You’d think that I would know better after more than a decade working at the intersection of information management/strategy and user experience. But I’m still surprised that I’m surprised when I hear of an executive dismissing an information architecture (IA) study out of hand. Every day we design and organize information systems tailored to particular user groups and needs. So while we practice the principle of fitting the solution to the customer, I wonder if sometimes we inadvertently stumble in getting the executive recognition of the value of IA and how it is a core component of customer experience. In this column, I’d like to propose an approach which has been shaped in consultation with peers in the strategy, customer relationship management, IA and user experience communities. Let’s see how systematically using real-world customer data can support our findings, introduce new issues requiring attention and provide a built-in business case to invest in the skills and solutions information professionals can bring to bear.

Speaking to Executives and Other Challenges

Many have written (better than I) about the disruptive technologies and changes the IA domain faces. Search as the primary means of wayfinding; social networks and trust economies; user-generated tags and folksonomies; advances in computer-based classification; entity extraction and semantic technologies – all, depending on one’s point-of-view, threaten our value and existence or offer new tools and domains for optimized information architecture. As if that challenge weren’t enough, practitioners across the user/info-centered continuum (human-computer interaction, information architecture, interaction design, new product design, technical communication, user experience and so forth) face a constant battle in translating our findings and recommendations into a form that resonates with finance-focused executives. To the extent that good executives are, among other things, good at assessing the cost/benefit tradeoffs of alternatives and allocating resources based on real-world data, we need to speak their language if we (and the customers we speak for) want a fair outcome. To that end, I propose we adopt information advantage in our information architecture efforts.

Information Advantage Defined

Recognizing that the term information advantage has specific meanings in the defense and business strategy communities, I propose a non-belligerent, IA-specific definition: We achieve information advantage when we optimally and systematically use real-world customer data to architect information solutions that yield the desired customer experience.

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At its heart, information advantage provides a way to manage and improve customer experiences with IA products such as catalogs, websites or software. It provides a structured methodology for identifying, synthesizing and acting on data that drives the success (or failure) of those customer interactions. Information advantage synthesizes existing and new customer data to

- discover and quantify trends, issues and things requiring further attention;
- provide evidence for/against existing findings (for instance, small-sample studies); and
- provide real world, quantitative justification for action (business case).

How to Embrace Information Advantage

To flesh out the anecdote from the introductory paragraph, I was surprised that an executive didn’t get the importance of updating the company’s public website based on findings from testing the site IA with a group of users. While I consider it significant that 10 of the 12 participants had a problem with the breadcrumbs, the executive simply couldn’t extrapolate (or believe the finding could be properly extrapolated) to their customer base and bottom line. Yet later, when the executive was given data indicating there were thousands of contacts with their contact center on this same issue, the message hit home. Multiply the actual number of customers experiencing an issue with the associated cost(s), and your justification for additional study or remediation is right there in dollars and cents. We thus supplement existing tools and techniques (and previous findings) with volumes of data that support them and/or justify particular action.

The 50,000-foot view of how to approach this customer information synthesis looks like this:

1. Identify and discover potential sources of feedback
2. Obtain and clean up data
3. Aggregate and synthesize data
4. Identify and prioritize trends/issues
5. Develop and execute remediation plan

This list is all fine and good, but it doesn’t appear to differ much from other methodologies (at least it shares face validity in that sense). That’s why we’ll need to address specific tools and techniques to help us get there. First let’s consider what kinds of information should be leveraged.

Sources of Data Driving Information Advantage

Chances are, if you support e-{something}, you’re already using data from web analytics and/or search engine logs to help you refine the user experience with your site. But just as customers have no qualms about jumping from channel to channel to suit their particular task needs and interaction preferences, they increasingly look to (and contribute to) information outside the control of your company when considering how or whether to do business with you. To be effective in using the increasingly user-generated content to achieve information advantage, we must look beyond traditional sources and methods of collecting customer feedback and use relevant information from sources such as the following:

- Records from customer contact centers and help desks (calls/emails/chats)
- Solutions that monitor forums, blogs, wikis and similar sites for product mentions and sentiment
- Social network/tag cloud analysis
- Satisfaction surveys (especially open-ended questions that can be mined/classified)
- Bug reports and feature requests
Automated web quality assurance solutions
New and existing IA/usability/customer studies
Debriefing trainers, field service, sales and other personnel who have direct face-offs with the customer
User forums (may be local or product-specific)
Customer-attended conferences
Warranty registrations and product field- (or factory-) service
Automated testing and A/B testing solutions
Web 2.0-aware market research/focus groups (txt-based panels, anyone?)
Professional (3rd party analyst) and amateur reports and reviews
Design “playgrounds” with users

For better or worse, this list is illustrative, not comprehensive. We must address the challenges of multiple sources, data formats, structures/definitions and the sheer volume of data with a robust toolkit.

Tools of Information Advantage
Our IA toolkit containing card sorts, taxonomies, prototyping, pluralistic walkthroughs and other techniques has helped and will continue to help us build and refine solutions. But increasingly, we must rely on technology to help us effectively manage technology and data. The volume of data alone – compare the few hundred terms in a website IA to the tens of thousands of tags the same number of pages may yield through a social bookmarking tool – requires new approaches and computer-assisted analysis. Random sampling and statistical techniques, data/text mining, automated classification/extraction and instrumentation are a few examples of how we can tie this information into our core IA work. Because this method cost-justifies itself readily, a quick and dirty manual review to start things off is typically sufficient to yield results that justify additional staff, resources and time to ramp up the scope and effectiveness of your information advantage effort.

The Power of IAs Practicing Information Advantage
Not only does a smartly done synthesis of customer feedback help identify the trends, issues and items meriting further attention, but it also provides a built-in business case for why these things need to be addressed. This business case is music to the ears of executives who only hear numbers and data. The idea of cross-domain synthesis is not new (nor do I presuppose to have perfected a comprehensive model for obtaining information advantage). I trust, though, that with our expertise and a focus on information advantage, IAs can overcome the dual challenges of adapting to disruptive technologies and securing the ear of executives who value the customer but need just a bit more data before they see the bottom line: information advantage equals success.