the response to “Don’t Know” would not be nearly as high.

Figure 62. What Is the Budget (USD) for the Current Year, to Implement Findability-related Functionality?
Awareness, Implementations, and Satisfaction of Solutions

In this last portion of the State of the Market, we used a three-phase approach to hone in on user experiences with specific solutions. The first pass was to quantify brand/product awareness of solutions in the Findability space. The second pass filtered responses to identify whether or not they had implemented the solution. The third and final pass asked them to rank their satisfaction with the solution.

From a “mindshare” standpoint, no single vendor or solution entirely “owns” the enterprise Findability space, regardless of the perception of the consumer-facing Web search world. The reality is that the market is tremendously fragmented—which is good from a competitive standpoint, at least if you are a buyer of technology, as competition in a market space forces solution providers to improve and innovate in order to compete.

However, it also means that with so many choices to be had, buyers can easily become confused about which solution would be the most appropriate for their needs. This can lead to abruptly short buying cycles (for those desperate to do something immediately), set the stage for lengthy research and evaluation timelines, or in the worst case, result in no action being taken at all—a losing scenario for everyone involved.

If we look at the solutions that garnered more than 50% of the responses, Microsoft (88%), Google Search Appliance (78%), Open Text (63%), Oracle (Secure Enterprise Search) (63%), FAST (50%), and Autonomy (50%) are the top mindshare owners with regards to Findability (see Figure 63 on page 56). The list is nearly endless, however (these responses are only for those who received 5% or greater of responses), and again speaks to the fact that there is much confusion and competition in this space. As more and more consolidation happens in the industry, whether due to acquisition or bankruptcy, perhaps this solution space will be easier to get a handle on. In the meantime, the availability of so many different choices both helps and hurts buyers and sellers.

As the follow-on question regarding solution awareness, respondents then provided insights into whether they had implemented and used the solutions they were aware of. Each of these solutions had to have at least 1% of total responses to make the list. The top six remain the same as the prior question, with Autonomy, FAST and Oracle (Secure Enterprise Search), and Microsoft and Google continuing their battle for first place, albeit in slightly reordered fashion (see Figure 64 on page 57). An intriguing indicator in these responses, however, is the last line, “Have Not Implemented Anything” (12% for AIIM members and 32% for non-AIIM members). There is clearly much room for growth, given how many respondents have not implemented anything. In addition, the fact that we needed to set the bar at a mere 1% of respondents to create this list suggests there is much more talk of Findability than action at this time.

In the final pass, respondents were asked to rank their degree of satisfaction with the solutions that they have heard of as well as implemented (see Figure 65, beginning on page 58). The filter for this pass was that the solution had to have been implemented and ranked by at least five respondents. Satisfaction with all solutions runs the gamut from Very Satisfied to Completely Dissatisfied, with no definitive best or worst.

Given that the context of success would also depend on these solutions being integrated into one or more systems, success can be difficult to measure. This makes the job both of buyers and suppliers all that more difficult, as the common understanding of success has not yet been attained. While this market is not at the earliest stage of adoption, it is clear that work needs to be done on many fronts to truly cement awareness for these solutions, the need to solve the problems they would address, and to drive home successful implementations.
Figure 63. Which of These Solutions/Suppliers Have You Heard Of?

- Microsoft
- Google Search Appliance
- Open Text
- Oracle (Secure Enterprise Search)
- FAST
- Autonomy
- IntelliSearch
- EMC (askOnce)
- Xerox
- SAP (NetWeaver Enterprise Search)
- Dow Jones (Factiva)
- IBM (OmniFind)
- Verity K2 (Autonomy)
- Infospace
- ZyLAB
- Endeca
- Brainware
- SAS (Enterprise Miner)
- Inxight (Business Objects)
- Vivisimo
- Coveo
- Dow Jones (Synaptica)
- Open Source: Lucene
- Reuters (Calais)
- Mercado
- ISYS
- IBM (Dogear)
- SchemaLogic
- Innmagic
- Stratify (Iron Mountain)
- Convera Retrievalware
- InQuira
- Omniture (Visual Sciences)
- dtSearch
- Siderian
- Wordmap
- Exalead
- Recommind
- Attivio
- NextIT
- Teragram (SAS)
- Cogenz
- Open Source: Lucene + Solr
- Connotate Technologies
- Kazeon
- SPSS (Lexiquest)
- Expert System
- Consona (KNOVA)
- SPSS (Clementine)
- Thunderstone
- Raritan Technologies
Figure 64. Which Findability-Related Solution(s) has Your Organization Implemented and Used?

<table>
<thead>
<tr>
<th>Solution</th>
<th>AIIM Members</th>
<th>Non-AIIM Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Google Search Appliance</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>Open Text</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Autonomy</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Oracle (Secure Enterprise Search)</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>FAST</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Verity K2 (Autonomy)</td>
<td>4%</td>
<td>4%</td>
</tr>
<tr>
<td>Dow Jones (Factiva)</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>SAP (NetWeaver Enterprise Search)</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>EMC (askOnce)</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Xerox</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>Open Source: Lucene</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>IBM (OmniFind)</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Inmagic</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>ISYS</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>dtSearch</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Endeca</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Inxight (Business Objects)</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Have Not Implemented Anything</td>
<td>32%</td>
<td>19%</td>
</tr>
</tbody>
</table>
Figure 65. What Is Your Level of Satisfaction with Solutions that Have Been Implemented?
Figure 65. What Is Your Level of Satisfaction with Solutions that Have Been Implemented?

- **Microsoft**: 46% (Very Satisfied) + 29% (Mostly Satisfied) + 19% (Average) + 6% (Mostly Dissatisfied) + 6% (Completely Dissatisfied)
- **Omniture (Visual Sciences)**: 52% (Very Satisfied) + 22% (Mostly Satisfied) + 24% (Average) + 8% (Mostly Dissatisfied) + 6% (Completely Dissatisfied)
- **Open Text**: 38% (Very Satisfied) + 28% (Mostly Satisfied) + 17% (Average) + 14% (Mostly Dissatisfied) + 8% (Completely Dissatisfied)
- **Oracle (Secure Enterprise Search)**: 35% (Very Satisfied) + 30% (Mostly Satisfied) + 35% (Average) + 10% (Mostly Dissatisfied) + 5% (Completely Dissatisfied)
- **SAP (NetWeaver Enterprise Search)**: 28% (Very Satisfied) + 28% (Mostly Satisfied) + 24% (Average) + 12% (Mostly Dissatisfied) + 10% (Completely Dissatisfied)
- **SAS (Enterprise Miner)**: 43% (Very Satisfied) + 43% (Mostly Satisfied) + 14% (Average) + 12% (Mostly Dissatisfied) + 10% (Completely Dissatisfied)
- **Verity K2 (Autonomy)**: 36% (Very Satisfied) + 55% (Mostly Satisfied) + 9% (Average) + 10% (Mostly Dissatisfied) + 5% (Completely Dissatisfied)
- **Xerox**: 25% (Very Satisfied) + 38% (Mostly Satisfied) + 31% (Average) + 6% (Mostly Dissatisfied) + 6% (Completely Dissatisfied)
- **Open Source: Lucene**: 33% (Very Satisfied) + 44% (Mostly Satisfied) + 22% (Average) + 10% (Mostly Dissatisfied) + 10% (Completely Dissatisfied)
A well-executed Findability strategy is the antithesis of approaches that link multiple sets of search and management tools with individual repositories.

Users instinctively understand that Findability is critical to their own goals and success, as well as their organization’s. Yet as strong as the study’s findings were in this regard, there are equally fervent beliefs that Findability within organizations is severely lacking, especially in contrast to the consumer Web.

Users of commercial tools and sites such as Yahoo, Google, Amazon, and eBay often ask why such Findability functionality does not exist in the corporate world.

Compounding this is the fact that technology solutions and related strategies are no longer viewed as the sole purview of IT. Business users are consumers: ones educated enough to be dangerous. They are now confident enough to know they can demand more, and become frustrated when they cannot simply have outside-the-firewall experiences inside it as well. If only it were that easy.

Part of the user dissatisfaction with enterprise Findability stems from information management solutions in organizations that have developed organically over a period of years. Also, the long tenure of a particular Findability technology—search—can potentially confuse strategists within the firewall. A belief that Findability is synonymous with search leads some to conclude they have a Findability strategy if they have search technology. All too often, however, search is linked to an individual application, which leads to fractured Findability.
Moreover, applying search tools in an ad hoc manner often does not result in effective Findability, which in turn often leads to blaming the search engine for the failure. In reality, the tool may be more than adequate for what it has been designed to do, but the design behind its deployment is flawed.

Findability introduces a platform of functionality that goes well beyond search. Many Internet-based search experiences today transparently include approaches to relevancy ranking, integration with many types of taxonomies (from stackonomies to folksonomies, deployed at multiple levels), behavioral search, text analytics, and sentiment analysis. But most organizations do not have a centralized, strategically developed approach to Findability. Under such a methodology, multiple layers of Findability technologies are orchestrated and coordinated as a service, capable of being deployed against any number of content sources and repositories.

A well-executed Findability strategy is the antithesis of approaches that link multiple sets of search and management tools with individual repositories. That strategy only causes user frustration due to the need to jump from one research environment to another, and merely provides an illusion of content integration.

Though perhaps not the only or most efficient manner in every case, the provision of a singular, navigational front end and omnipresent search tool that collectively aggregates disparate content resources can deliver the simple and effective single point of access many users desire.

The provisioning of enterprise Findability experiences that equal—or dare we hope, surpass—those on the Internet requires a rigorous needs assessment and strategy. But therein lies the challenge to the business and IT communities. While the business side must determine the right levels of functionality required, IT must develop approaches that simplify the delivery of it and minimize the number of front ends. Understanding myriad sources of unstructured information (e.g., e-mail) requires the orchestration and coordination of multiple disciplines and technologies working in concert.

The development of a Findability strategy has to be addressed deliberately and uniquely within each organization. It is not a product that can be purchased, but instead an environment that requires analysis, design, and ownership. Development of an effective Findability strategy requires multiple disciplines. We defined Findability as the art and science of making content findable. The Findability strategist cannot simply be someone in IT who can support the technical deployment of a “search tool,” but someone who is part library scientist, part linguist, and part interface designer (or someone adept at brokering these talents into a single team).

The Findability strategist must also be technically savvy. This individual (or team) should have an understanding of a full range of Findability technology alternatives, what each offers individually, and how they complement one another. This individual (or team) must also have an appreciation for business objectives, including legal and security concerns associated with information access.

From a technology perspective, a sound Findability strategy includes components such as automated classification, taxonomical and facet-based interfaces, ontologies, tagging, and search. The search function is potentially complex, comprised of many features and functions such as natural language processing, concept analysis, and user sensitivity. This is the more difficult aspect of designing and implementing the technology to support a Findability strategy. Each component should complement and leverage the capabilities of the others in a seamless and intuitive manner. The end result or “total solution” should be an interactive, personalized user experience that provides a single, albeit dynamic and heuristic, approach to finding content.

It must be stressed that the full value of investments in search technology will not be realized by purchasing the “best” search engine, but by integrating that engine into an overall Findability strategy. In the end, you want to give your users the ability to efficiently recover information so they can use it in innovative and targeted ways.

Inside the enterprise, however, this is no small task, particularly in light of users’ expectations. What the Internet has taught us is that “search” can occur across “all” content, applications, and repositories. Whether looking for text files, images, or videos in one collection, across multiple collections, in known repositories or discovered in unknown sources, the general approach or interface should be the same. What Internet-enlightened users can fail to realize is that while results equal to those achieved with commercial tools on the Web are obtainable inside the firewall, accomplishing this is not as simple as replicating what the commercial sites do merely by deploying the same technology.
Planning Advice
Each Findability strategy is potentially unique. For example, the steps taken to organize a collection of digitized video and audio files for purchase and download by a general-interest consumer community may not work for a collection of scientific findings needed by marketers and developers of chemical compounds hoping to increase collaboration and the rate of innovation. What remains the same in each instance, however, is the requirement for some form of Findability, working in a coordinated effort with search, navigation, taxonomy, personalization, and interface. Although the potential technical components remain the same, the individual features, make-up, and execution should differ.

Begin the development of a Findability strategy by examining Findability scenarios across the organization—or at least to the level of sponsorship. (One of the major issues affecting Findability is a lack of ownership of the strategy. The level of planning, change management, time, and technology investments that may be required will not be supported or funded without a corporate sponsor or owner. Therefore, it is important to identify early on who that individual or team of individuals is. Their position within the organization will dictate the scope of the strategy development.)

Using the sponsor’s domain as a framework, assess the needs for Findability across the organization. This is accomplished through a combination of process analysis, content audit, and user needs assessment. The process can be facilitated if the needs assessment and rationalization of findings is done within the context of content, community, and context. Focus on why the content is created in the first place, who needs access to it, why they need access, and all possibilities of how to get answers from the content.

Content
The questions below concern the issues that need to be addressed regarding content:

- How is the content created and by whom?
- Where is the content located and how many databases and repositories is it in?
- What categories of information exist?
- Do different types of content require or have different tags?
- Who are the owners of content?
- What is the volume of content?
- What similarities and differences exist within the body of content?
- How dynamic is the content collection?

Community
The types of issues that need to be addressed regarding community are:

- Who is the intended community of users? Is it one community or several?
- Are all users created equal? Do the needs of some supercede the needs of others?
- What interface models remove ambiguity or fit well with the users?
- What attributes make the content relevant?
- How proficient are the users in understanding the content?

Context
Pay particular attention to context. While understanding content and community is important, it is context that ultimately defines the intersection of the two. Context places the reality of content and the needs of the community within the demands of business goals and objectives. The types of questions that need to be addressed regarding context are:

- What is the ultimate goal of the Findability strategy (e.g., to enable customer self-service, ensure compliance, facilitate e-Discovery, foster expertise identification and brokering of tacit resources, facilitate collaboration, expedite knowledge discovery, assist targeted retrieval, detect brand sentiment, mine business intelligence—or all of the above)?
- What is the value of content after it is retrieved? What do users do with content after it is found?
- How is the relevancy of content determined?
- What access rights need to be supported?

It is important to note that security can be a major component of a Findability strategy. As noted in Section 2: Technology Complements and Alternatives, security was ranked the most important component to a Findability strategy. With increased Findability often comes a need for greater control over access. In fact, security should be viewed proactively and may...
require iterative assessments. The need for security may not be apparent initially. Prior to the availability of effective Findability, some content within an organization may naturally “hide itself” from inappropriate use or discovery. That is to say, ineffective Findability functionality may have rendered the unsecured content nonetheless difficult to find and thus “self-protecting.”

Although security can be viewed as a feature of the content itself, it is better to view access rights from the context perspective. This allows you to appreciate that security rights may be dynamic and contextual, but it will also let you weigh not only what security is required, but what security measures may in fact be unnecessary and actually impede a Findability strategy. Security should be viewed as integral to the entire Findability strategy.

By understanding the context of Findability, the strategy can also support “process intelligence.” Imagine a “search tool” that does not simply return content that satisfies a user’s query, but actually interfaces with inventory systems, marketing campaigns, or customer support tracking systems to dynamically trigger or advance processes, as well as alter or greatly personalize how content is retrieved, ranked, and displayed.

In the end, it is not a single component that determines the best approach to Findability, but the intersection of content, community, and context. In more technical terms, this is the development of an information architecture, an underlying foundation that manages all content (whether in a single repository or not), and provides a flexible, adaptable interface to the content to support the rapid, accurate identification and retrieval of content.

It should be appreciated that content, community, and context can break out into multiple levels. Content does not have to be physically positioned as a single collection or subjected to a single records plan. There may be separate and distinct communities within an organization, each with very different needs. Such unique combinations of content, community, and context must be examined, at least to see whether there is merit in specifically and uniquely supporting them separately. Does each instance need its own search tool, relevancy ranking scheme, tagging system, and taxonomy, or can functionality be shared and “personalized” dynamically and deliberately in context?

With the Findability strategy clearly defined, you can begin to assess technology alternatives. For the search component of the architecture, seek out technology providers that stress ubiquitous integration across business applications with highly customizable and context-sensitive interfaces. Look for integrated text and data analytics, contextual search and navigation, multimedia search, intelligent value/entity extraction and linking, social and collaborative search/tagging, and transparent and appropriate security as required by your strategy.

This approach to providing “search” inside the firewall is rigorous. It requires far more work than simply selecting a search engine, or accepting the search tool that comes embedded inside another application. But the effort likely results in the production of an enterprise asset—an ability to leverage corporate content, to eliminate reinvention, poor communication and miscommunication, increase innovation and responsiveness, support compliance and e-Discovery, and facilitate collaboration. We end this Market IQ with the same phrase with which we began it: Content without access is worthless.
Methodology Used

Two sources were used in producing this Market IQ: The accumulated experience and ongoing research of the AIIM Market Intelligence team and a survey it developed and administered.

The survey was conducted between May 2 and May 13, 2008, using a Web-based tool. Invitations to take the survey were sent via e-mail to several thousand individuals, both from inside and outside the AIIM community. A total of 528 individuals responded to the survey.

Survey Demographics

The make-up of the total community between AIIM members and non-AIIM members was almost equally mixed: 54% were AIIM members (285 individuals), and 46% were non-AIIM members.

Organizational Size

Survey respondents represented organizations of all sizes. The largest portion (46%) of the survey population was comprised of large-sized organizations (5,000+ employees). Another 42% came from medium-sized organizations (101–5,000 employees). Our research was not focused on smaller organizations. The entire breakdown by company size is provided in Figure 66.

Figure 66. How Many Employees Are in Your Organization?
Vertical Industry Affiliation
The survey population was comprised of individuals from across a broad swath of vertical industries. Overall, no single vertical comprised more than 11% of the total population, providing a broad perspective across industries.

Figure 67. Which Vertical Industry Do You Work In?

Role
Survey findings are reflective of multiple roles and departments within an organization. IT-related personnel accounted for 27% of the survey population, while senior-level management (including CxOs) constituted 15%. The entire breakdown by role is provided in Figure 68.

Figure 68. What Is Your Role in Your Organization?
**Geographic Region and Global Reach**
Most respondents (88%) came from the United States. Another 2% came from Canada. European respondents comprised 8% of the survey group, and the remaining 2% were from Asia-Pacific. Africa, the Middle East, and South America were not represented in this survey population.

![Figure 69. In Which Geographic Region Are You Located?](image)

The surveyed organizations, on the other hand, were split between those that are global organizations and those that are physically located in only one region.

![Figure 70. Is Your Organization a Global Organization (i.e., Has Physical Offices in Multiple Countries/Regions)?](image)
Livellink ECM – Records Management empowers everyone in your organization to file all corporate holdings according to organizational policies, managing the complete lifecycle of all corporate records, thereby ensuring regulatory compliance and reducing the risks associated with audit and litigation.

The Livellink ECM – Records Management interface is Web-based, enabling all users to access records management functions from a standard Web browser. By providing a common interface to access all forms of information, such as images, paper, word processing documents, spreadsheets, and email, Livellink ECM – Records Management provides an automated system that removes the complexities of electronic records management, making the process completely transparent to your end users.

**Enable centralized and consolidated access to information**

By classifying enterprise content as business records, you are also identifying the business context and value of corporate information. Accordingly, the entire records management process gives organizations a much clearer understanding of what their enterprise content represents. And as such, they can much more easily extract its maximum value; in other words, make the most of that content. Livellink ECM – Records Management improves access to enterprise records, giving all users the ability to create, classify, manage, and retrieve paper and electronic information.

**Feature Summary**

- **Embed records management into Livellink ECM – Enterprise Server** – Adds records management functionality such as Classification, Records Detail, Hold, Label, and Cross Reference to Livellink ECM – Enterprise Server documents, folders, email, compound documents, and physical objects.
- **Defensible records classification** – Classify records automatically or interactively. Automatically inherit retention schedules and classifications simply by moving records into folders. Alternatively, users can classify documents with a single click from the Livellink ECM – Enterprise Server user interface.
- **Detailed disposition reporting** – With the system’s report generation tools, organizations can create full and detailed listings of records that are ready for review or final disposition. The listings can then be routed to appropriate individuals for review and approval.
- **Disposition searching** – Supports disposition searching against Livellink ECM – Enterprise Server items, which calculates the disposition date of the items based on the RSI schedule and returns those records that are ready for deletion, archiving, or moving on to the next stage in their lifecycle.
- **Multiple classifications and retention policies** – Supports the application of multiple file classifications and retention schedules to individual records concurrently, meaning that a document can hold two or more record classifications and be retained concurrently according to multiple retention schedules.
- **Automated dispositioning** – Automate the disposition of records according to organizational requirements; for example, if your organization is managed thousands of emails as business records, the sheer volume of this content demands automated management processes.
- **Auditing** – All activities in the system are fully audited, with detailed logs maintained, ensuring that all disposition activities are fully documented.
- **Import Policies** – Enable retention policies and other data to be automatically imported into Livellink ECM – Records Management from IRCH Retention Manager.

Visit [www.opentext.com](http://www.opentext.com) for more information about these and other Open Text Solutions.

“We now have a standard and enforceable process by which the entire organization maintains all communications and work files. We’re working efficiently together, reducing business risks and protecting our intellectual capital.”

**Noelia Bordian, Corporate Records Manager, TransLink**

**Benefits**

- Improves productivity and accelerates user adoption.
- Minimizes corporate risk and enhances accountability.
- Ensures knowledge integrity.
- Streamlines records retention and destruction.
- Manages enterprise content as business records, no matter where they live, without impacting the way users work.
- Enable cost-effective long-term storage of content
Vignette Recommendations: Better Findability through Social Search

Enterprise Search has long been the de facto standard for corporate knowledge databases and websites. Because this approach is typically based on text-matching algorithms, it does a thorough job in finding all documents that match a particular query term. Some highly evolved search engines use specialized classification systems or pattern recognition techniques that rely on statistical inference. As a result, enterprise search engines have experienced huge increases in performance, comprehensiveness, and automation. However, they still lack the single most important ingredient that produces relevant search results: subjectivity. Based upon a few ambiguous words typed into a text field, a search engine still has no reliable way of accurately interpreting the actual intent of an individual user.

Social Search
Most social search techniques rely on explicit (and often misleading) user actions and feedback however. Social search techniques also frequently ignore a key element in determining a visitor’s true intent when conducting a search: the overall context of a visitor’s behavior. Context, in the case of social search, refers not only to the context of the visitor’s individual actions on a Web site, but also how those actions compare and relate to the actions of other visitors.

Vignette Recommendations
Vignette Recommendations not only interprets behavioral observations, but also understands the context of the behavior. By combining context with behavior, Vignette Recommendations dynamically recognizes the visitor’s intent and guides them to the right content in the Web site.

How it Works
Vignette Recommendations combines a site’s existing search engine results with community wisdom to produce a set of optimized results that is proven to yield greater conversions, longer engagement, and improved satisfaction. Thus, Social Search can be thought of as a community layer on top of the site’s existing search engine. The original search results may be re-ordered in the process, and the augmented results may include additional results that weren’t originally produced by the search engine, but proven to be valuable to your Web site visitors. Because Vignette Recommendations is delivered as SAAS (software as a service), it can be live on a Web site in as little as 30 days with little or no development, installation or configuration.

Working inside your existing environment
Vignette Recommendations Social Search gives businesses to the full benefit of social search while keeping their current search engine in place. Social Search operates with any search engine already in place, such as Autonomy, Google, Endeca, FAST, Lucene/Nutch, and others. The service can also be configured with “platforms” including ATG, RightNow, Vignette, and other marketing and support content repositories.

To learn more about social search and Vignette Recommendations, download our white paper at www.vignette.com/findability
AIIM (www.aiim.org) is the community that provides education, research, and best practices to help organizations find, control, and optimize their information.

For over 60 years, AIIM has been the leading non-profit organization focused on helping users to understand the challenges associated with managing documents, content, records, and business processes. Today, AIIM is international in scope, independent, implementation-focused, and, as the representative of the entire ECM industry—including users, suppliers, and the channel—acts as the industry’s intermediary.

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