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A Note from the Editors

THIS ISSUE OF INTERCOM is essentially a double issue on information architecture, with print and Web editions (some additional articles have been published online only). I’m thrilled to start off 2012 with such impressive content and an exciting topic. I thank coeditors Andrea Ames and Alyson Riley for their hard work and dedication to this issue. Visit http://intercom.stc.org to share your thoughts about the articles.

—Liz Pohland
liz.pohland@stc.org

WE SET OUT TO DO SOMETHING new with this special edition of Intercom magazine, something that reflected our passion for information architecture and our desire to help equip information architects (IAs) for success and survival given the pressures of today’s economic realities. We wanted to bypass entirely the long-standing discussion about the name and nature of information architecture—a debate that’s been going on since Richard Saul Wurman coined the term in 1976—in favor of exploring what IAs have learned as our discipline has matured and as we have come to speak the language of business. We wanted to focus on the strategic aspects of the discipline that resonate in today’s market—things like:

- The relationship between information architecture and business strategy
- Methods for balancing the mandates of user advocacy and the reality of business requirements
- Tools to measure and justify investment in IA outcomes
- Techniques for describing how human users benefit from information architecture in ways that resonate with those outside of our discipline

And wow, did the IA community rise to the challenge! We are very pleased to introduce the writings of fellow friends of information architec-

“I’VE NEVER MISSED A DAY’S PAY DESPITE THREE LAYOFFS, THANKS TO STC!”

“STC has been a great career investment for me. I never missed a day’s pay in my career, despite three layoffs—each time I was hired by a new company within the next week thanks to my STC networking. Membership in STC is also part of what helped me become vice president and part owner of a 300-person technical writing company. STC can be a good career investment for any technical communicator and my continued membership is a way to pay back for all that my career has given me.”

MY NAME IS THOMAS MILLIGAN AND

I’M AN STC MEMBER

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tecture who share our passion. In the pages that follow, you’ll discover work that explores these topics and provides a glimpse into the future of information architecture—so much good stuff that we couldn’t contain it all in the print version of Intercom. We encourage readers to check out both the print and Web versions of this publication—the Web version contains significant additional material, including our discussion with Rahel Bailie about the synergy between information architecture and content strategy, work by Laura Palmer and Susan Yeshin (who each explore in different ways how IAs can use Web analytics to make business-savvy decisions), some prescriptive advice from Tricia York Garrett for how IAs can communicate in smart, strategic ways with executives, and insights from Nicola Yap on the tricky topic of change management.

In looking at the print and Web versions of this special edition, some themes quickly emerge. First, we weren’t the only IAs who didn’t want to discuss the name of our discipline. Even if we may occasionally ask existential questions about boundaries, the IA role has solidified. There’s a new(er) player on the scene—content strategy—and how the two disciplines play together seems to vary by person, project, and professional context. As a result, there’s some exploration to be done there, but in general, the articles in this issue reflect the confidence and sophistication of thought that comes from being all grown up. Today, IAs are focused on things like business-friendly metrics, effective communication with stakeholders about results, standardizing methods to ensure procedural rigor and high-quality results, and, not surprisingly, what comes next.

Samantha Starmer—guest columnist for “The Strategic IA”—asks questions and begins to imagine what the future may hold, as does Richard Saul Wurman in the article featured on the cover of this magazine. In talking with the authors included in this special edition, we were left with a very clear sense of what can best be described as itchiness: a nagging, pressing, itching to move forward, to discover the next paradigm, to define an information architecture that will take the best of the massive technological advances we’ve made since 1976, and out of all the noise, generate a new, simple, elegant experience. An itching to take huge, technology-enabled, transformational advantage of a concept not new to IAs but revolutionary for the business world—that everything is information and that the lines between stuff, services, and story are forever blurred. The entire game is changing—and no discipline is better positioned to shape this future than ours.

We hope you find value in the focus and material of this special edition, ranging as it does from the practical to the prophetic. Thank you to the gifted authors who contributed to this project and to Liz Pohland for her ongoing support and creative calendaring.

—Andrea Ames and Alyson Riley
thestrategicia@pobox.com

Intercom Magazine Wins Association TRENDS Award

Intercom magazine has been honored with the Bronze award in the category of Monthly Professional Society Magazine in Association TRENDS’ 2011 All-Media Contest. It was one of more than 450 entries in the association publications contest, and STC’s entry was bested only by entries from the much-larger Society for Human Resource Management and American Society of Association Executives. See the full list of winners on the Association TRENDS website, www.associationtrends.com.
Information architects, and all good journalists, are essentially on a quest to inform their audiences, or to serve as a guide on a journey for understanding.
RECENTLY, I TOOK ANOTHER LOOK at two words that have become important to me—information and question. The word information (which is half of the title of my book, Information Anxiety, 1989) comes up often. Information Anxiety is about the current (then and now) flood of what is normally called information. Often when people see the term “information anxiety,” they assume that it refers to too much information, but my definition of the term refers to the lack of understanding that typically comes with gaining or obtaining information. Information anxiety is the gap between what we assume we should understand and what we are able to understand. We cannot be overloaded by information that we are interested in and that, at the same time, is also understandable.

What makes the terms question and information remarkable on another level are the roots of the words and the contrast between them. Most information does not inform, while a quest—that discovery, that journey, that joy in finding something—is a big part of the word question.

There is a power in being informed, and likewise there is power in a quest. Somehow those two words, inform and quest, have more rigor and more thoughtfulness than the words question and information. Instead of nouns—things to be worked on—the words live as verbs, as action. Information architects, and all good journalists, are essentially on a quest to inform their audiences, or to serve as a guide on a journey for understanding.

Since coining the term information architecture, and writing the book Information Anxiety, my previous description of data and information still resonates today.

“There is a tsunami of data that is crashing onto the beaches of the civilized world. This is a tidal wave of unrelated, growing data formed in bits and bytes, coming in an unorganized, uncontrolled, incoherent cacophony of foam…. we see graphic designers and government officials, all getting their shoes wet and slowly submerging in the dense trough of stuff…. they walk stupidly into the water, smiling—a false smile of confidence and control. The tsunami is a wall of data—data produced at a greater and greater speed … in amounts that double, it seems, with each sunset.”

When I wrote the above, the technology in my life was the fax machine. To have the world at your fingertips meant going to a library. We still have too much data and too little understanding, even with the comprehensive “make your life simpler” gadgets of today.

Since initially describing information anxiety, I have attempted to remedy it in a variety of ways. In the 1970s, I wrote a series of books titled after the Yellow Pages: The Yellow Pages of Learning Resources (1972) and Yellow Pages Career Library (1974). Following those were 23 Access Guides to cities and resources. In each book, I arranged information intuitively: around a neighborhood (in the case of a guidebook) or a specific question or idea.

A lifetime of organizing information and embracing my own ignorance has led to a vision showing the potential of information, my waking dream.

The Waking Dream

I had an architecture office in Philadelphia called Murphy Levy Wurman. Al Levy and I formed a little nonprofit out of our architectural practice called Gee!, which stood for Group for Environmental Education. We wrote several publications together on the manmade environment, the environment for over half of the people in the world. Among the publications we produced was a book called Our Manmade Environment, Book 7. The definition of the word environment by Buckminster Fuller was “everything but me.” The book became popular; Time Magazine did a feature on it, and it was published by MIT Press, where I met Muriel Cooper, who took me on a tour of MIT and led me through the architecture machine department that Nicholas Negroponte created. I worked on and published more books with Muriel and we bonded.

Later when I was running the early Technology, Entertainment, Design (TED) Conferences, I invited Muriel to come and show off something that I had seen at MIT. When she arrived at the conference, she came up to me and said, “Ricky, Ricky, I’m not ready yet, I don’t have my computers, I have to pull it together.” It was remarkable: she worked day and night, then finally climbed onstage on the third day with David Small where she showed a live demonstration of flying through information and navigating content in a new and fantastic way. She was doing things in the 1990s that are commonplace now. Shortly after this first and only presentation, she suddenly and unexpectedly died.

At her funeral I gave a eulogy that later became the introduction to my book Information Architects (1996):
IN ADDITION TO THINKING about the words question and information, I have been interested in how words that were once important have begun to weaken due to overuse. I am referring to the innovation fad: innovation conferences, innovation books, innovation divisions of companies, or innovation to describe cars, tires, food, and technology. Perhaps an alternative perspective on innovation is to consider what is not called innovation.

I’ve been thinking about a six-part nomenclature for innovation:

1. Innovation by combining existing ideas. The combination of a steam engine and carriage became a car. A gyroscope and a scooter yields a Segway.
2. Sometimes the lack of need or desire for a particular invention creates a perfect environment for innovators to run wild; for example, Edwin Land and his invention of instant photography.
3. Similar to number two is number three: the recognition of a black hole, a zero, a nonexistence that creates the space for invention. Maybe an appropriate example is the invention of the Post-It note.

“she wore wings on her many cartographic exercises: flying on airplane wings, flying in space, over maps, over information. Watching as the aerial perspective changed with clouds, re-focusing her vision of a man created reality.... a wonderful experience.”

Muriel had achieved a version of my waking dream, a dream of information in context, laid out spectacularly, where everything is at your fingertips. When I saw her onstage demonstration at TED, I remember saying, “She’s flying through information.”

By that point, my business focused on conferences and gatherings. I watched the introduction of the Apple Macintosh computer at the first TED that I created in 1984, and Java, which was called Oak before it was renamed by James Gosling. I even saw the first Google demonstration in 1999 at the “geeks and geezers” TED event (where all attendees were over 70 or under 30 years old). Despite these advances in technology, the realization of my waking dream remained a demonstration from years ago. Macintosh made computers understandable, both graphically and in terms of scale, but did not necessarily make information, understanding, or learning easily accessible. Java revolutionized code for programmers and laid the groundwork for future advances, and Google mastered the technical art of the search—but in order to search, you still need to know what you want to find.

The Internet now includes social databases and tools, vast open collections of the worlds of knowledge, tools for education, conversation, and gestural or intuitive means of navigating virtual spaces. The convergence of all of these things allows me to describe my waking dream as part of the WWW Conference (www.thewwwconference.com), in the form of an app that can metaphorically aid in understanding:

The accompanying app will engender a new modality, perhaps equal to the pivotal changes that have emerged in how we interact with information and each other. It will not merely archive presentations, as is currently the practice, but will offer a unique way to navigate, learn, and understand information based on one’s own personal journey and vast online resources. Wikipedia integration, bibliographic references, social media connections, and a flood of illustrative and cartographic images will allow for expansion and sharing of ideas as offered by the WWW Conference. It will present information in a way that has not yet been achieved. It will be the equivalent of a computer that can nod, nod with understanding.

In this description, I have tried to articulate how the navigation of information should be effortless, enjoyable, and personally rewarding—how the power and purpose of information is to inform, just as a quest is part of a question. Long ago, academics declared that “experience” is paramount, and I once described performance as a new language of design. In this vision, performance and experience are one and the same—both are words for ideas that illustrate the quest of a question and the complexity of information in a way that imparts not only a personal curiosity but also the performance of information.

In retrospect, I would call myself an understanding architect instead of an information architect.

Understanding is power.

Described by Fortune magazine as an “intellectual hedonist” with a “hummingbird mind,” RICHARD SAUL WURMAN is an architect, author of over 80 books and founder of the TED, TEDMED conferences. His latest project, the WWW Conference, will gather some of the world’s greatest minds to talk about the complexity of patterns and convergences affecting our health and that of our planet.
For over 10 years, Net-Translators has helped technology companies and medical-device manufacturers prepare their products for global markets. Our comprehensive localization services portfolio, experienced customer-focused project teams, and unique quality-centered approach help us consistently exceed customer expectations for deadline, budget, and accuracy. We have earned the trust of industry leaders worldwide, so you know your products are in good hands.

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INNOVATIVE INFORMATION ARCHITECTS are molding their designs to influence product success, from extending content collaboration across the enterprise, integrating end users into the content development process, decreasing time to market, and creating environments in which information influences the viability of the product. In this article, I introduce several case studies in which information architects are pursuing innovations in information development and delivery that contribute to the profitability of their companies.

Do Innovations in Information Architecture Contribute to Profitability?

Technical communicators are often informed by engineering and marketing colleagues, as well as by senior management, that technical content does not contribute to the corporate bottom line. These colleagues view technical content as a “necessary evil” that is required by customers but unimportant to product sales.

As a result, information development is poorly funded and often the first victim of outsourcing and downsizing. To combat opinions about the high cost of information development, in 1982–1983 STC funded a study, conducted by Janice (Ginny) Redish and Judy Ramey, that provided case studies of situations in which innovative information development reduced costs. The study, however, did not touch on contributions to corporate profits, in part because there was little data to that effect.

With the implementation of the OASIS DITA standards in many corporate environments, managers must demonstrate that they have achieved a return on investment. Consequently, it seems, we have experienced an increased attention to measurements of productivity increases, decreases in translation costs, reduced costs of customer support, and increases in customer acceptance and sales. Each of these measurements has an effect on profitability.

Although many measurements focus on the cost side of the profitability equation, I have been most interested in evidence that superior, innovative information architecture can have a dramatic effect on revenues. The cases that I present in this article point to both decreased cost and increased revenue. However, the revenue cases provide more vivid and persuasive examples of innovation that may be useful in changing the perceptions of senior management.

Measure the Customers’ Propensity to Buy a Product or Recommend It to Others

If you have not yet heard of the Net Promoter Score (NPS), it’s likely that you will—and soon. NPS is quickly becoming a key corporate indicator of customer satisfaction.
NPS was first promoted by Frederick F. Reichheld in his 2003 article in *Harvard Business Review*. In that article, “The One Number You Need to Grow,” Reichheld explained the NPS this way:

Companies spend lots of time and money on complex tools to assess customer satisfaction. But they’re measuring the wrong thing. The best predictor of top-line growth can usually be captured in a single survey question: Would you recommend this company to a friend? This finding is based on two years of research in which a variety of survey questions were tested by linking the responses with actual customer behavior—purchasing patterns and referrals—and ultimately with company growth. Surprisingly, the most effective question wasn’t about customer satisfaction or even loyalty per se. In most of the industries studied, the percentage of customers enthusiastic enough about a company to refer it to a friend or colleague directly correlated with growth rates among competitors. Willingness to talk up a company or product to friends, family, and colleagues is one of the best indicators of loyalty because of the customer’s sacrifice in making the recommendation. When customers act as references, they do more than indicate they’ve received good economic value from a company; they put their own reputations on the line. The findings point to a new, simpler approach to customer research, one directly linked to a company’s results.

Gathering the data and calculating your NPS is really quite simple. Customers are asked if they would recommend a product to a friend or colleague. Using a 10-point scale, from 0 for “not at all likely” to 10 for “extremely likely,” the NPS can be calculated by dividing the survey results into three categories and counting the number of responses in each category:

- **Promoters** are those who score you 9 or 10. They are very enthusiastic and ready to recommend your product widely.
- **Passives** are those who score you 7 or 8. They’re OK with your product but could easily be drawn away by the competition.
- **Detractors** are those who are very unhappy with your product and likely to send negative messages. They score 6 or lower.

To determine the NPS, calculate the percentage of customers who are promoters and subtract the percentage who are detractors. For example, if 70% of customers think the product is useless and only 10% would strongly promote it, you have an NPS of 10%-70%, or -60. For more information, see [www.net promoter.com/np/calculate.jsp](http://www.netpromoter.com/np/calculate.jsp).

With an NPS of -60, you’re not likely to be in business much longer unless you significantly change your business model. You want to turn the detractors into promoters, not just by making them less unhappy but also by actually turning them into active advocates.

To turn around the negative attitudes of existing customers, you need to embrace several key business objectives as well as reinvent your information architecture:

- Create an atmosphere in the company that focuses on customer quality.
- Set out a roadmap for the changes that you know must occur for you to be successful.
- Gather data you can trust about what your customers demand from product and service quality.
- Get to the real causes of customer unhappiness by conducting a root-cause analysis.
- Take action for correcting the problems uncovered and ensure that people are accountable for the solutions.
- Embrace innovation and embark on a program that transforms your company into one that understands and cares about your customers.

What is most interesting about the NPS is that it has most to do with the quality of the product and its accompanying information, training, and support. It’s not about a list of features or how many new releases occur in one year. It’s not even about sales. It’s about the service provided to customers after they have purchased your product.

At least one company recognized the importance of its customer content after getting a really low NPS. In addition to the base question about customer loyalty, they asked how much product usability and content quality influenced the customer’s loyalty ranking. Both scored low. As a result, senior management became advocates for significantly improving content quality. That meant changing the relationship between the technical authors and the product developers, requiring that information architects establish close relationships with customer support and training, and redefining the type of content that would be delivered to customers in the future.

This organization has big goals and a challenging transformation ahead, but the executives now recognize that content quality has a dramatic affect on customer loyalty, as does the usability of the product. The key to the success of the transformation is direct support from the top executives and the enlistment of everyone else in the company in the re-architecting effort.

**Consider Metrics-Based Publishing**

In a case study presented by Bob Lee at the 2011 Best Practices conference, he explained that the information architects at Symantec asked for measurements about the effect of content on the volume of calls coming to the support center. They were interested in support-call volume, activity on a corporate-sponsored forum, and the number of hits on a key set of topics on the website. They were looking for key areas in which topics would solve specific customer problems and help customers be self-supporting.

By studying which issues generated the most support calls, which forum threads were most active, and which topics got the most hits, they were able to make key changes to a set of how-to topics, optimizing their content and metadata. They also linked the how-to topics to the forum threads to encourage customers to read them. Then, they measured again.
The targeted, task-oriented topics rose to become the most popular content on the website for the particular technology. Hits on these optimized topics rose by 344%, demonstrating that even how-to topics can be made more accessible through search-engine optimization.

A previous study had already demonstrated that how-to topics led to better accessibility than PDF-delivered content. For the product Backup Exec, how-to topics generated 3,175,815 hits in one month, while PDF documentation generated 124,027 hits in the same month—a ratio of 25.6 to 1.

Although 85% of the content was the same between the PDF and the how-to topics, the same content is found much more frequently in the how-to format. Despite what customers may tell you about how much they like PDFs, the evidence strongly suggests that topics are actually used more.

Bob also reported a positive increase in visits to the content and interest among customers. He explained that their “buzz score” increased from 3.1 to 7.4. The “buzz score” tracks activity on the forum, including people who begin threads, people who add responses, and people who lurk. At 3.1, a few people posted responses and a few people lurked. At 7.4, someone started the thread, multiple people responded, and many people lurked. Thirty percent of the forum threads received more responses from customers, and 40% of customers reported that the enhanced content resolved their issues, which meant they had no need to call support.

The customer support organization also reported a successful outcome. Calls for the enhanced content dropped by 37% and what had been the number-one source of calls dropped to second place. Best of all, support spent 40% less time on calls about basic system setup, giving them more time to support calls that required their expertise.

As a result of the newly re-architected content, Symantec has been able to promote content that customers really need. They increased activity in the customer forums and decreased the number of calls to support on the targeted subject. No longer are support engineers simply “reading the manual” to customers.

Quite clearly, customer approval of the content was significantly increased by the new content architecture.

**Consider Affecting the Product Development Process**

In a second case study, presented by Bob Beims of Freescale Semiconductor, the information architects asked what impact improvements to the information-development process would have to the quality of the product. They set about to measure that impact by asking when content development should begin.

They believed that involving authors early in the product-development life cycle, especially in the early design stages, would significantly improve product quality. They knew that product developers often do not review content until the last moment before product release, or product changes are made after final content production. They also knew that explaining product-design concepts early clarifies thinking, eliminates ambiguity, and avoids errors in product development. Customer-oriented content created early also helps developers move from the “what” of the product (features) to the “how” (user scenarios and solutions).

The information architects developed a “document first” approach, sponsored by a director of research and development, starting with small wins before moving to larger projects. They communicated their new process to the senior vice presidents and the CEO, effectively inaugurating a culture change in the organization.

**Critical Path Method**

Central to their process change was the adoption of critical chain methods to replace the traditional critical path methods used previously. Under critical path, information development was not allowed into the product-development life cycle at the beginning. The content was only taken seriously by the engineers at the end of the process. Because they had to wait until the late stages for attention from engineering, information developers spent much of their time on non-value-added activities. Yet, they were blamed if content was late or delayed a product launch. For more information on the critical path method, see [http://en.wikipedia.org/wiki/Critical_path_method](http://en.wikipedia.org/wiki/Critical_path_method).

**Critical Chain Method**

The adoption of critical chain methods, coupled with topic-based co-development with engineering, has resulted in greater agility, allowing information developers to provide value throughout the project life cycle. See [http://en.wikipedia.org/wiki/Critical_Chain_Project_Management](http://en.wikipedia.org/wiki/Critical_Chain_Project_Management) for more information about the critical chain method.

A better information architecture, coupled with better processes, led to higher-quality information, including content that is correct, complete, and focused on procedures rather than features.

The new process improved the accuracy of the information, allowed automatic validation of the XML content, allowed for more opportunities to update the content during the process, and allowed the product to be released to testing in enough time to make design changes and correct errors in product design.

As a result of the process changes, a two- to three-month subprocess was reduced to fewer than three days and design data in XML became available six to nine months earlier than with the previous process. In one project, the early availability of design data helped identify a problem that would have been costly to correct later on. Information development is now in a position to change the way information is developed and delivered to customers, including a change from feature-oriented to solutions-oriented information that customers want and need. The new processes, supported by new technologies, make this possible.
Consider Improving the Customer Experience

Chona Shumate of Cymer, a semiconductor company, reported on a study that showed that field service engineers were taking far too much time to find the information they needed to troubleshoot and repair customer equipment. The required content was located in multiple repositories, including some on user laptop computers. Procedures were often isolated from related and important information.

Based on the survey data, the information architects determined that they needed a single information hub where the field service engineers could find all the information they needed to do their jobs. The unified support forum would provide one place to search and find information, a one-stop shop.

Because the architecture team had detailed survey results, they were able to set up measurements that would demonstrate the value of the changes to senior management. The survey indicated that

- users took, on average, 10 to 20 minutes to find information.
- information needed to be found in one location.
- users needed information on their laptops because they were often not connected to the content repositories.
- users needed a forum to exchange information and obtain expert help.

The goal of the one-stop shop was determined by the metrics of time—the time it took to find the needed information, the time required to transform unstructured knowledge into structured content, and the time required to resolve a customer problem from beginning to end.

To deal with unstructured knowledge, the information architect is implementing a technical issues forum to provide for bidirectional, multi-user information exchange. Information exchanged in the forum is “captured and transformed into structured content and repurposed to deliverables as appropriate.”

The success of the project to redesign information access and exchange can be measured. For example, the architecture team’s first goal is to reduce the time to find information to five minutes or less. The second goal, transforming unstructured to structured content, can be measured because it is solely under the control of the information developers. The third goal of reducing the time to resolve a customer problem is yet a work in progress.

Information Architecture—An Essential Ingredient to Product Success

As these case studies demonstrate, information architecture has a significant role to play in the success of a product. We know that buyers, especially those who are not early adopters, rely on references from people they know and respect before they make a purchase decision. The Net Promoter Score (NPS) demonstrates that connection. If better, more timely content and improved content accessibility creates happier, more loyal customers, they are more likely to recommend products and services to friends and colleagues. Those recommendations result in more sales, especially more sales among the late-majority customers who are, according to Geoffrey Moore’s model in Crossing the Chasm, reluctant to buy products that are not used by respected colleagues.

A loyal customer base, encouraged by meaningful post-sales support, is a most valuable asset. Customers who find what they need, get their questions answered quickly and accurately, and can act independently are our most loyal customers. They are most likely to be defined as promoters on the NPS.

Information architects can become serious contributors to product success and company profitability, but as the case studies demonstrate, they need data and measurement. Douglas Hubbard, in How to Measure Anything, asserts that we need effective measurements to make better decisions and reduce the uncertainty inevitably connected to our design decisions. We want to make better “bets” on the future. To do so, we need to focus on the measurements that have the highest payoff and give us the most useful information.

In each of the case studies, the information architects found ways to measure their effectiveness:

- the value of enhanced content to customers seeking answers to their questions
- the value of a major information-development process change to the success of product development
- the value of content accessibility and currency to customer productivity and success

Each new design and the resulting measurements ended in more satisfied and effective customers. Information architecture innovations succeed when they can prove their value. Careful design in response to data and measurements leads to that success.

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REFERENCES

Turning Down the Volume

By DEIRDRE LONGO

SEVERAL TIMES DURING the past few years, I've mentioned during presentations that my first 10 years in information development seemed to be devoted to evangelizing information development and making space for our content. I, or my team, would make the case for being involved early, for building help into a product, for creating a consolidated information library. In each case, we were trying to get our information in.

My second 10 years have instead been focused around making the case to take content out. As a full-time, strategic information architect for a large and ever-expanding portfolio, I'm teaching writers to stop creating a help topic for every UI panel and focus on judiciously adding assistance only where users need it. Instead of writing about each and every product function, I'm advocating that they write about how users can achieve their goals and leave the edge cases to another day or to user communities or other developer sites. I ask development to remove Help buttons from the user interface.

As I read about information architecture and especially about content curation, I see the same focus on trying to control, corral, and simplify the incredible volume of technical content we've written in the past 40 years and that we continue to write. As an industry, we've built standard structures for developing information that result in a great deal of content. Customers already can't find the information that they need, in part because there's so much of it. What can we do?

The following are the basic tenets of my strategic architecture work with my product and writing teams—all aimed at enabling users to find and use only necessary content, exactly where and when they need it.

Discontinue the use of volume as a measure of productivity

This one is a killer. If the entire system is organized around measuring and rewarding volume, is it any surprise that we have so much content? Instead of measuring productivity, we need to measure value. Are we producing content that helps users successfully complete their work? In many cases, the content might not be written topics: it might be an installation program that detects what they have installed already and upgrades it for them; it might be a multimedia demo; it might be a change to a set of labels inside a few windows. I educate and encourage writers to be partners with development teams and usability professionals in the design of the product, showing how complicated parts of products will be to document and suggesting product changes that can reduce written content.

To measure value, we should conduct testing with users to see if they can complete a set of typical tasks. If we’ve been involved from the beginning in the development of the user interface, carefully selecting terms in the user interfaces and embedding assistance, users often won’t need any additional information other than what they see in the product to complete their task. This is a much more valuable experience and a much better use of writers’ time than writing help topics.

Educate teams to understand and apply models, not templates

We all want shortcuts and quick solutions, but our historical approach to building a library for a new product results in a huge amount of content. Teams without an IA (or limited access to an IA) tend to follow this historical approach—one help panel for each UI panel, one document for installation, one for administration, one for application developers, and one for users. The number of documents might change a bit depending on the product size and target audience, but this approach is a quick way to get to 1,000 or more topics in no time.

For teams I can’t spend much time with, I ask them to answer the basic information architecture questions: Who...
Carefully curate related content rather than just including it

Often writers are asked to include some content from another source with the rest of the documentation. Sometimes this content is for a related product, sometimes it’s for a related use case, and sometimes it’s related content with a different scope or perspective.

It’s easy to just add the information. I encourage writers to do the harder but more valuable work of examining the content closely. Writers must ensure that it doesn’t conflict with anything we already say, that it will blend well with our existing content, and that it will provide additional value.

Often, the better solution is to include just a portion of the content or to build a map through the content, showing customers how they should make sense of the related material given the context of our product.

Because of our positions within our development teams, we are a trusted source for our customers. We need to continue to earn that trust by telling customers what they need to know, when they need to know it. Identify and organize the most valuable content for users, no matter where it comes from.

Trust your vision

We as IAs need to envision the design and sell that vision. Once we sell the vision, it’s up to us to hold the space for our teams so that others don’t start designing the information for us.

Because of that historical design perspective I described earlier, it’s not just our writing teams who have expectations about what a library of information looks like. Our development and test organizations have the same expectations and so do our customers. We need to carefully review requests for design changes and see whether they come from valid requirements or from historical expectations.

When our team starts working with a new test team, we’ll get defects that say, “There’s not enough help” or “This panel doesn’t have help.” When we ask what task they were trying to do that they couldn’t complete, they usually respond that they could do their task just fine, they just thought there should be more help because there always is.

User feedback and testing are very much a part of our process and we need to incorporate changes into our design throughout the cycle. But we shouldn’t be reactive with requests unless they reflect true information requirements.

There’s some cognitive dissonance that comes with feeling like we’re trying to undo what we built, but remember that this dismantling is a healthy sign! In any field, you must be willing to question all facts and rules. Any rule that becomes too rigid will mark the first step on the path to irrelevance.

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SUCCESSFUL STRATEGIC INFORMATION architecture is like alchemy—an almost magical blend of art and science. From a scientific perspective, information architecture involves disciplined rigor in the way that we:

- Follow repeatable processes to achieve measurable results
- Test and refine theories until we get them right
- Define variables and constants to arrive at solutions

And much like art, information architecture is about creating meaning through a deep understanding of the human experience—in particular, the science of human cognition. It involves a passionate pursuit of simplicity and elegance in the face of complexity and chaos.

For those facing complexity and chaos at the enterprise level, modeling the information experience in the abstract is an invaluable method for helping everyone to think: employers or clients (“the business”), users, technical communicators, and information architects (IAs). Models ensure that technical communicators (IAs, technical writers and editors, user experience professionals, and so on) can create or contribute to concrete information architectures that work across a broad diversity of audiences, user goals, products, and business requirements while maintaining consistency and brand recognition. Models also ensure that we capture and codify the best information relationships, delivery mechanisms, presentation formats, and content deliverables to address our clients’ business challenges and to meet the expectations of our users within their domains, leveraging their mental models, problem-solving paradigms, and information-processing approaches.

Abstract models of the information experience are key to an enterprise-level strategy for delivering consistent, scalable, effective information architectures. This kind of modeling blends art and science in the best ways:

- It yields artifacts based on tested theories of cognition and information processing.
- It leverages the scientific method by building on validated theories that produce consistent results.
- It borrows from the art-world frameworks for asking the right questions, discovering patterns, and tolerating the ambiguity necessary when dealing with human intent, behavior, and cognition.
- It encourages IAs to discover solutions by applying concepts in a systematic manner, nuanced by a vision for user needs—not by following rules and recipes by rote.

The paragraphs that follow define information models in general and introduce a handful of models for very specific purposes to illustrate how these models drive value in the business.

Models defined

For the most part, adult humans think in terms of models. We observe the world around us, conceptualize, and abstract into models to think and solve problems. To explore this idea further, consider the example of a model home. If you’ve ever looked at a model home while house-hunting, you know that the model is an example, a pattern that shows an ideal state, a depiction of how things might be if life were perfect, a representation of what’s possible if price were no object. In reality, the house you...
end up purchasing might differ significantly from the model—it might be smaller, include different countertops or hardware, or have a slightly different floor plan. The fundamental purpose, form, and structure remain the same—kitchens, bathrooms, bedrooms, etc.—while details vary based on home-buyer needs and capabilities. If you were to compare a collection of “real homes” built by the same developer, they would likely conform to the general pattern of the model home—you probably have felt this effect when driving through a neighborhood where all the houses look alike. While this kind of uniformity is boring in neighborhoods, it’s ideal for user experiences: consistency is predictability, which allows for recognizable brands and highly cohesive, usable information solutions across a broad diversity of design contexts (such as the environment that we’re in when working at the enterprise level).

Information models are a specific type of abstract, conceptual model. Using IBM as a case study, let’s take a look at a handful of “model homes” from the world of information. When used in concert, IBM’s Use Model, Content Model, and Access Model address all facets of an information experience and work together to form a comprehensive Information Model.

Use Model defined
An abstract Use Model consists of a complete, coherent collection of patterns that define ideal interactions between users and information—that is, the information they need, why they need it, what they’re doing when they need it, and how they will use it in that context. “Why?” is a critical question for good Use Model development. In a product documentation context, an IA can assume that the user’s primary purpose is not to use information—rather, the primary purpose is to achieve some other goal. In fact, in the world of “jobs” that the user performs, using information is “Job #3.” Consider the following:

- **Job #1**: the user’s goal—for example, to balance her checkbook
- **Job #2**: using tools—things like paper, pencil, calculator, or personal finance software—to accomplish job #1
- **Job #3**: using information to figure out how to accomplish job #2 to reach the goal of job #1
- **Job #4**: learning how to use and then using the delivery mechanisms in which we deliver our information (as painful as it is to admit, we often create job #4)

The Use Model standardizes and validates assumptions about users and the information they need to achieve their goals by helping the IA specify with precision the user’s principle objective and the information necessary for achieving that objective. A Use Model also helps an IA identify information needs based on user motives and skills. As a result, Use Models should describe an abstraction of how readers use information in typical contexts, such as:

- To do (accomplish a task, achieve a goal, etc.)
- To study (learn concepts)
- To locate (retrieve content by browsing or searching)

When an IA applies the abstract Use Model to their product or process, the resulting deliverable includes:

Concrete user descriptions
Product-, process-, or system-use scenarios that include the tasks that are the user’s primary focus (job #1)

Descriptions of how the user’s primary focus areas are addressed by the product or process (job #2)

Information scenarios that describe the user’s interactions with the information (job #3) necessary to ensure that the user can successfully complete her primary tasks

In short, the abstract Use Model, once applied, yields a specific use model describing a comprehensive set of use requirements for the information.

Content Model defined
An abstract Content Model defines the standard building blocks of content, from the atomic, most granular level to larger “deliverables”—those concrete, stand-alone objects that humans recognize and use. It includes the subject and structure (presentation) of the content, provides a content taxonomy, and relates metadata to appropriate content chunks. When an information architect applies the Content Model, the result is a set of concrete units of information and a structure that combines those building blocks in a way that reflects concrete user goals and tasks.

Product installation information, for example, is a unit of information or a deliverable (using our parlance above) that users typically recognize. The atomic information building blocks—a variety of tasks and concepts—come together in a relatively predictable way, ordered around the task of installing the product. At a high level, that predictable structure (order and organization) typically looks like this:
1. Prerequisites
2. Installation planning tasks and concepts
3. Installation tasks
4. Post-installation configuration tasks

The abstract Content Model enables defining patterns of information—building blocks, order, and organization—that meet customer expectation, removing from the communicator the design burden and eliminating from the user the cognitive processing required to parse information inconsistent with their expectations.

Access Model defined
An abstract Access Model defines a vision for how your target users will find your information. IAs use the Access Model to describe the organization, structure, and inter-relationships of chunks of information and full deliverables, as well as the strategy for using a variety of access methods across an information space—methods such as search, browsable navigation, and so on. The Access Model provides a big-picture vision for overall navigation strategy, as well as patterns for specific access methods for individual collections of content or deliverables. When an IA applies the Access Model to the design of their specific information and user contexts, the resulting deliverable is a concrete navigation and access scheme, including the requirements for what information is delivered where and by what delivery mechanism.

Information Model defined
An abstract Information Model defines the relationships between and unites the other models into a coherent whole. In other words, the Information Model helps architects “put it all together,” standardizing the way we assemble the components of the other models in order to create an information experience for a specific kind of product or system. Like the other models, the Information Model is abstract; when you apply it to a product- or system-specific context, the result is a concrete information architecture.

Why models
While reading the model descriptions, you might be thinking, “Wow! That looks like a lot of work!” It’s true; it can be lot of work. For a large enterprise like IBM, it’s worth the effort. For smaller organizations, a careful cost-benefit analysis will help you determine if the modeling process has tremendous value for you, as well.

Models help businesses think. Models are good for business, because they adapt well and yield results that matter in the marketplace. At the enterprise level, information architecture must scale to handle increased complexity; diversity of users, products, or systems; flux in the market; and rigorous business processes. An enterprise typically can’t afford to update templates every time tactics change or strategy evolves, and no cookie-cutter recipe or library of templates can cover every situation. Models force a business to identify, prioritize, and design for those user interactions that are critical to achieving business objectives. Technology and visual identity may evolve over time, but those user interactions essential to business success do not.

While models can drive sea change, they do not change with trends. The abstract quality of the models keeps the architecture above the fray of trend and branding, aligning all aspects of the information experience, and ensuring that the focus stays on successful user interactions while allowing for interesting change at the presentation level. Because of this focus, modeling an information experience in the abstract helps IAs define and deliver an ideal, consistent, and strongly branded information architecture. Consistency, of course, leads to brand recognition, which in turn contributes to brand loyalty—something the business world definitely understands. In addition, user-centered information architecture ensures high-value and highly findable content; findable, high-value content generates highly ranked search results and priceless social capital, which contributes to the process by which mindshare becomes interest, then consideration, and ultimately a revenue opportunity.

Models help users think. Abstract models based on cognitive science and user-validated theories provide a robust, user-focused framework on which to build the specific architectures that our teams require to implement successful information experiences. Abstract modeling helps us to deliver intuitive information experiences that users don’t have to think about—allowing them the mental
space that they need to maintain focus on the things that they care about—their primary goals and tasks.

As a profession, we follow in the footsteps of Steve Krug and his first law of usability—“Don’t make me think!”—when we deliver excellent information experiences that remove significant user-cognitive load from the equation. That means that we don’t make the user think about our information (Job #1)! Abstract models that are based on sound cognitive principles and user-validated theories work in our users’ cognitive favor. As Krug says, our “job is to get rid of the question marks” so that it’s obvious, without thinking:

- What to do next
- Where to go next
- Whether the information answers the question
- How to find more or different information that will answer the question

Note that “what to do next” and “where to go next” can refer to the product or process that you are documenting, or to the information system used to display your content. Work to make job #2 and job #3 more self-evident for the user; in so doing, you will eliminate job #4 and you might preclude the need for a lot, if not all, of job #3.

Models help communicators think. Abstract models that define access, delivery, content, and presentation remove much of the “guess work” with which our colleagues struggle—especially those teams without experienced IAs. By enabling a framework for thought, technical writers, editors, and IAs (particularly those who are new or have little formal training) can more easily and reliably produce high-quality and consistent concrete architectures.

Experience is still the best teacher. By providing abstract models—including education, examples, and best practices for applying those models in the context of a specific product or system—we build information architecture capability among the other technical communicators on our teams. Removing the need to study the details and theory behind the models enables teams to think less about the general, underlying principles and more about understanding the specifics of their users and how to best apply the models to deliver successful information experiences to those users. In this way, they learn by experience to design and deliver successful architectures while maintaining consistency and integrity within an overall corporate brand, or look and feel.

Models help IAs think. Abstract models encourage an IA to keep user needs and business strategy in the forefront of her thinking, rather than confining an information experience to the boundaries of a template. Applying the models allows IAs the flexibility needed when working across an enterprise. Models enable a trust in the IA to determine where the application of the model can be adapted to support specific business or user requirements while maintaining the integrity of the overarching experience. Models keep the focus on consistent, high-quality outcomes that map to business and user success: results rather than rules, as rules often require deviation and the IAs time and focus to ensure that those deviations are appropriate and necessary for user success. Models provide the IA a method to ensure that the fundamental purpose, form, and structure of the information experience remain the same, while allowing freedom in the details as dictated by user need.

Models: supporting strategy and reducing cognitive load

Modeling an information experience in the abstract can help IAs develop a strategy for delivering scalable, effective information architecture. While wireframes and templates are important, abstract models yield concrete, enterprise-level information architectures that will stand the test of time. Building models and applying variables to get high-quality, consistent results—that’s science. How you adapt the model based on user need and business strategy—that’s art. And that’s the art of the IA—that magic place where user needs and business requirements get synthesized in unique ways that templates cannot fully articulate or replicate. Models help IAs capture the benefit of a scientific process while leaving room for the art that happens when you innovate on the user’s behalf. Salvador Dali captured this concept elegantly when he said, “I am a carnivorous fish swimming in two waters: the cold water of art and the hot water of science.” To our fellow fish, we’ll add the words of Dori from Pixar’s Finding Nemo: “Just keep swimming.” Give abstract modeling a try—for those of you swimming in turbulent waters, it just may help keep you afloat.

Want to learn more about IBM’s abstract information experience models and how we create, validate, and apply them?? Visit Intercom online to see more and to contribute to the conversation!

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ALYSON RILEY’s mother swears that her first word was actually a complete sentence, and she began her career as an information architect shortly thereafter by developing various organization schemes for her plastic dinosaurs. She now works as a senior information architect and strategist on IBM’s corporate strategy team and has over 17 years experience in technical communication. Alyson serves as the corporate lead for IBM’s information architecture council, drives IBM’s corporate-level efforts to define the next generation of user experiences with technical content, and consults with IBM content teams worldwide to develop effective information strategies. Alyson has BS and MS degrees in scientific and technical communication from the University of Minnesota.
Bob Dylan once sang, “Man gave names to all the animals, in the beginning, long time ago.” Although it’s debatable whether this song is the most influential that Bob Dylan wrote, it certainly comes up in my mind quite often in professional meetings and conferences. The fact that we can give names to objects, events, and abstract concepts is a gift. At the same time, this gift is a source of much confusion and sometimes funny (but more often very frustrating) situations.

Ever tried to use the phrase technical communication in a European country? In most countries, the phrase either doesn’t mean anything or makes people think of mobile phones. And how does technical communication relate to the term information architecture?

This article will not discuss terminology; rather, it will explore how misunderstandings around the name of our discipline can cause significant irritation and limit professional effectiveness. In response, this article proposes a way to avoid these issues in specific situations by introducing a layered model for information architecture. This layered model can also be used for other purposes: structuring information architecture deliverables, checking team skills and competencies, assigning responsibilities, and verifying that communication among team members is effective.

A universally accepted term
Information architecture is a universally accepted term—perhaps even too broadly accepted. From a European point of view, this term has established itself in parallel with the North American trend. Since there was no appropriate term in other languages, “information architecture” suited Europeans just fine. We all jumped on a professional title that added more clarity and weight to what we were doing (instead of the “wire-framer,” the “concept-designer,” or the “usability guy,” for example).

This doesn’t mean, however, that everyone has the same understanding of what information architecture is. On the contrary, the definition leaves much room for interpretation (as any definition of an abstract concept does)—especially when working with a business client. In a business context, the term information architecture doesn’t necessarily reflect the definition that we as information architects (IAs) have more or less accepted in our own community.

In one of my recent projects as an e-business strategist, I participated in a planning workshop where the client’s e-business, marketing, and IT teams met with a creative agency selected to redesign the client’s international Web presence. In my role, I had to make sure that the agency understood the client’s e-business vision and properly...
incorporated that vision into the planning and design of the new Web presence. The discussion became heated when we got to information architecture concepts. Here’s a simplified and condensed version of the exchange:

**Client**: We want you to immediately start working on the information architecture; it’s critical for the success of the site.

**Creative agency**: Sure! We need to understand the product structure first.

**Client**: Exactly. Start working on the information architecture for the products. It’s the most complex part.

**Creative agency** (defensive): Agree. We need to understand the product structure before we can work on the information architecture.

**Client** (confused): Isn’t the product structure the information architecture?

**Creative agency**: We think we should start by understanding the product structure before we decide which information about the projects we show.

**Client** (visibly irritated and confused): Agree. You are repeating yourself. I never said you should start with product descriptions and photos, but rather the information architecture.

**Me**: Perhaps it would help if you both briefly explain what you mean when you say “information architecture.” I think you are not quite talking about the same thing.

The client and the creative agency tried to describe information architecture using more abstract words like visualization, model, structure, and organization. Everyone agreed with everyone but did not make any progress. This example illustrates common irritation and confusion when people inadvertently use the same term to describe different things.

Since the abstract explanations didn’t help my client or the creative agency, I proposed a more “architectural” approach to the conversation by looking at the information architecture at various layers. A layered approach to information architecture includes the following:

- **Visual and interaction layer**: This layer involves information visualization and interaction. This was the layer the agency was talking about and included deliverables such as wireframes, visual sketches, visual design, and later specifications for text, photos, and other elements on the site. In my example, both parties called this “the information architecture.”

- **Structural layer**: This is the layer with which the agency was particularly concerned and includes site maps, linking structures, logical taxonomy, and content sources. In my example, both parties agreed that this layer is “the information architecture.”

- **Business logic or mapping layer**: The mapping layer is where the taxonomy (which came up frequently in my example), customization and personalization, content reusability (or single sourcing), and delivery channel specifics play a significant role. In my example, both parties touched on these concepts every now and then, but never explicitly. The information source systems already play a significant role in how information will be logically organized and dispersed. This layer and its functions were never mentioned explicitly by either party in my example.

- **Data layer**: This layer was what the product experts and IT staffers in my scenario were talking about—that is, which data and how and where the data gets stored. They were not concerned with databases, but rather how the data is organized. This includes dynamic data, content management system, static data, and data sources.

In my example, this explanation of information architecture and, more specifically, what we are all doing and how things relate to each other, removed the confusion and allowed us to proceed. This layered model is not meant to be a definition nor the “absolute truth” about information architecture; rather, it provides guidance to help IAs clarify their work. It is structured from the outside-in (think of sushi), from the user- or client-visible parts to more information system-oriented technical parts. The model doesn’t explicitly define the order in which deliverables should be produced, but it helps set the focus and thus helps identify the order specific to the project. Typically, the work must be done iteratively and in parallel.

I have used this layered approach to information architecture several times in situations like the one described above, and it always helped to identify exactly to which facet of information architecture a person is referring. Let’s look at each of these layers in more detail.

### Visual and interaction layer (information visualization)

This layer is about information visualization; clearly, this is the visible layer of the product and the one about which everyone has an opinion.

Using the term *information architecture* at this layer is misleading because we are actually talking about information and interaction design and layout. Some decisions made in this layer do have an impact on deeper information architecture, but more often it’s the other way around. In addition, interaction-design skills are specific and different when compared with information architecture. The deliverables in this layer are various conceptual sketches: rough paper sketches, wireframes, interactive prototypes and first working interface drafts, and sometimes visual design elements.

Depending on a depth of the discussion, it’s sometimes necessary to split this layer into two: visual design and interaction design. Some creative agencies are fine with the visual design, but struggle with interaction design. At the same time, most IAs don’t work on the visual, but more on the interaction layer, thus becoming part interaction designer.
Information architects have a variety of backgrounds and experience levels, all driven by the user-centered approach and a passion to ensure that user needs are incorporated in the information structure and design.

In business contexts, a wide variety of people and roles can be involved in the discussions around this layer. Assume that you will need to moderate many different opinions. In addition, many topics addressed here might actually be a better fit with other layers, so it is helpful to illustrate these layers at the beginning to achieve a shared understanding of the layers. As you do so, place the topics or questions to be discussed immediately next to the right layer in order to steer the discussion.

**Structural layer**
This layer is what we typically think of as the information architecture. It is the “third dimension” cutting through the user interface to information sources and presenting the right information in the right place. It brings the individual bits and pieces of information (and user interface pages) together through relationships. For an IA, it is important to consider two things:
- The interrelations between user interface pages
- The interrelations between the information objects (blocks)

Information architects with a more “user interface focus” work primarily on the relationships between user interface pages or elements; IAs with a more technical background focus more on the relationships between information objects. This difference is subtle but crucial: although a user interface page is an information object, an information object can be something concrete (such as text, multimedia, labels, metadata, and so on) or an abstract object like a “product” or “article.” An abstract information object, like a “product,” may consist of other information objects and be displayed on a user interface page (together with other information objects).

This concept is (and should be) reflected in the following deliverables of an information architect:

- **The user interface sitemap**
  This is the most common and known deliverable. Sitemaps rank in complexity from several boxes outlining the hierarchy to highly complex visualizations showing various dimensions, such as country-specific pages and customer profile-specific pages. Some sitemaps also show dynamic linking between pages. As visualizing dynamic linking typically reduces readability, this detail may be depicted in other deliverables.

- **The user interface interaction map (interface flows)**
  Contrary to the sitemap—which is usually purely hierarchical—the interaction map doesn’t focus on hierarchies but rather on all other relationships between pages (such as static and dynamic links). Unfortunately, many IAs use the interaction maps (or flows) only to depict parts of the interface with explicit flows (for example, registration, account changes, and so on) but not for the complete product. I strongly recommend creating a full interaction map for the product: it represents all possible ways the user can move from one page to another. Going through such a map with a team and reviewing the possibilities results in an excellent mental model of the product design. At the same time, it gives hints on where the design’s mental model can contradict a user’s mental model, which in turn helps IAs improve the interface until both models match.

  Both the sitemap and the interaction map can be intensively discussed in client workshops. There are easily understood, add tremendous transparency, and increase client understanding of the final product. Very often these flows open critical discussions about business processes, such as what is needed in order to support a certain workflow, what is done by the system, and what must be done manually by an operator. These are critical conversations that you should initiate and moderate as needed.

- **Business logic layer**
  The business logic or mapping layer is where concepts like taxonomy, customization and personalization, content reusability (or single sourcing), and delivery-channel details become important.

- **Information objects model**
  This shows the information structure of each information object, including visible and invisible information elements. For example, a news article consists of:
  - Visible elements: a heading, author, date, summary, and the full article, as well as optional elements such as user tags, sound, video, and a photo gallery.
  - Invisible elements: structural tags, additional metadata, expiry date, and archiving tags.
  - Object actions: what can be done with the object and with each information element. For example, create new, delete, modify, move, duplicate, and so forth.

  Often, IAs don’t create models like this; instead, they add elements to the user interface and leave it up to the “data layer” to handle them. I strongly recommend creating these models, as this is the actual information architecture. In particular, the invisible elements are crucial for the proper management of the information, as they define dynamic behavior of information and define the requirements for the business and data layer. If the IA covers these aspects, he simplifies the design of these two layers significantly. Note that the IA in the information object model doesn’t cover the technical data needed to make the desired functional-
ity and information object work in a specific technical environment—that is a part of the data layer.

For all who are new to these concepts, I recommend reading some introductory chapters in any book on object-oriented modeling—information architecture is, in a way, an application of a user-centered design and object-oriented modeling on information delivery.

**Taxonomy and ontology classifications**

Taxonomic and ontological classification involves identifying dependencies and relationships among information objects. If the IA has created information objects models, creating and organizing classification schemes will be easy. If not, then something similar to the information objects map will have to be done in this layer. This work will also result in a definition of metadata used to describe the information objects and usage for this metadata.

Most commercial websites don’t have or need an overly complex taxonomy and ontology. Typically their classification schemes concentrate on one of the two areas, including products and their classification or articles and their classification.

Conducting client workshops around the information objects model and taxonomy is often a challenge. It requires a multidisciplinary team that includes product experts (marketing, product managers, and the like) and IT professionals (who typically have a deeper understanding of the product model) who can each participate in the abstraction and modeling. I often split the model and discussion into visible elements (which are easier to understand and discuss) and invisible elements for which you need to find people at the client side able to understand them.

**Personalization and customization**

If the final information product allows or requires personalization and customization, this feature must be addressed in the business-logic layer. Details about personalization are beyond the scope of this article, but some of the typical deliverables here include:

- A user personalization profile model that describes various user profiles in relation to their personalization characteristics
- A mapping of user personalization profile models and information objects models
- Implications for the visual and interaction layer
- Implications and requirements for the technical infrastructure

The topic of personalization can lead to endless discussion; everybody has a different idea of what it is or should be. The role of an IA (or business architect) in this case is to clearly outline the potential levels of personalization and focus the discussion in the right strategic direction.

**Implications for the technical infrastructure**

Once the information has been modeled and you have a clear picture of relationships and the way they must be managed, requirements on the information-delivery systems become clear and can be further detailed. If the content delivery system is predefined, then its characteristics should be outlined as a model and considered in the information object model. Typically, this would include the technical limitations for what can be done with information objects—for example, only static tagging with no differentiation between end user and the editorial content. If the content delivery system is not defined, then the information object model defines clear requirements to help the team choose the content delivery system. Note that it is almost always necessary to revise the information object model to match the capabilities, information model, and actual implementation of the chosen system.

**Data layer**

The data layer covers all the layers defined above and mapped to the technical infrastructure. In this layer, all deliverables from the other layers are enriched with the specifics of the chosen technical infrastructure in order to be able to realize the desired behavior.

Although IAs are typically involved only in the deliverables for this layer, it is crucial to differentiate this layer from the others above and make sure the difference is understood by the team. At the same time, the specifics of the technical infrastructure from this layer do need to be understood by the whole team, and especially IAs, in order to come up with working and acceptable solutions.

**Summary**

Information architects have a variety of backgrounds and experience levels, all driven by the user-centered approach and a passion to ensure that user needs are incorporated in the information structure and design. This is also absolutely necessary; however, more is needed to make client project setup and strategy successful. I advocate expanding the IA’s toolset by borrowing the concept of a layered approach to system architecture from the IT world.

In conclusion:

- Don’t assume that everyone on a team has the same understanding of information architecture that you do.
- Use the proposed layered approach to information architecture to bring clarity to your focus areas, the deliverables you produce, and the requirements you have on the extended team.
- Use the proposed layers to verify that your team has the necessary skills.
- Have a copy of Bob Dylan’s “Man Gave Names to All the Animals” on your laptop and play it when appropriate.

BOGO VATOVEC is known as a provocative speaker who gets straight to the point. He works as a no-nonsense consultant in change and transition management, user experience, and lean and agile methodologies.
Analytics Aren’t Just Measuring Information: A Case Study
LIKE MANY ROLES in this difficult climate, information architects (IAs) are challenged to crystallize their value proposition in a way that resonates at a business level. One of the industry trends is to measure value through business analytics; however, even if there is a set of defined metrics, measurements in and of themselves are meaningless. According to a 2008 Towers Perrin Study, “90% of employees are looking to make improvements through increased metrics, but almost all of them lack clear metrics and become confused, frustrated, and emotionally disengaged.”

If we think about applying measurement to the information architecture discipline in software or product development, for example, we could say that having a dedicated IA on a team resulted in 25% fewer lines of written documentation. Is that good or bad? What time period was this measured across? Is this an improvement over previous measurement periods, or attached to any stated goal for that product area?

The IBM Rational software development organization consists of several thousand analysts, architects, project managers, developers, and quality professionals distributed over six continents. We create and maintain 57 product families, with hundreds of software releases. Our team of IAs has been thinking about how to drive maximum value to the business for several years leveraging IBM’s notion of measured improvement, a set of theories and concepts that lets companies analyze whether they are really tackling the right set of metrics, and attaching them to business and operational objectives.

In this article, we review how we are working to apply measured improvement to the IA discipline, and explore how that transformation could take shape across our IBM IA community. Leveraging the work that we did in IBM Rational as a case study, we have extrapolated best practices that are equally useful at an enterprise scale as they are at an individual level for a single IA working in a small firm.

Key concepts include:

- What business objectives does information architecture, as a discipline, answer? How do those business objectives break down into operational objectives? For example, we could analyze cost reduction in terms of task analysis, removing unneeded content, or improving market share in terms of enhanced designs as a differentiator against competition.
- What metrics support those objectives? For example, we could look at translation cost deltas, customer satisfaction ratings, writer’s time saved (in dollars), or, better but harder, time to task completion improved in key user scenarios.
- What practices could be defined to enable teams to deliver against those objectives? For example, the IBM IA Council develops standards, templates, and best practices that could be mapped to the business objectives they help achieve. We also work toward tooling in many of the standards; however, can we become more intentional about this?
- How do we capture improvements to strengthen the business case? We have a compliance process that we will analyze to build in the measured improvement process and see delivered results.

**Deriving IA measures from customer satisfaction**

One of the clear and obvious objectives to pursue with a product release is customer satisfaction. However, that’s a statement more easily included in a chart or emboldened in an email blast than put into practice. What constitutes customer satisfaction? How do we know if the customer is satisfied if we do not hear from them? If we only hear criticisms from the customer, does that mean they are not satisfied? For each discipline in a development effort, the criterion for satisfaction is different; from identifying what satisfies the customer, pursuing the goals to achieve that satisfaction, and evaluating whether or not the customer is satisfied in the end. For product documentation efforts, customer satisfaction takes on a particularly unique nuance in that documentation is a means to an end; it is not the product, and is not always even viewed as part of the product. However, when the “end”—that is, the product experience itself—is viewed as poor, there is a very good...
chance that documentation will be highlighted (rightly or wrongly) as a contributing cause. It is the responsibility of the information team, ideally the IA, to head off those issues before they arise. The challenge is to identify the areas with which the documentation struggles most, repurpose those into business objectives, and improve on those in a measurable sense. Initially, the quantitative metrics involved in measuring improvement are also the basis for identifying the objectives. Ultimately, it is the IA identifying these objectives, building strategic solutions to meet the objectives, and executing through to delivery.

In the Rational team at IBM, we set out to determine how we can prioritize areas of the product that need the most attention, justify our focus with quantitative methods, build skills and processes that enable us to execute on those priorities, and prove improvement through the measurements that drove our focus in the first place.

**Benchmarking and iteration**

Metrics are important on two fronts: both at the onset of planning a release and later, at some point prior to the onset of the next release when enough time has lapsed, to capture data that reflects the currently available release. These two lifecycle points allow us to identify our focus items that could be measured over a series of product releases, and specifically allow us to gauge customer satisfaction as it improves (or worsens) at the close of a release, and to guide plans for the pending release. The effort for us became perpetual, allowing us to see trending over a series of releases—in other words, it measured improvement. We gathered our metrics with two primary methods, defects and customer surveying; both were structured to derive statistical data.

**Defects**

Tracking defects or bugs is a standard in the software development business, but we neglected to gain maximum value from this process for our information architecture activities. Previously, defects were managed one-dimensionally: they’d be submitted, triaged to the appropriate owner, scoped to some stage in the release, maybe the severity reemphasized, and essentially tossed over the wall to that owner with the expectation that they’d do their job. That approach works, for what it’s worth—defects are addressed, resolved, and onward into the release we go. But there’s another dimension to defects that we were not appreciating, and that was a more holistic view of the sum of the parts as input to our overall approach to product documentation. We wanted to identify defect trends that highlighted the parts of the products with the most issues—not necessarily the functionality of the product, but of the overall product experience (as perceived through the experience with the documentation). This required that we identify a supplemental set of properties in our definition of a defect that we could use to make such evaluations. The list we came up with is as follows:

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Usage</th>
</tr>
</thead>
<tbody>
<tr>
<td>User</td>
<td>Developer Administrator Development Lead Project Manager Tester Business Analyst (Tailored to the product selected)</td>
<td>Allows us to identify which users struggle most, and ultimately which sets of information they use</td>
</tr>
<tr>
<td>Task area</td>
<td>Getting started Configuration Installation Task completion Troubleshooting</td>
<td>Allows us to identify which stage during the product lifecycle they struggle with most</td>
</tr>
<tr>
<td>Doc type</td>
<td>Installation guide Tutorial General help Reference Videos</td>
<td>Allows us to identify which type of documentation they are having difficulty with</td>
</tr>
</tbody>
</table>

We didn’t expect that the defect submitter would always provide values for each of these properties. When they did not, we were usually able to extrapolate from the details the appropriate values. Importantly, the reason we wanted to capture this information via property values in our defect tool was so we could query against them.

Now that we were able to attribute values to our defects that held specific meaning to the work of information development, we were able query the data to identify which combination values appeared most in defects.

**Survey input**

Trying to solicit customer input on documentation via surveys is a challenging task, not to mention the challenge (including bias) in asking a customer who has complained about your documentation to then spend more time filling out a survey to answer why they are dissatisfied. However, as challenging as it can be, we knew that whatever results we could obtain would be useful. We already had the material for the survey based on the trends we were seeing in our defect analysis. Our focus was improving the return rate of the surveys and determining how to parse the feedback in order to produce statistically valid data.

We require the customers who participate in our client programs at IBM (such as beta programs and customer conferences) to complete surveys at various stages throughout the program or event. We wanted to leverage these existing opportunities to incorporate the type of information we were seeking. To be sure we could gather statistical data, each question required the user to select a number on a sliding scale representing their degree of satisfaction. In addition, we asked that they elaborate on the reasoning behind their responses. The number selection allowed us to rate degrees of satisfaction and the elaboration allowed us to derive themes.
Identified themes and objectives

From the defect and survey metrics, we were able to detect three major problem areas that we translated into our core business objectives and corresponding actionable operational objectives (at least until the improvement metrics indicate it is time to shift focus as part of the evolution and iteration of measured improvement). Our results are included in the table below.

Scenario-driven information architecture

Once we understood the areas that needed the most improvement, we had to identify the actions to execute against the operational objectives to ensure that we met our business objectives. This meant looking closer at the information supporting these objectives and understanding why what was already being produced was unsatisfactory (according to our data). To understand where the disconnect was—that is, why the information was not resonating with the users—we looked at the direction that our technical writers were receiving when producing this information.

What were the development teams telling our writers to write about and was it being guided by the information architecture strategies? From what perspective was this information deemed necessary—from a technical or an IA perspective? Were the writers writing about something that our users told us they needed? Or were the technical writers taking the “document everything” approach, causing our users to experience information overload?

We held some information-gathering sessions with the technical writers and discovered that the problem was a little bit of a lot of things. In some cases, the development team dictated what the writers needed to cover, but this information was based only on the developers’ own familiarity (and preference) with the product. In other cases, the writers wrote only what was tested, but that didn’t always account for all the options that we support as a business. There were also cases where the writers leveraged the information they had to determine their content prioritization, but they didn’t have the appropriate inputs they needed. In any case, whether or not the input of these various sources were accurate and sufficient, we had to standardize the process with which we define information requirements for a release, particularly in response to our newly defined business objectives. Specifically, we needed a process that ensures our users’ needs are addressed.

The resulting process centered on scenario-driven information development. The common theme across all the data that led us to our business objectives was that the current content was not framed in a way that helped the user accomplish higher goals, nor did it explain the context and rationale behind those goals. In other words, we needed to present the information in an architecture that complemented their needs, laying out a pathway for them to follow. Once we had established the foundation of our process, we were able to identify actions against our operational objectives:

- **Identify prioritized scenarios with key stakeholders.** This involves working with development, product management, support, and test teams to reconcile the perspectives we all have on the product and release with the input we receive from customers. We do this to derive a list of prioritized, real-world scenarios that focus on deploying the product, user up-skilling, and task completion. Granted, this can

<table>
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<tr>
<th>Metric results</th>
<th>Business objective</th>
<th>Operational objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delays in installation and configuration phase</td>
<td>Improve time to value: Whether your architecture is for a suite of enterprise software or a desktop application with a narrow audience, ensuring that your users realize the value proposition of the content as quickly as possible is a broadly applicable business objective.</td>
<td>Reduce time to product deployment: A majority of our products are heavyweight enterprise products that can take upwards of six months or more to put into production. We cannot avoid the labor-intensive nature of these complicated deployments, but we can minimize the failure rate and maximize efficiency throughout with the appropriate documentation. This is a key measure for how quickly a customer begins to see value from our products, and directly correlates with how well designed the information architecture is.</td>
</tr>
<tr>
<td>Lack of understanding and general frustration getting started</td>
<td>Lower ramp-up costs: The faster a customer understands the skills or information that are needed to leverage the product or service, the lower the cost of adoption. In the end, this could mean lower switching costs, shortened repeat business cycles, and higher customer satisfaction.</td>
<td>Improve user up-skilling to reduce time to normal production mode: Getting users to maximum productivity as soon as possible is a very important aspect for our customers, and can be a costly one when delays prolong this stage. The documentation plays a vital role in making this transition smooth with tailored information, including intro tours, demos, and tutorials, among other architected content to achieve learning objectives.</td>
</tr>
<tr>
<td>Difficulty locating the just-in-time information needed to complete tasks</td>
<td>Optimize efficiency: Users have goals, and they want those goals to be achieved as quickly and effortlessly as possible. If they can’t complete their tasks because they are unable to locate the information they need, or aren’t guided through the experience, they will assuredly have a negative perception of the product or service quality.</td>
<td>Improve findability and retrievability: With such robust products, there will always be tasks that even a seasoned user comes across that they have not performed before, and will need some degree of assistance. The longer it takes them to figure out the new task, the more dissatisfied they will be. Documentation can aid in these situations with effective retrievability and content organization, allowing them to find the information they need faster.</td>
</tr>
</tbody>
</table>

Table 1. Identified Themes and Objectives
cover a very broad spectrum, but by leveraging the existing data that originally highlighted problem areas, we are able to narrow the scope to focus on what customers are telling us they’re trying to do.

**Maximize coverage of scenarios with other information producing teams.** At IBM, the information development team is not the only group producing publicly consumable information for our products. Contributions also come from advanced education, support, community engagement, and other subject matter experts who regularly publish blogs, articles, and other media. It was imperative to the overall success of our effort that the content being produced from these various teams and roles all aligned with an accepted scope of scenarios. This was not to assign scenarios to specific groups, but rather to make sure that we accounted for the broader ecosystem of content producers to maximize our efficiency.

**Adhere to the process through culture change and governance.** Documentation practices currently employed by our writing teams were very much engrained in their day-to-day activities, and it was part of those activities that needed to change to make sure the scenario-based information was being developed according to the defined architecture. The process employed to change how our writers worked, and adhering to it involved both educating the writing teams and also introducing a governance mechanism to monitor that the process was being followed.

**Results**

What executive would not want to see that the quality of their product was improved or that customer satisfaction had increased? By using the measured improvement concepts, we were able to show the benefits of information architecture at a business level. We reduced the defect backlog related to documentation by 80% and increased our customer satisfaction score to 85%, up 30% from the previous release. While our team is working on goals related to other metrics and objectives, we highlight those two metrics in this case study to illustrate the power that measurement can have when approached rigorously.

Rational has been focusing on measuring improvement across a variety of metrics important to our software development business since 2006 in order to gain development intelligence. This kind of improvement over time against identified metrics allows teams to highlight the value their work is driving, as shown in Table 2.

If you do not inherently understand the value of information architecture, as many managers and executives don’t, it can be simple to dismiss the skills and the role as noncritical in a challenged economic climate. In order to prove value at a business level, you need to use the language of business. Analytics and metrics intelligence has been a growing focus area for companies forced to evaluate every means available for optimizing their business, and it is predicted to continue to trend. The International Institute for Analytics predicts “a strong growth for analytics [overall], with a growing competitive edge for companies using analytics.” Given that analytics requires a logical appreciation of often large amounts of data, and evaluation and assessment against defined criteria, what better match could there be for the work than an information architect, already armed with an analytical and organizational mind?

Leveraging the skills that come naturally, information architects should take on the challenge of defining their own value to their business. Analyze what is important to their company, what they can learn from their customers, and define a set of business and operational objectives they can execute against. And, critically, don’t stop there! Iterate and evolve those measurements so that you are able to demonstrate positive trends over time through measured improvement. Keep a pulse on exactly what objectives are pivotal for IAs to achieve in order to deliver high-value assets to their businesses.

**Table 2. A Sample of Rational Measured Improvement**

<table>
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<tr>
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<tbody>
<tr>
<td>On-Time Delivery</td>
<td>47%</td>
<td>82%</td>
<td>100%</td>
</tr>
<tr>
<td>Defect Backlog</td>
<td>9+ Months</td>
<td>4.5 months</td>
<td>3.5 months</td>
</tr>
<tr>
<td>Beta Defects Fixed Before GA</td>
<td>3%</td>
<td>88%</td>
<td>94%</td>
</tr>
<tr>
<td>Customer Calls</td>
<td>~135,000</td>
<td>~24%</td>
<td>~26%</td>
</tr>
<tr>
<td>Customer Defects Arrival</td>
<td>~5,900</td>
<td>~22%</td>
<td>~20%</td>
</tr>
<tr>
<td>Beta Program Participation</td>
<td>9</td>
<td>26</td>
<td>33</td>
</tr>
</tbody>
</table>

**References**


Information Architecture and Business Process Management: A Recipe for New Business Value

By LISA DYER

THERE IS NO REAL CONTROVERSY in the assertion that information should be architected and managed as a strategic business asset. Most organizations acknowledge the benefits of solving the “information problem,” a problem whose solution could deliver significant business value:

- **Operational efficiency.** People spend up to 35% of their time looking for the information they need. They are successful in finding it less than 50% of the time (Feldman).

- **Information-driven revenue opportunities.** Companies report that their post-sales information is bringing in over 50% of qualified leads, and helping marketers convert prospects to paying customers (Fullkerson).

So why is it that so many potential solutions are not getting funded? A solid business case that in one organization would easily get funding may not get it in another. Many organizations simply put up with the growing cost of the problem, counting on search engines and other technical quick fixes to mute the pain.

Be that as it may, organizations are funding any number of projects to solve other business problems, and in a large portion of those projects, information plays an integral part. Information is ubiquitous, democratic, and highly mutable; its lifecycle is difficult to manage. In a sense, it involves a component of “voodoo” that is often poorly understood and communicated.

Information architects (IAs) are uniquely equipped to help organizations manage this complexity while increasing their competitive edge in the way information is developed, deployed, discovered, and kept relevant as the frameworks and context around it change and grow in complexity. IAs need to improve their skill at communicating and marketing value in terms that businesses can understand, support, and fund. More often than not, we use a mix of jargon, methodology, intuition, and hand-waving to sell our value propositions. We also talk about tactics when we should be talking about strategy. For the typical executive, the proposition is difficult to parse and therefore sponsor. The purpose of this article is to equip you with new insight and skills for doing just that—selling information initiatives in ways that resonate in the world of business.
Engage your entrepreneurial and methodical thinking

Go out and find those funded projects and programs and partner with them to create better business outcomes. Wherever information is being discovered, developed, and presented, there you’ll find opportunities to improve outcomes.

“But I architect information, not businesses,” you might say. I’m not suggesting that you radically change your business model. Your bread-and-butter activities fulfill perennial business needs and requirements. On the contrary, I’m suggesting that you take more control over your organizational destiny by broadening your impact across the organization in a very methodical way. The method that has helped me change and shape my business over the years is Business Process Management.

An Introduction to Business Process Management

Business Process Management (BPM) seeks to transform the way businesses do what they do in order to identify new opportunities, streamline activities, and deliver successful outcomes. In other words, with BPM, “it’s not what you do that is so different. It's how you do it. That is the big difference.” IBM gives us a more precise definition:

BPM is a comprehensive management approach to continuously improving your business processes. BPM is more than workflow automation. [It] promotes effectiveness and efficiency in business processes by using measurable business value to align all projects with corporate strategies. BPM relies on an incremental delivery methodology that creates process visibility, which enables process control.

Process visibility also means that your process participants have perspective into the end-to-end process that is not limited to the activities assigned to them. This perspective, now coupled with a common language and taxonomy, enables conversations that create new business opportunities.

BPM enables you to manage your processes and support corporate initiatives such as improving product quality, reducing time to market, expanding to new markets, raising customer satisfaction, and increasing profit margins.

Why is BPM such a good fit for our purposes? Because a business process always involves information, and information always involves a business process. And both are everywhere. Embracing the fundamental idea that BPM and information are inseparable enables you to impact the value chain of your organization in innovative ways, to get better business outcomes, and to raise the profile of yourself and the people who collaborate with you. (Remember, whoever collaborates and partners with you is motivated by the promise of measurable benefits that are rewarded.)

If you’re still not drawing the parallel between your business and BPM, consider Figure 1, the business process life cycle. Does it look familiar?

As you can see, the lifecycle phases of a managed business process are very similar to the information architecture and development lifecycle. Let’s explore three different case studies of successful solutions in which the information architect applied a BPM approach and reaped the reward.

Developing reusable RFPs collaboratively

The opportunity: The pre-sales team needed their Request for Proposals (RFP) process to scale in order to help close more deals faster. However, only a few people were enabled to preside over the content. Compiling RFPs was an arduous exercise in cut-and-paste and massaging in order to arrive at the required content and format. Information evolved constantly, but was not revisited regularly (or at all). The workforce at client sites needed fast turnaround on new

![Figure 1. The life cycle phases of a managed process (Dyer et al.)](image-url)
question-and-answer pairs for their RFP responses—often via mobile devices due to firewall issues—but turnaround was bottlenecked by the review process and technology.

**The solution:** The IA working in this space saw a process, a problem, and an opportunity. Using classic information architecture skills, the IA drove the following solution (see Figure 2):

- Created reusable structured templates for the RFP information
- Identified information components and taxonomy for reuse, leaving room for variable content in each RFP
- Leveraged an online collaboration framework for developing and sharing draft question-and-answer pairs while waiting for the review process to warrant the information
- Built an open-source tool chain to produce the necessary outputs (wiki, PDF, XHTML)
- Identified and used a process application to orchestrate all activities and report on key performance indicators such as request-to-submit times

**Prosperous partnering**

**The opportunity:** Through conversation between the teams developing product documentation and the teams developing product code, both teams discovered a shared business process problem. Information needed to flow between the teams throughout the process of manufacturing the product, but the two proprietary source formats were incompatible. The two teams were using a very high-touch and costly process to bridge the information flow. A customer, dissatisfied with the resulting information product, escalated the situation until it got the attention of senior management and put a spotlight on the root causes. The information team had a solution in mind, and they successfully lobbied for funding to deliver the solution.

**The solution:** The product development team committed to using a standards-based XML template and process developed by the information team, while the information team committed to maintaining the framework and serving as process owner. The solution shortened time-to-market, prevented errors in the end products (at least once saving over a million dollars in manufacturing costs), and reduced the amount of human effort required overall. Executives are now asking for monthly updates on this work; they are engaged like never before, and dreaming up new opportunities. The solution team now has momentum and opportunity to deliver more successful projects, ultimately leading to a full-fledged business program.

**Tip:** Of course, it’s painful to get your executive’s attention because a customer complained that “the docs suck,” and it’s easy to get on the defensive. The entrepreneurial IA will leverage this situation as opportunity—proof for your business case that the business process needs to change. Don’t let the opportunity pass you by even if you don’t feel well versed enough in business issues. Partner with those who do, and ask them to stand up and testify about the value your solution will create for them.

**Building an “app store” for solution developers**

**The opportunity:** Stakeholders agreed—product samples were valuable, but the current ad-hoc model of producing, maintaining, and delivering the samples was inefficient, underfunded, and incapable of meeting the demand. Teams were asked to provide tutorials and samples, but the teams were not enabled with access to subject matter experts and working code early enough in the release cycle—particularly challenging given the Agile development process. In addition, samples were governed with a splintered approach: everyone in their silos tried manage the problem, creating problems with coherency, predictability, currency, reusability, and captive subject matter experts. This team needed a fundamentally different solution.

**The solution:** This problem practically diagnosed itself for the IA, and the solution involved a blend of process savvy and classic skills in scenario-based design. The new solution involved the product team developing key scenarios that help users get started with the product and adopt new features, while other samples would be developed by the worldwide practitioner community and hosted on a community-enabled site. The solution involved a handful of additional elements:

- The team decoupled samples from the product installer. This decreased the risk to schedule and quality as a result of late code changes. It also freed up developers to collaborate on key samples after completing the bulk of their product-release work.
The team implemented direct links from the product to the community site from a visible location. They began to track incoming traffic in order to know where users were coming in to the site. This data helped the team determine how best to integrate community assets into the user’s context in using the product.

The team measured the relevancy of the samples through downloads and page visits. Non-relevant samples were archived or updated. Relevant samples were promoted.

Tip: Talk to customers and partners. What assets—like samples or other special content—do they need to be more self-sufficient? Would they be interested in co-developing those assets? Under what conditions would customers be willing to pay for those assets? (Some people have an aversion to using and sharing non-warranted community assets.) You might create new revenue.

Lessons learned
If you’ve read this far, hopefully you’re thinking that perhaps there’s something to this idea. But you still might file it away because you just don’t have the time to put the idea to work—at least not without assurances (to your boss, for one) that it’s really going to pay off.

To that end, I offer this short recipe of actionable steps you can take that will help you jump ahead of the learning curve and immediately start testing a BPM approach—with no tooling investment. You just need a reasonable time investment and your entrepreneurial thinking. I recommend these steps:

1. Learn the basic concepts of BPM! Read chapters 1, 2 and 3 of Scaling BPM Adoption from Project to Program with IBM Business Process Manager (IBM Redbooks). The book describes how to manage BPM solutions with a specific product, but the core message is product-agnostic.
2. Find someone in the organization that is business-savvy and a seasoned negotiator, and ask that person to coach you.
3. Find out if there is a BPM initiative in your organization. If yes, great; tell the program manager that you are looking to adopt BPM for your work and ask how you can get plugged in. If your question draws blank stares, great: you have the once-in-a-lifetime opportunity to bring BPM to your organization!
4. Run a process discovery and documentation workshop:
   a. Pick a partner whose business processes you know, even if just a little. Ask if they have information flowing through their core business processes (usually the answer is yes), and if they would participate in a discovery workshop with you. Your shared goal is to discover opportunities for improvement.
   b. Together, document the “as-is” process and define what the “to-be” process should be. (Even if it ends here, you have already added value by creating a process inventory that is yielding new wisdom and enabling decisions for improvement.)
5. Pick a project to deliver with your partner.
6. Run your first successful project, then market it in every way you can. Enable as many influencers as you can to sponsor it—this is best done if you engage them in the process from the very beginning.
7. Keep it simple and iterate in “bursts” of value. Don’t build or measure what you don’t really need right now.
8. Create a plan for measuring the business value and marketing that value. Create the simplest meaningful report that can reveal bottlenecks and opportunities, and share the report regularly with stakeholders.
9. Use testimonials to illustrate impact on the daily routines of process participants.
10. Keep building on the momentum, and your business will grow.

I hope these stories inspire you to embark on a BPM journey of your own. If you do, you will expand your horizons, connect to new opportunities and people, and have fun in the process. I’ll leave you with a thought represented in a process diagram I have taped to my office door.

Become one of the first Certified Professional Technical Communicators™ at a special introductory price!

Why earn your Certification?

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<th>Leadership Recognition</th>
<th>Professional Status</th>
<th>Professional Development</th>
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<td>Show your employers you are a technical communication leader who is committed to establishing worldwide performance standards for the field.</td>
<td>Join an elite group of professionals who have demonstrated their technical communication knowledge and proficiency.</td>
<td>The educational requirements of certification are one more reason to continuously maintain and upgrade your knowledge. Add certification to your career development plan.</td>
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<th>Portable Career Credential</th>
<th>A Sense of Achievement</th>
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<td>When you change jobs, your certification credential travels with you and will enhance your employability and compensation.</td>
<td>Give yourself the confidence to excel at your job.</td>
<td>Certification confirms your experience and competency in technical communication, your commitment to the profession.</td>
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The CPTC assessment encompasses broad areas of practice that represent the major activities performed by technical communicators. The certified practitioner demonstrates proficiency in the following areas:

- **User, Task, and Experience Analysis**—Define the users of the information and analyze the tasks that the information must support.
- **Information Design**—Plan information deliverables to support task requirements. Specify and design the organization, presentation, distribution, and architecture for each deliverable.
- **Process Management**—Plan the deliverables schedule and monitor the process of fulfillment.
- **Information Development**—Author content in conformance with the design plan, through an iterative process of creation, review, and revision.
- **Information Production**—Assemble developed content into required deliverables that conform to all design, compliance, and production guidelines. Publish, deliver, and archive.

Employers know that certified practitioners earn more than their uncertified colleagues, because employers find that certified professionals are more likely to be successful hires and valued employees.

Apply by 14 February 2012 and lock in a special introductory rate for your application fee. You’ll be recognized as a Charter Member for as long as you maintain your certification!
In Memoriam: Suzanna Laurent
Memories of Suzanna and a Reminder of Who She Was

BY LINDA OESTREICH | Fellow

SUZANNA LAURENT,
FORMER STC PRESIDENT
28 December 1942–26 December 2011

MY FIRST MEMORY of Suzanna dates back to 1999. She was the Director-Sponsor for Region 5 and I was on the admin council for the Houston Chapter. (At one time, STC had eight regions—each region voted for a director to sit on the Society’s Board of Directors.) She would occasionally visit Houston and I would attend her presentations. I was not impressed. In fact, I was put off by her “grandmotherly” demeanor, her heavy Oklahoma accent, and her overall fashion sense. I was a snob. She was genuine. Lucky for me, I let go of those first impressions and grew to love, admire, respect, and emulate her. It didn’t take me long to realize that she was a consummate professional, a phenomenal leader, and a great champion of technical communication.

Suzanna’s term as Region 5 DS lasted until 2002, and I was her successor. I still have hundreds of files that she gave me to help me understand my new duties and keep track of all that went on in our seven-state region. Throughout my three-year term, I kept Suzanna’s phone number on speed dial because I often needed her wisdom to keep me from insanity!

Not too much later, I was elected to the Society’s Board of Directors in the presidential chain—two years behind her. And, once again, she became my mentor and our friendship grew. She and I did presentations together; we talked for hours on the phone about families, careers, and STC; and we brainstormed about anything and everything tech comm.

Suzanna Laurent was an STC Fellow who served seven years on STC’s Board of Directors, culminating with Society President in 2005–2006. Suzanna was also selected as one of the Top Ten Women in the nation by the American Business Women’s Association (ABWA) for her outstanding career achievements. She presented more than 140 chapter programs, leadership workshops, keynotes, and sessions at more than 44 STC conferences from Toronto to Hawaii. She also received the first-ever STC Volunteer of the Year award at the annual conference in 2006.

Suzanna was a technical communicator since earning her degree in 1986 (after raising four children and being a stay-at-home mom!). In recent years, she began her own company and served as president of the Communications Design Group in Mustang, OK. She won tech pubs competitions and earned both regional and national awards as a newsletter editor. She was an excellent project manager and, not surprisingly, a great multitasker. She had a knack for leadership and always showed a “can-do” spirit.

When she died, folks on Facebook, Twitter, and LinkedIn sang her praises—here is one LinkedIn recommendation, from Rahel Bailie, that describes Suzanna perfectly: “While Suzanna and I were on the board of the STC, she found herself taking the helm during a particularly challenging transition. In her thoughtful and careful way of leading, she steered the organization through some extremely choppy waters. Her steadiness, discretion, and integrity were definitely key aspects of her leadership style, which allowed her to bring in the right people for support and manage to ‘turn the ship’ successfully.’ (For other comments about Suzanna, please see the STC Notebook notice of her death and the ensuing comments at http://notebook.stc.org/in-memoriam-suzanna-laurent-1942%E2%80%932011/) We knew her as a member of STC, but she was also as much of a leader in ABWA. The following list of her honors and awards attests to her accomplishments in both organizations:

- 2008 Fellow, STC
- 2008 Boss of the Year, ABWA
- 1999 and 2007, National Newsletter Award, ABWA
- 2003–2007 Presidential Chain, Board of Directors, STC
- 1999–2002 Region 5 Director-Sponsor, STC
- 1997 Top Ten Woman of the Year (nationally), ABWA
- 1988 District III Vice President, Board of Directors, ABWA

In my online search about Suzanna, I found this poem at the end of a presentation entitled “Achieving It All,” that she gave many years ago. It fits her life:

Within our reach lies every path we ever dream of taking,
Within our power lies every step we ever dream of making,
Within our range lies every joy we ever dream of seeing . . . and,
Within ourselves lies everything we ever dream of being!

My heart is heavy that we have lost this giant of our organization. Nonetheless, I am honored to have known her, to have worked at her side, to have been her friend, and to have learned that first impressions are often 180 degrees wrong.
LAST YEAR ABOUT this time, then-president Mike Hughes started a tradition of providing a midterm report, as he put it, “where we are and where we still need to go.” I would like to continue that tradition. From where I stand, I see five major accomplishments of 2011.

1. First of all, we can say that Project Phoenix—the big STC project of last year—has been a success. The number of visits to the website has increased about 15% in the period of 1 July 2011–30 November 2011, compared with the same period last year. Unique visitors have increased by 18% and, most importantly, the time folks are spending on the website has increased by 25%. More people are coming to the site and are finding more reasons to stick around. We are collecting a full array of analytics and will analyze them over the next couple of months to improve the user experience even more.

2. As an educator, I am particularly pleased that STC has maintained and strengthened a culture of learning this past year. In fact, our educational offerings have boomed. In the past four years, the number of live webinars has increased by four-fold (from 14/year to 56/year). Certificate courses (which didn’t exist four years ago) have increased by four-fold in the past three years. And STC held its first virtual day-long conference in November. If I had had any doubts about the value of virtual conferences, Applying Research in Practice erased them. Hosted by Saul Carliner, this virtual conference allowed participants to be active and vocal learners without interrupting the speaker. You could just watch learning happening on many levels. And, finally, STC now offers 38 archived seminars free to members—sessions from previous Summits—with more to come this spring.

3. Perhaps the biggest step we took this year was to set up a TC certification program, administered by a Certification Commission. The Certified Professional Technical Communicator™ (CPTC) credential will help promote the profession by increasing recognition, respect, and salaries. It will also allow certified professionals to stand out in a crowded job market and provide employers with assurances about the quality of their hires.

4. While holding dues steady for the third year in a row, STC developed a new category of membership for those coming out of degree programs: New TC Professional. Dues for this category are halfway between regular and student memberships, thus easing the transition into the TC workplace for new first-career or second- (or third-) career members. New TC Professional membership is open to anyone who has graduated within the previous three years.

5. Informed by the Global Audit Task Force report, the Board has renewed its commitment to support and serve the technical communication profession globally. The survey results that chair Kit Brown and her committee members presented to the Board suggested many ways to provide educational and professional benefits to STC members wherever they live.

So where do we go from here? In the coming year, Alan Houser (who will take over as President in May 2012) and I look forward to expanding these initiatives and adding more. STC is committed to expanding the number of educational webinars and virtual conferences, offering expert learning opportunities at a very reasonable price and during many different time zones. If you check out the preliminary program for the 2012 STC Summit in Rosemont (20–23 May), you will see that we already have dozens of great speakers and sessions lined up: sessions such as Building a Developer Documentation Wiki, Destroying the Box, Putting the Sexy Back in Tech Com, Publishing in a New Media Landscape, Data Visualization: Seeing through the Numbers, and Collaboration in a Decentralized Culture. Other sessions on content strategy, localization, agile development, ePubs, CMSs, Web design, mobile, HTML5, and more will help you compete in (or teach for) today’s multi-faceted technical communication workplace. These sessions represent a variety of areas that go “beyond writing” and in which technical communicators are actively engaged. May 2012 may seem a long way away, but we all know how time flies.

Finally, I would like to remember former STC President Suzanna Laurent, who passed away 26 December 2011 [see related article, page 34]. Suzanna served the Society as president from 2005–2006 with great dedication, fortitude, and gentleness. It was a time of transition in STC’s governance structure, and Suzanna held together the various factions with grace and courage. We will miss her greatly.
On 6 October 2011, the STC Academic Special Interest Group (SIG) hosted a hybrid, one-day Partnership Preconference before the 2011 Annual Conference for the Council for Programs in Technical and Scientific Communication (CPTSC). We were invited by Kirk St.Amant, program chair for the 2011 CPTSC conference, to “consider coordinating a preconference event that would further promote collaboration between educators and practitioners.” The purpose of this inaugural event was to facilitate a more active exchange of information between industry and the academy. The preconference theme, “Partnerships for Professionalism,” paralleled that of the CPTSC conference. As a result, members of the two organizations were able to meet and exchange ideas of interest to both groups. We had an exciting, packed day, which a number of attendees described as “much more” than they had expected. In this brief article, members of the preconference committee share what happened and what we believe was learned.

A Cross-Boundary Conference in a Hybrid Format

Initially, we did not envision the Partnership Preconference as a hybrid, with both virtual and face-to-face presentations. However, we realized that if we wanted to bring together practitioners, educators, and students, allowing for virtual presentations was critical. More conference opportunities exist than funding and time allow, and each of these three groups has its own premier conferences—an all too common situation creating unfortunate demands on increasingly limited resources. Thus, a cross-boundary conference necessitated new perspectives and new media.

Critical Conversations/Collaborations

The cross-boundary goals of the Partnership Preconference and the 2011 CPTSC conference align significantly with the goals of the STC Academic SIG. We are a group of educators and students within an industry-based organization. We organized this inaugural preconference in approximately two months’ time and focused on bringing together diverse groups to discuss topics we believed were of most importance to the field of technical communication.

We grouped preconference topics under five greater themes:

- Certification and Assessment
- Virtual Mentoring and Internships
- Partnership Program and Cross-Organizational Collaborations
- Social Networking and Technical Communication
- Making Collaboration a Priority

We created a panel for each theme and sought to have at least one practitioner, one educator, and one student on each panel; however, this was not possible for all panels.

In order to address specific themes, have representatives from a number of diverse groups, and work on a tight schedule, we decided against a CFP. Instead, we invited presenters who represented diverse perspectives within each of the themes. In addition to panel presentations, the preconference featured two keynote speakers—one representing the academy (Dr. Hillary Hart, University of Texas at Austin) and one representing industry (Dan Voss, Lockheed Martin Missiles and Fire Control). Students from James Madison University (JMU), host organization of the preconference, both presented on panels and moderated. They also held meetings with speakers.

Planning and Logistics

Due to the generosity of sponsors and of JMU, the hybrid Partnership Preconference—including breakfast, lunch, and coffee—was free to attendees.

We invited registration both through the STC Academic SIG website and through a link on the

Participant Feedback

“Industry has a need for education in virtual collaborative writing.”
—Charlotte Robidoux, Hewlett Packard

“The price tag of this dynamic, interactive information-packed one-day workshop was hard to beat—as in free! I really have to say, the value derived from it was comparable to that received from events that carry a substantial registration fee....The conference was an uplifting experience; and, as ‘gravy,’ it also proved to be a perfect jump-start for our STC task force on student outreach.” —Dan Voss, Lockheed Martin Missiles and Fire Control

“Educators should attend some practitioner conferences....Practitioners need to help educators make a case for collaboration with industry.”
—Rebekka Andersen, University of California, Davis

“The preconference was simply fabulous for a whole host of reasons. [The] team did a wonderful job that should be commended and hopefully, replicated at future conferences.” —Lisa Meloncon, University of Cincinnati
Preconference at CPTSC

CPTSC registration page. Approximately 50 people attended in person or virtually.

Because several of our speakers could not physically attend the preconference, we used Skype and a back-up Polycom conferencing telephone to support our virtual speakers. These systems also were configured to enable speakers to hear onsite panelists and interact with the audience during the presentations. JMU provided us access to Skype Free, which precluded video and screen sharing for multiple speakers. Speakers presenting virtually were placed in Skype groups and called five minutes prior to the start of their panel session.

Lessons Learned

The STC Academic SIG seeks to serve as a bridge between industry and the academy; our preconference was one such bridge. We learned much during what was a packed day. Participants, for example:

- were equally interested in and prepared to collaborate on student initiatives; and
- recognized a need for continued discussions between the groups, including future panel discussions on practitioners’ educational and research needs.

The preconference committee noted:

- the importance of different professional organizations’ partnering to create shared conference spaces and times;
- that a hybrid preconference is an effective bridge between industry, academia, and students; and
- the benefit of holding the event on a college campus where room and technology fees are often much cheaper—or even free—in comparison to the more conventional conference sites like hotels or conference centers.

For future Partnership Preconferences, we need to examine the optimal ratio of virtual to face-to-face presenters. We wish to offer a geographically co-located conference experience that is enriched by speakers who join us virtually; however, we do not wish to offer an experience that is primarily online. In addition, we will need to budget for conferencing software that allows group video and screen sharing; provide training, if needed, for virtual presenters; and, importantly, provide both onsite and virtual attendees longer breaks!

Finally, we are excited by the opportunities that such a hybrid format offers in making events truly international. We will be able to allow presenters from other nations to participate on a scale that is rather unprecedented and could be of great advantage to the field of technical communication.

Thanks to everyone who supported this first offering of the Partnership Preconference. This event helped us move toward one of the primary goals of our SIG, that is, to promote practitioner/educator awareness and collaboration. It also helped us move toward a SIG goal of supporting students and their work. We invite you to review the content of some of the presentations, which are linked on the STC Academic SIG website at www.stc-academic.org. We continue to add them.

In closing, we invite every STC member to join the Academic SIG. This SIG is a wonderful network for any STC member who wishes to support communication between those who practice and those teach in the field of technical communication.

STC 2012 Slate of Candidates

BY MARK CLIFFORD | Chair, STC
Nominating Committee

THE NOMINATING COMMITTEE is pleased to announce the 2012 slate of candidates for Society office. Please note that the election slate presented below is based on the current Society Bylaws. These are available for review at www.stc.org/images/stories/pdf/ForAll/stc-bylaws.pdf. NOTE: All STC members must have paid their dues by 29 February 2012 to be eligible to vote in the election.

Congratulations to all of the candidates, and thanks to everyone who expressed an interest in running for office.

For President
- Alan Houser will automatically succeed from Vice President.

Candidates on the slate for the 2012 STC election

For Vice President
- Nicky Bleiel
- Robert Dianetti

For Secretary
- Alyssa Fox
- Michael Opstegh

For Director (two positions to be elected)
- Bernard Aschwanden
- Ray Gallon
- Li-At Ruttenberg

For Nominating Committee (two positions to be elected)
- DJ Cline
- Bonni Graham
- Judy Glick-Smith
- John Hedtke

The 2012 Society election is scheduled to begin at 9:00 AM EST (GMT-5) on 2 March and end 23 March 2012 at 5:00 PM EDT (GMT-5). Visit the STC election website at www.stc.org/election for detailed information about the candidates and to access a question and answer area that you can use to ask questions of the candidates.
Getting Support from Your Supervisor

WOULD YOUR EMPLOYER be willing to pay at least part of the expenses of attending the Technical Communication Summit in Rosemont, IL, 20–23 May 2012? It couldn’t hurt to ask! Consider writing a memo to your supervisor that explains how you and your firm would benefit from your attendance. The following model is based on a memo that worked for its author. Feel free to modify it for use within your company.

Dear [your supervisor’s name]:

To help provide [your company] with the most current professional methods and technological advances in editing/writing and report/publication management, I would like to attend the Society for Technical Communication’s annual conference—the Technical Communication Summit—in Rosemont, IL, just outside of Chicago, 20–23 May 2012. The conference will offer sessions in ten tracks: Content Delivery; Content Development; Content Strategy and Design; Education and Training; People, Project, and Business Management; Professional Development; Social Media; User Experience and Accessibility; Visual Design; and Web Design and Development. There are more than 80 education sessions over the three days of conference, and the following are of particular relevance to the company:

[List the sessions that you think will benefit your company most. Refer to the list of sessions in the conference Preliminary Program, available on the Summit website, http://summit.stc.org.]

Although I will try to attend these particular sessions, some of the most popular may be closed because of limited seating. In that case, I will choose alternates. I also will have additional access to almost all of the sessions after the conference through STC’s SUMMIT@aClick. This service provides access to the sessions online as MP3 files, audio synched to PowerPoint and video synched to PowerPoint, and STC is the only meeting in the technical communication field that offers this. Our company can also benefit from the conference Proceedings, which includes papers from many conference sessions and is provided free to all full-conference registrants.

Costs: [List transportation costs, registration fee, cost of meals, and the price per night of the hotel room. These are posted on the Summit website.]

Summary of benefits for [your company]:

The sessions will provide me with more knowledge of report production, editing, writing, management concepts, and government contracting. This knowledge will enable me to handle [a particular project] with more professionalism and confidence, which will reflect favorably on [your company]. I will be able to pass on much of this information to coworkers, to access SUMMIT@aClick again and again throughout the year, and to use my notes and copy of the Proceedings as a valuable reference.

Sincerely,

[Your name]

Discounts Available for Summit Travel

STC HAS SET up discounts on airfare for those attending the 2012 Summit in Rosemont, IL.

American Airlines: Attendees will receive a 5% discount off the lowest applicable published air fare. When you make airline reservations, call American Airlines at 1-800-433-1790 from anywhere in the United States or Canada and refer to your Promotion Code 3652BP, or go online to www.AA.com and choose More Flight Search Options and insert the promotion code in the appropriate box.

United Airlines: Attendees can receive up to a 10% discount (depending on booking class) on domestic or international travel to/from Chicago between 14–28 May. Use the special STC discount code 589MF by phone at 1-800-864-8331 to receive this discount.

If you fly into O’Hare, the Hyatt Regency O’Hare runs a complimentary shuttle service between the hotel and the airport. Board the shuttle at the Bus/Shuttle Center (look for the signs). The shuttle for the Hyatt Regency O’Hare departs from door 1.

If you need a handicap accessible shuttle, when you arrive at the airport call the Hyatt at +1 (847) 696-1234 to request that van. It will take about 15 minutes for the van to arrive at the transportation center.

Visit the STC Summit website at http://summit.stc.org and click on the “Hotel-Travel” menu bar for easy access to all travel discounts.
Day Trips in the Chicagoland Area

BY DONNA TEMPLETON | Senior Member

THE 2012 STC SUMMIT will be held just outside the city of Chicago at the Hyatt Regency O’Hare in Rosemont, Illinois. I would like to share some gems from my entertainment box of things to do in the Greater Chicago Area, also known as Chicagoland. Most anything you would want to do, see, or buy can be found in the area. You will feel as if you have stepped onto the grounds of a huge resort.

The Summit takes place in May, when flowers will be in bloom in the Chicago area. If you would enjoy seeing a variety of plants and seasonal flowers the region has to offer, you may want to visit the Chicago Botanic Garden in Glencoe, a 385-acre living plant museum featuring 24 display gardens. Or you can drive through or hike the trails of the Morton Arboretum in Lisle where acres of trees and other plants from around the world are cultivated for display and research. Cantigny Park in Wheaton, named after the WWI Battle of Cantigny in France, features large gardens surrounding the two war museums. Another is the Cuneo Historic Mansion & Gardens in Vernon Hills.

If you are interested in shopping, the quaint village of Geneva is an excellent place to start. You’ll find many shops featuring fine art and antiques, and don’t forget to visit The Little Traveler, known for its room-after-room of unique gifts. The downtown districts of St. Charles, Naperville (also known for its historic Naper Settlement), Evanston (also known for its Mitchell Museum of the American Indian), and historic Long Grove Village host many shops in close proximity.

For outlet shopping, head to the Chicago Prime Outlets in Aurora. To the north is Gurnee Mills, where the outlets rest in the shadow of Six Flags Great America. For indoor mall shopping, the multi-layered Woodfield Mall in Schaumburg is popular. For outdoor mall shopping, the Arboretum in South Barrington and the Oakbrook Center are a must.

For slots and tables, Rivers Casino in Des Plaines is just down the street from our hotel; however, there are other gaming establishments in the area—Grand Victoria Casino in Elgin, Hollywood Casino in Aurora, and Harrah’s in Joliet. To the south in Hammond, Indiana, is the Horseshoe Casino.

For horses, racing returns 4 May to Arlington Park. To see other animals, you can visit the Brookfield Zoo. For animal art, the Guge Institute of Wildlife Art in Gilberts is a destination.

For science, you can visit Fermilab in Batavia, the only U.S. laboratory dedicated to high-energy physics. Another site is the Argonne National Laboratory in Lemont, one of the U.S. Department of Energy’s oldest and largest national laboratories for science and engineering research.

For premier architectural tours, a must-go destination is Oak Park, home of the world’s largest collection of Frank Lloyd Wright-designed buildings and houses. Both guided and self-tours are available.


Donna Templeton is a senior member of STC and a longtime member of STC Baltimore and STC Chicago.
Holistic Interactive Experiences—
The Future of Information Architecture

RECENTLY, I WAS in a cafe idly flipping through a Sunday newspaper that had been left by a previous patron. While looking for the entertainment section, an iPhone speaker system in a Target sale flyer caught my eye. Finally ready to retire my ancient stereo, I decided to jump on the excellent price. I pulled out my phone and tried searching for the item by product name on Target’s mobile site. Null results. I tried browsing for the product, but couldn’t find it in the sea of speaker, audio systems, and portable audio sections. Nothing I found seemed to match the specific item I was looking for. Giving up on technology, I decided to stop by my nearest Target on the way home. I had to buy toilet paper anyway.

But even when I got to the Target store, finding that speaker system was no easy task. Although I couldn’t figure out what category the speaker system would be in on the website, at least it had clearly separated sections. The store had one big corner of electronics and the aisles didn’t seem to be labeled in the same way the website was. I wandered up and down, trying to figure out how they were organized so I could find

This column explores the strategic aspects of information architecture and the tools to equip information architects (IAs) for success. Topics will address the business, strategy, user experience, and implementation of strategic information architecture, including organizational, content management, and tactical considerations. Send your comments, questions, and suggestions for future articles to thestrategicia@pobox.com.
my speaker system. I finally came across one on sale at the end of an aisle. The name of the product was still slightly different, and a couple of the specification details didn’t match. Was this the same item? I wasn’t sure, so I left the store without making a purchase.

As we become ever more surrounded by technology, the landscape between the physical and digital environments is becoming increasingly intertwined. A 2009 Forrester study reported that 70% of U.S. online consumers research products online and purchase them offline. We use our computers to order pizza delivery, browse our iPad to find the nearest public restroom, and can even open our rental car with an iPhone app. This ubiquity of technology means that consumers are getting more demanding, expecting information at their fingertips anytime, anywhere, and in all formats.

We can see now that information is what our world runs on: the blood and the fuel, the vital principle.

—James Gleick, The Information: A History, A Theory, A Flood

Holistic, interactive experiences have become an expectation. Consumers need to research, interact, and communicate seamlessly between channels, devices, and environments. But few companies know how to support these cohesive experiences. As Jesse James Garret of Adaptive Path points out, “more and more, our clients are asking us to look at the total experience they deliver: integrating products and services, making the digital and the physical work together holistically, and crafting experiences that happen across multiple channels over time.”

So what does this mean for information architecture? Much of the recent buzz on developing holistic experiences has been focused on developing fancy new features and functionality. But I agree with James Gleick. Information is “what our world runs on.” It is the critical foundation of many of our goals, dreams, and experiences. Gorgeous visual design and sophisticated technologies can’t provide a seamless experience across channels and devices by magic. Information must be architected, structured, and managed to support holistic interactive experiences.

Information architects need to move from just organizing information for websites, mobile devices, and digital technologies. As technology increasingly allows us to merge our virtual and real lives, we need to begin thinking about the physical space. Andrea Resmini and Luca Rosati note that “Information is going everywhere, bleeding out of we thought was cyberspace and back into the real world.” Information architects have the opportunity to take a key role in transforming disconnected experiences across channels into seamless experiences that integrate our digital and physical environments.

Imagine a world where your phone could automatically check you into your hotel and order your airport shuttle as soon as you step off your flight. A world where you never need to wonder how much wine you buy a month because your purchases are automatically categorized when you swipe your debit card. A world where you never have to fiddle through a long IVR or wait on hold again, because a mobile app passes on your identity and all necessary information and a service agent calls you back with your solution.

The need for holistic experiences supported by extensible information is not limited to the private sector. Imagine going to the doctor without filling out yet another paper form in triplicate with your medical conditions. On the hoped-for road to unified health records, President Obama described a lifetime electronic record that will “help ensure a streamlined transition of health care records... a framework to ensure that all health care providers have all the information they need to deliver high-quality health care while reducing medical errors.” A fleet of information architects will be needed to get us there.

The future of information architecture means getting out of our cubes, away from our computers, spreadsheets, and Visio diagrams. It will require us to be squarely in the center of creating experiences and services that cross devices, physical and virtual. We need to listen to Peter Morville when he says, “I’m an information architect. I map paths and places across physical, digital, and cognitive spaces.” Let’s take our taxonomies and user flows into the real world. Let’s wireframe our stores, banks, airports, and cities. Let’s create holistic, interactive experiences that resonate in all channels and environments.

After 12 years of customer focused work at companies like Amazon and Microsoft, SAMANTHA STARMER now leads experience, design, and information architecture teams at REI (Recreational Equipment Inc.). She is passionate about evangelizing and creating holistic customer experiences across channels, time, and devices. Samantha regularly teaches at the University of Washington’s Information School, writes about experience design, and enjoys being active in UX and IA communities. You can find Samantha on Twitter at @samanthastarmer.
The Society for Technical Communication is where it all comes together, and nowhere is that more evident than at the Technical Communication Summit! Technical communicators from around the world will converge on Rosemont, Illinois, just outside of Chicago, from 20–23 May 2012 for the 59th annual Summit. Choose from over 80 sessions in 10 different tracks at the conference, with some of today's top technical communicators coming together to share their knowledge.

And the sessions are just the beginning of your Summit experience! In-person networking, the Expo Hall, preconference education, the honors banquet, SIG meetings, and so much more are also available to help you advance your career.

Visit http://summit.stc.org for complete details on how you can be where it all comes together.
Mark Your Calendar

Organization events across the globe

F.Y.I. lists information about nonprofit ventures only. Please send information to intercom@stc.org.

1 23–26 Jan
The Annual Reliability and Maintainability Symposium (RAMS), on “Securing Tomorrow's Future With Reliability and Maintainability,” will be held at the Nugget Hotel and Resort in Reno, NV. For more information, contact: RAMS +1 (803) 863-2832
www.rams.org

2 16–20 Feb
The 2012 American Association for the Advancement of Science (AAAS) Annual Meeting, with a theme of “Flattening the World: Building a Global Knowledge Society,” takes place in Vancouver, BC, Canada. For more information, please contact: AAAS +1 (202) 326-6450
meetings@aaas.org
www.aaas.org/meetings

3 3–9 Mar
The Philadelphia Metro Chapter of STC hosts the Mid-Atlantic Technical Communication Conference and Workshop at the Giant Conference Center in Willow Grove, PA. For more information, please contact: STC–PMC www.stcpmc.org/conference

4 21–25 Mar
The International Society for Information Science and Technology (ISI) will hold its annual conference at the Sheraton Centre in New York, NY. For more information, contact: ISI +1 (800) 350-0111
www.prso.org/conferences/DigitalImpact/

5 22–25 May
Join the Association of Proposal Management Professionals for the 23rd Annual APMP International Conference and Exhibits at the Sheraton Dallas Hotel in Dallas, TX. For details: APMP www.apmp.org

6 2–3 Apr
The Public Relations Society of America (PRSA) hosts the Digital Impact Conference and Workshop at the Giant Conference Center in New York, NY. For more information, contact: PRSA +1 (800) 350-0111
www.prso.org/conferences/DigitalImpact/

7 18–23 Apr
The International Society for Information Science and Technology (ISI) will hold its Performance Improvement Conference at the Sheraton Centre in Toronto, Ontario, Canada. For more information, contact: ISIP +1 (301) 587-8570
conference@ispi.org
www.ispi.org/AC2012

8 19–21 Apr
The American Society for Indexing (ASI) will be holding its annual conference at the Bahia Resort in San Diego, CA. For more information, contact: ASI conference@asindexing.org
www.asindexing.org/

9 22–23 Apr
The Rochester Chapter of STC hosts Spectrum 2012, Expertise, Knowledge, Leadership: Influence Change in Your Organization, at the Rochester Institute of Technology, in Rochester, NY. For more information contact: STC Rochester spectrum@stc-rochester.org
www.stc-rochester.org

10 18–21 May
The Council of Science Editors (CSE) will hold its annual meeting, “Our Authors, Ourselves: Science Editing and Publishing in a Global Market,” at the Sheraton Seattle Hotel in Seattle, WA. For more information, contact: CSE +1 (703) 437-4377
CSE@CouncilScienceEditors.org
www.councilscienceeditors.org

11 20–23 May
The Society for Technical Communication (STC) brings its 59th Annual Technical Communication Summit to Chicago-Rosemont, IL, at the Hyatt Regency O’Hare. For information as it’s available: STC +1 (703) 522-4114
http://summit.stc.org

12 9 Mar
The Philadelphia Metro Chapter of STC hosts the Mid-Atlantic Technical Communication Conference and Workshop at the Giant Conference Center in Willow Grove, PA. For more information, please contact: STC–PMC www.stcpmc.org/conference

13 13–16 Oct
Join the Public Relations Society of America (PRSA) for their 2012 International Conference, taking place in San Francisco, CA. For more information, contact: PRSA +1 (800) 350-0111
www.prso.org/conferences/InternationalConference/

14 26–31 Oct
The American Society for Information Science and Technology (ASIS&T) will hold its Annual Meeting, with a theme of “Information, Interaction, Innovation: Celebrating the Past, Constructing the Present, and Creating the Future,” at the Hilton Baltimore in Baltimore, MD. For more information, contact: ASIS&T asis@asis.org
www.asis.org/asis2012/am12cfp.html

* STC-related event
On the Clock

BY JEAN-LUC DOUMONT | Senior Member

4:30 AM. MY IPOD LETS OFF its familiar wake-up tone. As I open an eye to reach for it, the furniture's silhouette around me seems utterly unfamiliar. Where am I? I open my other eye and try to focus. Looks like a hotel room—but where on Earth? I shake my head and it comes back to me: the long flights, the rental car, the late arrival. I rub my eyes.

4:31 AM. I’d better get up—there is so much to do. Shave, shower, get some breakfast. Iron my shirt. Pack the material I need for the day. Take a last look at my slides. And, especially, review the 40 participants’ photographs once more, to make sure I know who is who. Then, of course, drive; find the campus and find parking; find the building; find the room. Another typical day.

7:57 AM. I’m entering the room. I’m on schedule; now let’s see the damage. The projector connects to my laptop in no time, but the colors are off and, as usual, the remote control is nowhere to be seen. That’s okay: if I climb on a chair set on one of the tables, I can reach the controls on the projector itself. There: go back to RGB, tweak the contrast and brightness—problem solved. But wait a second. Tables? I asked for chairs only—no barriers between the participants and me. Oh well, I can use the workout: tables at the back, chairs closer to the front. I feel better. Now check the lights. Prepare the documents. Set my travel clock where I can see it. Clean the white board and test the markers. Tidy up the room.

8:45 AM. I’m jetlagged, sleep-deprived, and underfed. I can feel the tension building up in every part of my body. I’m all alone, miserable, wondering what the hell I am doing there.

8:47 AM. The door goes open and a grad student pops her head in inquisitively. I manage a smile; she smiles back. I recognize her from her picture, but I ask her who she is just the same and I check her on my list. She looks genuinely happy to be in my session, and I strike up a conversation. The tension in my body finds a purpose. My mind follows and focuses.

9:04 AM. The last participant comes in, mumbles an apology for being late, and sits down on the chair we saved for him. I feel a surge of positive energy as I watch my opening sentence phrase itself in my mind. I look at the group. They look at me with seemingly high expectations—bright, intelligent eyes, an unmistakable hunger for learning, and just a touch of apprehension. I have half a day to pique their brains, to make them think, share, and learn. Half a day to change their lives. From now on, and until the last of them leaves, I will feel no hunger, no thirst, no weariness, no sorrow, no pain—only challenge, engagement, and bliss. What a job!

You guessed it: I’m a trainer. My business partner and I help people sharpen their speaking, writing, and graphing skills. We train other trainers, too, and we cover a number of specialized topics, such as statistical thinking or persuasion. We train mostly groups, in sessions that range from a simple 90-minute lecture for a few hundred people to a week-long training program for just 15 to 25 of them. We do so almost indifferently in English, French, Dutch, or Spanish. We travel the world, going wherever people ask us.

The author begins a presentation

What we teach we also do—it keeps our teaching practice firmly grounded in reality. We (help) create written documents, speeches and slides, graphs and page layouts, and other communication tools. We love to take care of all aspects, for a final product of perfect harmony: we design the format, write and typeset the texts, interpret and graph the data, etc. In the same spirit, we self-published a book on “effective communication for rational minds.”

As this point, we get more demand than we can handle, but we are not hiring. Clients come for who we are: this is our greatest asset and our greatest limitation. And the frequent travel and long hours are a price I am willing to pay for the freedom my job affords me. I like to do things my way, and I would not have it any other way.
Work fast.  
Work smart.  
Step up to the tool the pros use.

Reduce your total cost of ownership with Adobe FrameMaker 10

Take advantage of the enhanced XML/DITA/S1000D content authoring, reviewing, managing, and publishing capabilities of Adobe FrameMaker 10 software to make your structured migration a streamlined, timesaving, and cost-effective move.

Choose your preferred mode of authoring—Take advantage of the enhanced XML/DITA/S1000D authoring capabilities that make FrameMaker as good at structured authoring as it is at unstructured authoring.

Manage content more effectively—Enjoy out-of-the-box connectivity with Microsoft SharePoint and EMC Documentum, and integration with other leading content management systems via WebDAV enhancements.

Speed up time to market and reduce localization costs—Efficiently repurpose content into the languages and formats customers demand.

Work more efficiently—with an intuitive interface, predefined templates, customizable workspaces, and a host of usability enhancements. Collaborate faster with PDF-based roundtrip peer reviews.

Now, get more bang for your buck! Introducing Adobe FrameMaker Improved Upgrade Plan.

Complimentary Bronze support. Exclusive utilities and plug-ins. Training and consulting enablement. Special rights to buy Adobe development support.

To find out more about Frame Maker Improved Upgrade Plan, visit http://www.adobe.com/products/framemaker/improved-upgrade.html

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