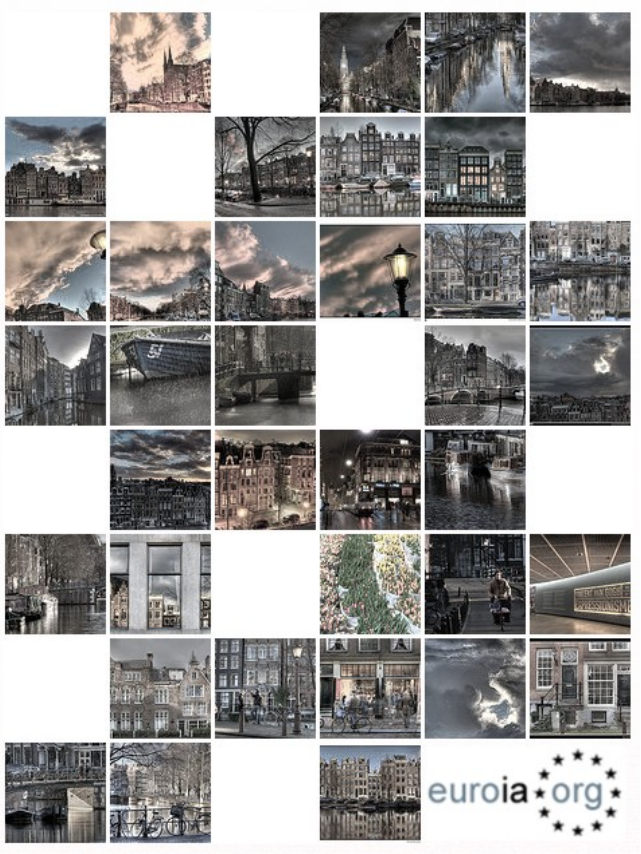

Euro IA Summit 2008

REDRAWING THE MAP

26 – 27 September, Amsterdam, The Netherlands

Conference Handouts

ASIS&T

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Conference Handouts - EuroIA 2008, Redrawing the Map
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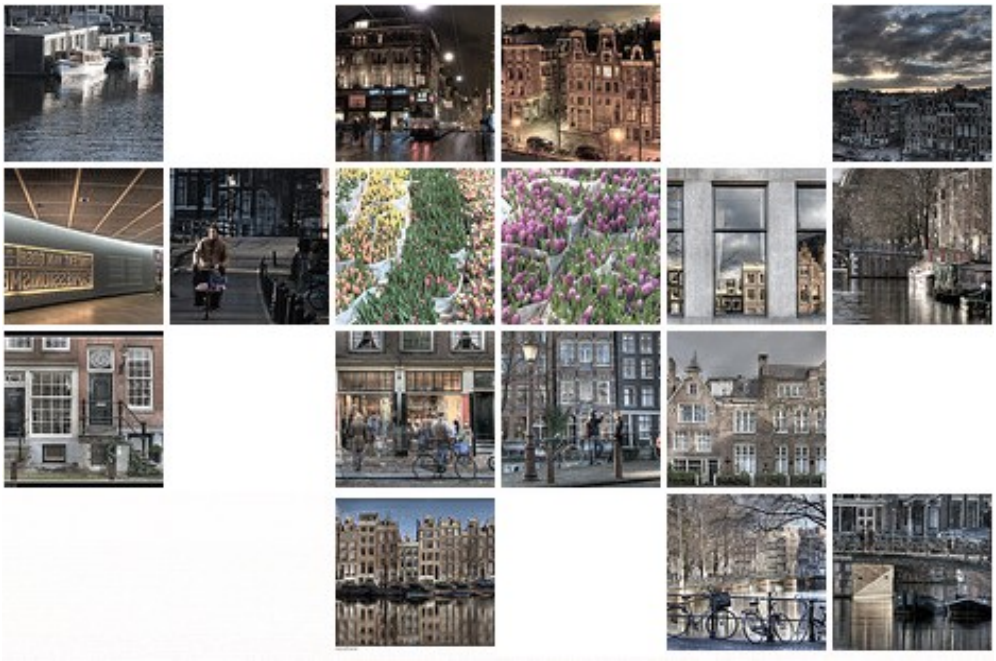

PROGRAMME

FRIDAY, 26 SEPTEMBER 2008

08:30-19:00 REGISTRATION

	THEATER ▼ BIG IDEAS	CINEMA ▼ PRACTICAL IA
09:00-09:45	COFFEE	
09:45-10:00	**WELCOME AND LOGISTICS** *Eric Reiss (Chair), FatDUX, DK*	←
10:00-11:00	**KEYNOTE** *Adam Greenfield, Head of Design Direction, SUID, Nokia Design, FI*	←
11:00-11:15	SHORT BREAK	
	MARKETING AND CUSTOMER SERVICE ▼	CONTENT AND SYSTEMS ▼
11:15-12:00	**IA HEARTS DM** DRAWING ON DIGITAL MARKETING *Tim Ostler, Tribal DDB, UK*	**WHY INFORMATION ARCHITECTS ARE NEEDED IN THE KITCHEN** BETTER CONTENT MANAGEMENT THROUGH INFORMATION ARCHITECTURE *Ruud Ruissaard, Informaat, NL*
12:00-12:15	SHORT BREAK	
12:15-13:00	**THE SEDUCTION OF THE INTERFACE** MERCHANDISING IN INTERACTIVE PRODUCT DESIGN *Christopher Fahey, Behavior Design, US*	**INTEGRATING WEB ANALYSIS IN THE USER EXPERIENCE DESIGN PROCESS** *David De Block & Erik Verdeyen, Internet Architects, BE*
13:00-14:30	LUNCH	
14:30-15:15	**E-SERVICE. WHAT WE CAN LEARN FROM THE CUSTOMER-SERVICE GURUS** *Eric Reiss, FatDUX, DK*	**CONTENT ANALYSIS. THE HOWS AND WHYS TO UNDERSTANDING YOUR CONTENT** *Chiara Fox, Adaptive Path, US*
15:15-15:30	SHORT BREAK	
	SOCIAL AND SEMANTIC WEB ▼	USER-CENTERED DESIGN ▼
15:30-16:30	**CAMPUS 5.0** THE EXPERIENCE OF REDESIGNING THE UOC VIRTUAL CAMPUS *Eva Patrícia Gil-Rodríguez, Universitat Oberta de Catalunya, ES* **BUILDING SOCIAL WEB EXPERIENCE** *Laurent Goffin, Emakina, BE*	**HOW DO YOU RE-DESIGN A BUSINESS CRITICAL WEB APPLICATION WITH BILLIONS OF UNIQUE PRODUCTS?** *Floris Ketel, Mirabeau, NL* **GETTING THE RIGHT TICKET BEFORE THE TRAIN LEAVES** THE CHALLENGES OF USER-CENTERED DESIGN FOR THE SWISS FEDERAL RAILWAYS *Andrea Rosenbusch & Jacqueline Badran, Zeix AG, CH*
16:30-17:15	AFTERNOON COFFEE & TEA BREAK	
17:15-18:00	**CHANGE IS INEVITABLE** WHAT SEMANTIC WEB AND WEB 3.0 MEAN FOR IA *Claudia Urschbach, BBC, UK*	**COMMERCIAL ETHNOGRAPHY AND INNOVATING INFORMATION EXPERIENCES** *James Kalbach, LexisNexis, DE*
18:00-20:00	IA JAM - All participants invited to share and show off their projects and deliverables	

20:00- DINNER - Participants are free to make their own dinner arrangements

SATURDAY, 27 SEPTEMBER 2008

8:30-13:00 REGISTRATION

	THEATER ▼ BIG IDEAS	CINEMA ▼ PRACTICAL IA
9:30-10:30	**ESTABLISHING A COMMON GROUND FOR IA PRACTICE AND THEORY** MISSION IMPOSSIBLE? *A. Resmini, University of Bologna, IT; D. Madsen, Copenhagen Business School, DK; K. Byström, University College of Borås & Göteborg University, SE; N. Pharo, Oslo University College, NO; L. Rosati, University for Foreigners of Perugia, IT; S. Skorka, Pedagogical University of Krakow, PL* **PANEL**	**ROADMAP FOR A STRONGER, EUROPEAN IA/UX NETWORK** *F. Borloo, Internet Architects, BE; S. Muus, FatDUX, DK; W. Nöding, DE; J. Ponya, HU; A. Resmini, IT; P. Bogaards, NL; P. Boersma, NL; S. Cottong, LU* PANEL
10:30-11:00	COFFEE BREAK	
11:00-12:00	**TAKING THE 'OOH!' OUT OF GOOGLE** GETTING SITE SEARCH RIGHT FOR NEWS *Martin Belam, currybet.net, UK*	**URL DESIGN FOR INFORMATION ARCHITECTS** *Deanna Marbeck and Silver Oliver, BBC, UK*
	FRAMEWORKS AND PATTERNS ▼	BEYOND THE WEB ▼
	IT'S A DIY FUTURE *Joe Lamantia, Keane, US*	**APPLE, IKEA AND THEIR INTEGRATED INFORMATION ARCHITECTURE** *Davide Potente, Erika Salvini, University for Foreigners of Perugia, IT*
12:00-12:15	SHORT BREAK	
12:15-13:00	**TAKING SOCIAL NETWORKS GLOBAL** DESIGN PATTERNS AND TIPS *Peter van Dijck, BE*	**DOCUMENTING MOBILE 2.0 IA** *Scott Weiss, Human Factors International, UK*
13:00-14:30	LUNCH	
14:30-15:15	**I'M NOT YOU** MODELLING AND CONCEPTUALIZING PERSONALIZATION IN INFORMATION ARCHITECTURE *Bogo Vatovec, Bovacon, DE*	**EXTENDING THE GAMING EXPERIENCE TO CONVENTIONAL UIs** *John Ferrara, Vanguard, US*
15:15-15:30	SHORT BREAK	
15:30-16:30	**CONCEPT DESIGN TOOLS FOR INFORMATION ARCHITECTURE** *Victor Lombardi, Smart Experience, US*	←
16:30-17:30	**WRAP-UP AND FIVE-MINUTE MADNESS** *Eric Reiss (Chair), FatDUX, DK*	←

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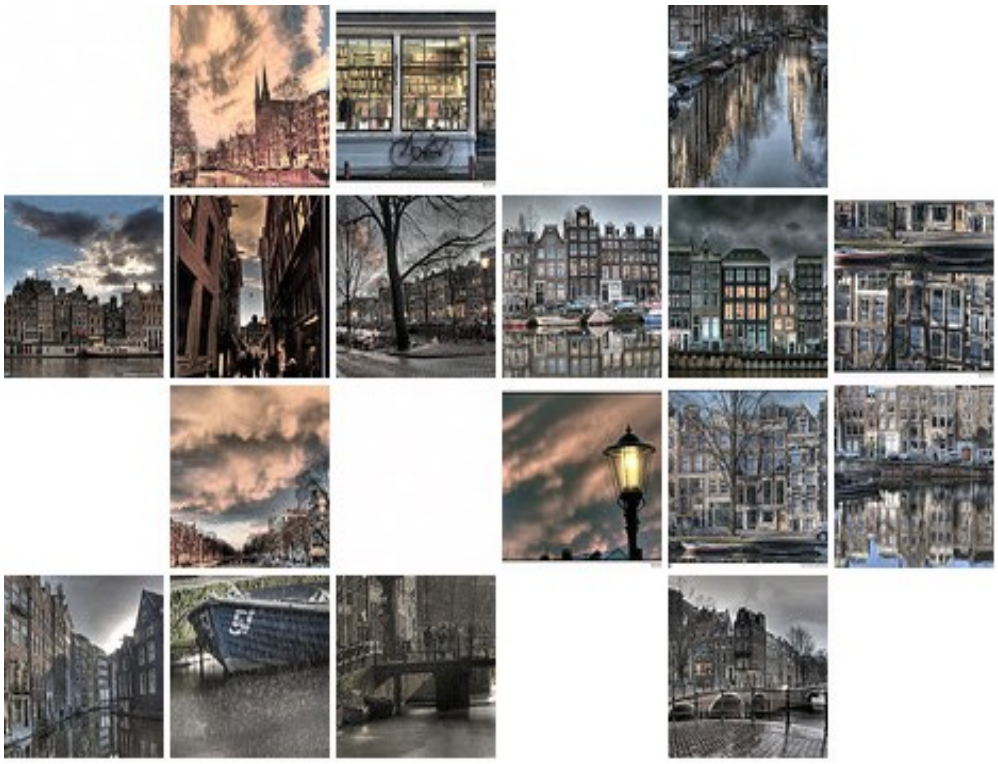


SPEAKERS AND ABSTRACTS

Adam Greenfield Keynote	Head of Design Direction SUID, Nokia Design, FI
Jacqueline Badran, CH	Søren Muus, DK
Martin Belam, UK	Silver Oliver, UK
Filip Borloo, BE	Tim Ostler, UK
Katriina Byström, SE	Nils Pharo, NO
David De Block, BE	Davide Potente, IT
Christopher Fahey, US	Eric Reiss, DK
John Ferrara, US	Andrea Resmini, IT
Chiara Fox, US	Luca Rosati, IT
Eva Patrícia Gil-Rodríguez, ES	Andrea Rosenbusch, CH
Laurent Goffin, BE	Ruud Ruissaard, NL
James Kalbach, DE	Erika Salvini, IT
Floris Ketel, NL	Stanislaw Skorka, PL
Joe Lamantia, US	Claudia Urschbach, UK
Victor Lombardi, US	Peter Van Dijck, BE
Dorte Madsen, DK	Bogo Vatovec, DE
Deanna Marbeck, UK	Erik Verdeyen, BE

Fri 26
11:15-12:00
THEATER

IA HEARTS DM
DRAWING ON DIGITAL MARKETING

Tim Ostler, United Kingdom

Tim Ostler is Senior Information Architect at Tribal DDB London, where most recently he was one of those responsible for designing Volkswagen's new UK site. Trained in architecture in the 1970s, he went on to make a living teaching and writing about it (and also doing a bit of it). His view of computing remained somewhat jaundiced until he was seduced by the home computer revolution of the 1980s. Discovering Macs in 1984, Michael Benedikt in 1991 and Wired in 1993 he was eventually inspired to ditch building design for good and run away to become a Cyberspace Architect. He never expected to end up in advertising.

"Advertising isn't a science, it's persuasion. And persuasion is an art." - Bill Bernbach

INTRODUCTION

Digital marketing sites tend to be overlooked at IA conferences. Given that their sole purpose is to promote a product or a brand it's not surprising: as they're a product of the advertising industry they may not seem a suitable object of interest for serious IAs.

But I believe that we IAs have as much to contribute to these as to more traditional sites, although the rules are different - and we might have to adjust our concept of what an IA is.

AN IA IN AN ADVERTISING AGENCY

I work as a Senior IA for Tribal DDB London. As a division of DDB, it's part of one of the largest advertising agencies in the world. Our major clients include Philips, VW and the Guardian.

Most of our work can be described as digital marketing. But thanks to its founder Bill Bernbach, DDB can lay fair claim to being the advertising agency for those who hate advertising agencies. It made its name in New York in the 1960s, with the "Think Small" campaign for the VW Beetle. It was witty. It was smart. Above all, Bernbach made it a point of principle not to insult his audience's intelligence.

DEFINING DIGITAL MARKETING

Wikipedia defines digital marketing as "the practice of promoting products and services using digital distribution channels." The classic digital marketing artefact is a microsite, a site consisting of a small cluster of pages with a custom domain name or simple URL that operates in conjunction with a banner, rich media or offline campaign - and more often than not these days, a Facebook application.

It is an article of faith in digital marketing that rich media interfaces will prove engaging and encourage users to linger and discover more about a product.

Of course we can fool ourselves that the experience we offer is engaging enough to entice anyone - even someone who's currently pre-occupied with a specific task - but realistically we can only hope to attract people who are in a relaxed, receptive frame of mind with no specific goal in mind. The perfect context of use is an office worker browsing in his/her lunch hour over an office broadband connection while munching a sandwich (these also happens to be well-nigh perfect conditions in which to encourage sharing a link with a friend).

Microsites gained a lot of momentum from their perceived usefulness as a SEO tactic. They were also seen as the main destination point of a digital campaign, where the creative idea represented in the banners and rich media linking to it could be co-ordinated and translated into a specific marketing message or experience, often with a direct route to Buy Now.

But these days microsites are falling out of favour. On the one hand they are seen as watering down a company's brand; on the other they derive no benefit from the credibility that a brand may have been laboriously establishing over several years.

For VW's new UK site, launched in February, it's an explicit goal to eliminate the need for microsites and instead drive traffic to specific model areas within the main site, each with its own creative idea and interactive animation. Philips too have brought their range of microsites more closely within the fold of the corporate site.

Microsites are not however going to go away any time soon. They are still universally used as a focus for specific marketing campaigns where product identity is seen as more important than the parent brand, notably in media products such as films, albums or video games.

It was while doing a series of microsites that I began to think seriously about how what I was doing differed from what would normally be asked of an IA.

RHETORIC AND PERSUASIVE TECHNOLOGY

First of all, these are not neutral information sites that merely make information findable for strongly motivated users. A good digital marketing campaign creates motivation where it previously did not exist. Digital marketing is therefore a branch of rhetoric.

Rhetoric is the art of persuasion through the use of oral, visual, or written language. For the Romans it was one of three essential liberal arts - the others were logic and grammar. These days we tend to associate it with slippery politicians, as in "empty rhetoric": classical philosophers believed that rhetoric, far from being a means to obscure the truth, was essential to its discovery, as it provided the means to order and clarify an argument.

Aristotle, in his writings on rhetoric, described three means of persuasion: a speech can produce persuasion either through the character of the speaker (by extension, the brand), the emotional state of the listener (user context), or the argument (logos) itself (the marketing message).

In 2003, B J Fogg brought rhetoric up to date by describing its application to computers in his book "Persuasive Technology" in 2003. One of Fogg's most interesting contributions was his focus on credibility in web design: why it's important, and how to convey it. This is what Aristotle referred to as ethos: how the character and credibility of a speaker influence an audience to consider him to be believable.

KEY DISTINCTIONS

Viewing digital marketing as a branch of rhetoric sheds light on a number of specific differences between digital marketing and other sites:

Guidance Not Navigation - Navigation in a microsite is not objective, but "navigation with attitude." As it matters to use where the user chooses to go, navigation is less about providing straightforward menus than about orchestrating a series of calls to action.

Experience Not Orientation - To gain a foothold in a user's consciousness, we need to create an experience that has emotional resonance, where the user is not a dispassionate observer bit in the centre of the action.

Journey Not Destination - Traditional IA values near-instantaneous navigation to your goal; digital marketing is all about creating a journey. Digital marketing IA is to traditional IA as Google Earth is to Google Maps.

State-based Not Page-based - Maintaining rhetorical focus on a single product or experience with the assistance of rich media technologies such as Flash and Flex encourages a state-based rather than page-

based organization. This allows the product to remain the centre of attention within a three-dimensional space while its environment changes around it.

Dynamic Not Static - The flip side of a site being state-based is that it is also dynamic rather than static. Wherever possible transitions between one state and another are animated. This animation can itself be used to reinforce the product's identity, creating a kind of leitmotif or theme tune announcing the product's arrival. Bill Bernbach was referring to something similar when he said, "Execution can become content. It can be just as important as what you say."

Seduction Not Usability - Seduction here refers not to seducing the user into believing something, but into engaging with the site to the fullest possible extent, via the use of rich media technologies such as Flex or Papervision.

It does raise issues that are problematic in terms of usability, such as load times, what you can reasonably expect of a user who is not in task mode, and how to handle the wait state. However, whatever our illusions about our power to seduce, usability is not an absolute necessity in many cases, just a nice-to-have.

WHAT IA CAN DO FOR DM

So what can IAs do for digital marketing?

The answer is, just keep on doing what we've been doing for the last 2500 years. One of the innovations that Aristotle introduced in his writings on rhetoric was the idea of topics, a heuristic tool for categorizing, retaining and applying frequently used types of argument.

That may sound familiar. In effect, classical rhetoricians were the first information architects.

Today as a profession, we possess one brand value above all that can help any digital marketing project: we are analytical about bodies of information and know how to organize them into coherent structures. This equips us to advise not just on ways of organizing information but also how to communicate it using the principles of persuasive technology.

To quote Bill Bernbach again: "The truth isn't the truth until people believe you, and they can't believe you if they don't know what you're saying, and they can't know what you're saying if they don't listen to you, and they won't listen to you if you're not interesting, and you won't be interesting unless you say things imaginatively, originally, freshly."

There are plenty of ways we can help this happen, both in conventional IA terms - managing the screenflow, content and page organization - and as professional rhetoricians - advising on credibility cues and the mechanics of persuasion.

Aristotle defined rhetoric as the ability to see what is possibly persuasive in every given case, and this is a skill we need to cultivate. In other words it's our job not just to organize information, but also to marshal arguments. We need to ensure that the arguments put forward in a digital marketing campaign actually make sense and - above all - do not insult the user's intelligence.

WHY INFORMATION ARCHITECTS ARE NEEDED IN THE KITCHEN
BETTER CONTENT MANAGEMENT THROUGH INFORMATION ARCHITECTURE

Ruud Ruissaard & Peter Bogaards, The Netherlands

Fri 26
11:15-12:00
CINEMA

In 1986 Ruud Ruissaard started his professional career as a technical communicator at the engineering and standardization department for Fokker Aircraft in the Netherlands. In his role as information manager he initiated and guided the restructuring of the Fokker 50, 70 and 100 manufacturing manuals and helped to professionalize the content creation and publication processes. Since 1996, he has been working as an information architect at Informaat. He has advised large (inter)national companies and organizations on their content management strategies and devised site concepts with respect to structuring, organizing and labeling content-rich internet and intranet applications. Recently, he started working as an information management consultant for Informaat content design & creation.

On the web there are several debates about the future of information architecture. Some of the debaters warn us about the near death of the information architect (Joshua Porter). Others foresee information architecture 3.0 (Peter Morville) and then there are evangelists who believe that the future of information architecture *will be about architecting massive networks, and even cities* (Shel Kimen).

Whatever the future of information architecture, it is reasonable to predict that the role of the information architect (IA) will continue to focus on three core activities they "do best" (Louis Rosenfield and Peter Morville). These activities are organizing, labeling and structuring. The purpose of these activities is to make information usable. The main environment for these activities is the online world. In this environment, we conduct content analyses to determine the quantity and quality of the content. We design an organization of logical groups of content and within these groups, we apply an alphabetical, geographical or other order. Subsequently, we try to figure out the appropriate labels that cover the meaning and appeal to the intended audience. Finally, we determine and design the relationships between the identified content clusters and specify the best possible structure. This concise description of IA activities may oversimplify matters, but it is the very essence of our work.

WHERE WE STAND

Information architects are for the most part preoccupied with the design of websites and applications. The organizing, labeling and structuring activities of the information architect are primarily aimed at the 'front stage' which people interact with. As a community, we are keen on improving the usability and enhancing the user experience (UX) by making content easily accessible, by reducing the redundancy and information overload and by guiding the user in a controlled manner through the content along hierarchical paths. To optimize our designs, we use techniques such as personas, scenarios and prototypes. Our success depends on the degree in which the user is able to achieve the intended goals and fulfill his information needs in an effective and pleasant manner.

To summarize in the words of Ann Rockley, information architecture is "synonymous with information architecture for the web".

OUR CHALLENGE

Despite all the good work of information architects, the number of unsuccessful websites and applications is still staggering. Problems in the 'back stage' are generally the primary reason for the lack of success. At a more specific level, the organization of content management is not taken seriously, tools provided are inadequate, and the attention is not focused on the needs and wants of the people involved . Information architects will add more value if they gain a deeper understanding of the business environment and target their skills to the environment where the content is created and managed. In a metaphorical way, this environment can be labeled as the *kitchen*. As in any restaurant, the kitchen is the place where ideas materialize. These ideas must be processed, composed and styled.

The results will subsequently be served to the customer. In case of content ideas, the user may be a (potential) customer conducting transactions or an employee searching for information to write a report.

As in any kitchen, it is important to have the proper tools. These tools are no guarantee for high-quality content, but are used to make processes simpler, shorter and therefore cheaper. Such tools range from simple text editors to complex content management systems which facilitate workflow management, versioning, and collaborative writing.

Judging from the limited amount of attention on the web and at conferences, it seems information architects are not too keen to get involved in the content kitchen. Extensive speculation on the possible causes of this reluctance is not necessary, but one reason may be the hesitation of IAs to deal with technologists who consider the kitchen to be their territory. It is important that IAs overcome their hesitations and become fully involved in the kitchen territory. There are three important considerations:

1. Changing the menu implies change in the kitchen.
2. You can only serve what the chef can cook.
3. A merry chef creates merry guests.

CHANGING THE MENU IMPLIES CHANGE IN THE KITCHEN

Changing the IA of the publication requires a team with skills from the fields of IA, communication, writing and content management technology. In this team, the information architect does not only architect content, he also orchestrates change. This change applies to new ways in which content is decomposed, structured and recomposed in a content management environment. This change may even require the redefinition of processes and procedures or additional competencies of the people involved. To implement his design successfully, the IA must be aware of its consequences and act accordingly. This means he provides the organization and people involved with advice and guidance, creates the conditions necessary to implement his design and ensures ownership of his design in the organization. In such a way, changes are understood, accepted and implemented by the content management organization.

YOU CAN ONLY SERVE WHAT THE CHEF CAN COOK

There are many criteria for high-quality content such as readability, usability and relevancy. To a large extent, the production of high-quality content depends on the attitudes, skills and competences of the people in the content management organization and the quality of the tools. Too often, people in the content management organization lack appropriate attitudes, skills and competences in order to contribute significantly to the success of the project. Moreover, tools are selected and implemented by specialists who do not know what is needed in the content kitchen. As a matter of fact, many content management projects fail because there is a mismatch between the people and tools necessary for the creation, publication and maintenance of high-quality content. For instance, when an organization instigates a change of structure (e.g. from centralization to decentralization), it does not take the necessary steps in order to assign or provide the appropriate expertise. In the case of tools, even basic functionality is often unavailable. Also, the scalability and flexibility of content management system can be disappointing to a degree that new content types cannot be accommodated by the system, such as blogs, forms and rich media components.

A MERRY CHEF CREATES MERRY GUESTS

The user experience of a restaurant guest is not just determined by the quality of the food alone. It is also a combination of the atmosphere in the restaurant, the collaboration between the white and black brigade and the bill at the end of the evening. If all goes well, the guests and staff are equally happy. The guests will return to the restaurant and the cook will remain motivated to show his best over and

over again. It is important to realize that the user experience of every individual in the process matters. Or to put it differently, the strength of the UX chain is in its weakest link.

The implication here is that throughout the customer life cycle, the UX depends on the organization's ability to deliver high-quality content for all of its products, services and channels. Every disruption of the UX chain has a negative impact. In the context of content management, the UX of people involved can be improved by giving them the proper tools. Tools which are easy to implement and customize with intuitive and easy-to-learn interfaces, and for which vendors provide adequate support.

HOW TO ACT?

So what can the information architect do when facing the challenge of creating added value in a new territory, the domain of content management?

- Adopt a holistic approach towards the 'front' and the 'back stage'.
- Apply IA expertise to content management.
- Advise the organization dealing with the change.

ADOPT A HOLISTIC APPROACH TOWARDS THE 'FRONT' AND THE 'BACK STAGE'

Before doing anything at all, IAs need to reconsider their mindset. They need to acknowledge the fact that their designs create change in the organization. If they want to implement their designs successfully, they need to understand the nature of the change. Therefore, it is necessary that IAs acquire knowledge about the organization, its people and processes to minimize the gap between what happens in the kitchen and what is on the menu. It is not just a matter of perspective. It is also truly acknowledging that, in creating and publishing content, staff, processes and tools determine the value and significance of the UX of sites and applications.

APPLY IA EXPERTISE TO CONTENT MANAGEMENT

The skill set of the information architect contains three valuable assets for the kitchen. First, the ability to analyze and evaluate the quality of the content is an excellent instrument to apply more broadly to the quality of the organization. Second, the architect can translate findings into feasible concepts to improve content creation and delivery. Third, the information architect can create a road-map for better content creation and delivery to unfreeze the business and embrace the change. In this context, the information architect can use user-centered design techniques such as personas, scenarios and card sorting.

ADVISE THE ORGANIZATION DEALING WITH THE CHANGE

In his TV show “Kitchen Nightmares”, Gordon Ramsay provides genuine inspiration for IAs entering the content management kitchen. He is a famous chef who helps restaurants that are on the verge of bankruptcy to get their act together and become successful again. Like Ramsay does in restaurants, IAs must identify problems and disorder in faltering content management organizations and propose solutions. Let us apply a few of Ramsay’s rules of thumb to the field of IA.

Know your role: Tell content management organizations which roles and skills are required to do the job. Too often, the organizations underestimate or neglect content management. They do not distinguish the specific roles, tasks and responsibilities needed for professional content management.

Keep it simple: Advise organizations on the selection and implementation of content management systems. They often entail complex features, workflows and interfaces. The complexity needs to be reduced significantly so that users of these systems can do their job more easily.
Know the user: Promote research into the needs, wants and desires of users. Tell organizations to get out on the street to find out what people want to know. Convince them that they have to keep up with changing customer needs and priorities.

There are more good lessons to be learned from Ramsay's kitchen shows. But there is one that applies specifically to the information architect.

Use your unique selling point: Focus on the core competences being organizing, labeling, and structuring. Apply these not only to the publication domain ('front stage'), but also to the domain of content management ('back stage').

REFERENCES

Glushko, Robert J. and Lindsay Tabas, "Bridging the "Front Stage" and "Back Stage" in Service System Design", June 15, 2007 (http://repositories.cdlib.org/ischool/2007-013/)

Porter, Joshua, "Thoughts on the Impending Death of Information Architecture", November 21, 2006 (http://bokardo.com/archives/thoughts-on-the-impending-death-of-information-architecture/)

Morville, Peter, "Information Architecture 3.0", November 29, 2006 (http://semanticstudios.com/publications/semantics/000149.php)

Kimen, Shel, "10 questions about information architecture", September 29, 2003. (http://articles.techrepublic.com.com/5100-22-5074224.html)

Morville, Peter and Louis Rosenfeld, Information Architecture for the World Wide Web, Designing Large-Scale Web Sites, Third Edition, November 2006

Rockley, Ann, "Information Architecture of Content Management", September 25, 2005 (http://rockleybulletin.com/featurearticle2.php?id=122_0_2_0_C)

Fri 26
12:15-13:00
THEATER

THE SEDUCTION OF THE INTERFACE
MERCHANDISING IN INTERACTIVE PRODUCT DESIGN

Christopher Fahey, United States

Christopher Fahey is a founding partner and the IA practice lead at Behavior, an award-winning New York web design consultancy focused on building compelling and elegant user experiences. At Behavior, Chris has led the IA and UXD strategies for clients in many industries, including HBO, BusinessWeek, The Smithsonian, McGraw-Hill, JPMorgan Chase, XM Radio, The National Geographic Channel, AARP, the AIGA, and The Onion. Chris speaks at many design conferences and will teach at the School of Visual Arts' new interaction design MFA program in 2009. He also blogs about design, technology, culture, and whatever else he's interested in at http://www.graphpaper.com.

This talk is not about how to sell your real world products by optimizing your shopping cart or your product pages in your online store. If you came for that, you're in the wrong room. Rather, this talk is about the design of web-based interactive products and services (the line between these is completely blurred) and how the traditions and concepts of merchandising apply to the design of web-based applications and content platforms.

This difference is really the difference between designing "Selling Contexts" versus designing "Products that Sell Themselves".

By "design", I am talking about the holistic design of the user experience of an interface — the interaction design, the information architecture, and the visual design. By "web-based products and services", I am talking about a broad category of services primarily hosted on the web, in specific contrast to (a) web sites that sell stuff, and in contrast to (b) traditional desktop apps. Think Pandora or Last.fm versus Amazon. Think Flickr versus iPhoto.

What these examples have in common is this: The user experience is so integral to the appeal and desirability of these products that it's almost impossible to make a sale without convincing the customer that the user experience will be absolutely delightful to them.

In almost every other product sales context, the job of the marketer is to convince the user that they really really need the product… and the job of the product designer is to please the user after they've already paid for the product.

But the impact and importance of the user experience on future sales has changed profoundly in the Web 2.0 world, where we have subscription-based models of payment under which a user can quit your product and move to a competitor in seconds. Where we have vibrant communities of consumer reportage and reviews, from personal blogs spreading word of mouth through the grassroots to a plethora of product and service review sites, enabling users to learn countless pros and cons about your product before ever trying it out. A world where a fully-functional product demo is seen as essential to product success. A world where many products are, in fact, completely free (ad supported, usually).

In traditional marketing and advertising, you show sexy photos of sexy people using the product. You show these photos in magazines and on TV. You put a million bullet points on the box, and make up technologically-sophisticated names for your features.

In the world of interaction design, there has been a long-standing kind of feud between designers and marketers. In the first decade of the web, most web sites, if they were selling anything at all, were selling products or possibly content. Designers, at their best, tried to create the best possible user experience for their users — creating meaningful information architectures, clear graphic design… while marketers did what they could to drive customers to the site and to convince designers to make their products look as desirable as possible — using the right words and images to sell the products.

Conflicts, however, arose. Designers found themselves being asked to do "marketing stuff" they thought was counter to a positive user experience, especially the incorporation of advertising. But with today's Web 2.0 products and services, advertising is only the tip of the iceberg. "Monetization" opportunities abound. Designers need to become acutely aware of, and indeed primarily responsible for, the ongoing marketing of the products they are designing. They need to create products with continuous user seduction, before, during, and after the user converts. Designers need to be marketers.

Marketing has traditionally focused on the zero-sum model of conversion, a magic moment where, through clever marketing, a potential customer clicks "submit" on the checkout screen or the sign-up page, and boom! you have a customer.

This model is utterly out of date for the new, sophisticated web-native consumer. The new consumer never converts. We jump from site to site, brand to brand, on the slightest whim. We are turned-off by hard-sell marketing where merchants demand our trust and loyalty before we even use their products. Because of this, I don't like to use the word "conversion". I like to think of it as adoption — the introduction of a product into the customer's life in the framework of an ongoing relationship.

That's where continuous merchandising comes in. First, let's distinguish between merchandising and marketing. They're very similar. But marketing is the broader category of actively creating need and desire for products and services, delivering messages to the public via media, messaging, and retail environments (which are, as Paco Underhill explains in Why We Buy, essentially immersive media environments — TV advertisements you can actually walk through like the famous scene with Ed Norton walking through the IKEA catalog in Fight Club.)

Merchandising is the strategy and implementation of how a product is presented to customers as they decide whether or not to adopt or purchase. It is the aspect of design that focuses on a product's inherent desirability (as opposed to its utility, price, usability, etc). It is where product design, marketing, and advertising intersect.

When we design web-based products, we are doing something not much different than what industrial designers have been doing for decades — creating products whose design is so seductive that you are compelled to buy it.

There are three kinds of merchandising:

- Selling Contexts: This is the design of "the store". Will you have a minimalist store like a trendy boutique? Or racks of warehouse-style shelving? Online, should you present alternative products before the user adds an item to their shopping cart, or afterwards? This is the design of retail environments to drive sales. In this context, surprising challenges emerge that have resonance for all designers.
- Packaging: This is, in a nutshell, "the box" that sits in the store. In online products, however, the packaging and the selling contexts are the same thing. You rarely want to go back to the sales web site once you are a customer or subscriber. In fact, I contend that thinking about product packaging at all, even metaphorically, is not relevant online. If you see your product's UI or UX design as "packaging", you're missing the point that the product's design IS an integral part of the product. Packaging is the part that you throw away when you start using it.
- Products that Sell Themselves: Fifty years ago, the father of user-centered design Henry Dreyfuss included merchandising among a product designer's core job responsibilities, declaring that the successful designer "accepts the responsibility of his position as liaison linking management, engineering, and the consumer and co-operates with all three." He was defining the design of the product itself as a marketing task.

We know a little more now than we used to about how consumers make decisions. One surprise is that many economic and marketing models rely on the idea of the "rational consumer", someone who always makes decisions based on what is good for them economically — they will always buy the product that "maximizes utility". But we know now that consumers take many other factors into account besides usefulness — in addition to perceived value (which may not be accurate), there are emotional factor such as sexiness, status, brand.

In the history of product design, for example, there was a great innovation in the early 20th century where products started to take on certain stylistic factors. Ask yourself how many classic product designs wouldn't be just as useful without all the superficial stylizations. Style as a guiding force of a design process is not something to be pushed to the side. It is an essential ingredient of good design, precisely because it can profoundly affect a product's desirability.

I believe there are such things as "Affordances of Desire" — user interface elements that suggest to users a delightful user experience awaits them.

New techniques recognize the existence of a complex adoption curve, a slow, steady seduction that occurs over time (social media products in particular as they move from simply customizing and friending to a "critical mass" phase where the network's tools become genuinely useful). Products take time to capture customer loyalty. A product might not show its value until you've used it in a variety of contexts.

Product Ecosystem: We're doing much more than than designing standalone products now. Now we are designing systems that touch users at many different points, contexts, platforms.

BRINGING MERCHANDISING-BASED DESIRE TO THE DESIGN PROCESS

"Designing the box", thinking about the sales process as a pre-conversion and post-conversion dichotomy, is no longer adequate. It is time to envision user behaviors at every stage of a product lifecycle to identify continuous engagement opportunities.

Understand emotional qualities in your users, and use them as guiding forces in your design.Examples: Rebelliousness and difference (Apple); Power and control; Modesty; Avoidance of embarrassment; Authenticity; Acceptance in one's social group; Aspiration to a different class status or job role (see power); Fun and release of stressful thoughts.

I do recommend user research and user personas — not so much as a tool for generating abstract or even quantitative insights into users, but as the foundation for envisioning successful adoption curves for your product (and for identifying effective affordances of desire). They don't have to be hefty, robust research-intensive documents to do this.

Define scenarios for successful exploration, adoption, initial use, transition to advanced use.

Evaluate interface designs according to psychological conversion-focused criteria: Users must have confidence that they're not screwing up; they must trust that they're not being ripped off; they must have a clear vision of what's next or where they are; they must have comfort in the easiness of the experience; they must focus away from distractions from the objective, their emotional level of excitement in general.

Put these criteria right on the process flow diagrams, in the wireframes, and alongside the page mock ups. As you review design concepts, use all of these evaluation criteria to drive your designs and iterate them to incorporate these patterns. Go back and revise processes later in the process, recognizing that you will learn about user desires and fears that need to be addressed from the earliest stages in the user experience process.

In particular focus on removing obstacles, logistical and psychological.

Envisioning experiences as linear paths, or "funnels", assumes that you are controlling or manipulating users. Old school ad executives might think this way, but even in traditional store design customers generally aren't corralled down a linear track (IKEA is an exception).

Plan for opportunities for user delight as a technique of seduction. Create delight early and often. And dn't simply hope for delightful experiences to coincidentally emerge from your otherwise perfectly good solid design. Make it an explicit objective in the design process: "In the design of this product, we will create two moments of Wow." Hold meetings in which the design team is asked to suggest ideas for delightful moments, choose the ones you think have the most potential (most practical to build, most appropriate to the audience, most likely to improve conversion, etc.).

INTEGRATING WEB ANALYSIS IN THE USER EXPERIENCE DESIGN PROCESS

Fri 26
12:15-13:00
CINEMA

David De Block & Erik Verdeyen, Belgium

David is a co-founder of Internet Architects. Internet Architects is a consulting company focused on designing user friendly websites and online applications. Before starting Internet Architects he was a project manager and user experience consultant with companies like Telenet (Belgians biggest cable company) and Real Software. He has been involved in any number of projects for government departments, banks and multinationals such as Agfa, Fortis, The Belgian prime ministers office, … By combining his background in communication with an in-depth technical knowledge, David is able to understand both the business and communication requirements and the underlying technological issues in a project. He is focused on the end-user while supporting his customers' expectations. He is able to cross the chasm between communication and technology people.

Erik is a co-founder of Internet Architects. Erik has a masters degree in business engineering and a strong background in economics. He has been a full time internet professional for over ten years. He was involved in wide variety of projects fulfilling a range of roles including webmaster, information architect, strategic consultant, team leader and management consultant. Erik's experience includes anything from

operational to strategic aspects projects for medium to international organizations in government and private sector including customers such as Agfa Gevaert, Sony Europe, SmalS-MvM (portal of the social security in Belgium), Tractebel, VDAB, The prime ministers office, The employment agency of the Federal government and the province of Antwerp. He founded Internet Architects with David in early 2006.

WHO IS INTERNET ARCHITECTS

Internet architects was founded in 2006, but the team behind the company has been active in the internet industry since the early 90s. During their long carriers they realized what most of their customers needed was a neutral party looking at solutions from the point of view of the end user and with the technical knowledge to build innovative solutions in line with the latest trends. Internet architects only focuses on the user experience and the design process, they leave the implementation up to CMS specialists and developers.While working for large government projects, large commercial clients and communication agencies they realized that selling the value of design, usability and users experience was hindered by a lack of objective measurements. Quantifying the impact of a new information architecture for a huge site like the portal of the Belgian federal government or the redesigned websites of the different business lines of the Carrefour group is essential to justify an ongoing investment in the user experience in stead of technology alone.

METHODOLOGY

Internet Architects developed there service offering and tools around four axes representing the main stages in the design process. They convinced many of their customers that managing an efficient and effective online presence is an ongoing process which requires continuous improvements to maximize results.

During the Define stage measuring starts with the very first step, the audit of the existing site. Traffic analysis is documented in a dashboard and business oriented reports and creates a benchmark from which improvements can be measured. As these tools are understandable by the key influencers in the business they help them see where there is room for improvement or where the online results are not in line with the company strategy. The result is clear KPI's to measure the business criteria and scenario's to measure the usage of the site.

While Designing the user scenario's are used during user testing. They become an integral part of the toolset to evolve and improve the templates and the information architecture. Once the project goes into production there will be further use tests on the code and the functioning of the different features in the site or the online application.

But the stage were measuring becomes most important is the Optimization. An online project really only starts when it goes in production, only when the users are visiting the site on a regular basis can we start observing their behavior and start optimizing the templates and the key functionalities of the site. At this point we can see if the redesign has resulted in the expected improvements both in the usage of the site as in the bottom line for the business. By continuously measuring we can also continuously improve the site. We can react to trends and even anticipate user needs and expectations. The result of this left brain approach is an overall integration of the online with the rest of the business reporting, planning and execution.

Finally we are also going to look beyond the usability, user experience and information architecture aspects of the site and look at how we can improve findability through SEO and campaign management using integrated tools bringing web traffic analysis, ad management and keyword management together in one environment.

PRESENTATION

The presentation will be a combination of vision and theory with examples form customer cases and tips and tricks for your own use.

E-SERVICE. WHAT WE CAN LEARN FROM THE CUSTOMER SERVICE GURUS

Fri 26
14:30-15:15
THEATER

Eric Reiss, Denmark

Eric Reiss has been actively involved in the creation of menu-based programs, hypertext games, multimedia, and web projects for almost 30 years. In November, 2000, his book, Practical Information Architecture was published by Addison-Wesley. In 2002, it became available in Japanese and Korean. He is also the author of Web Dogma, co-instigator of the IA Slam, and a frequent speaker at conferences and educational institutions throughout Europe and North America. Eric is currently completing his second term as president of the Information Architecture Institute, and will be lecturing at Instituto de Empresa Business School in Madrid, Spain as Associate Professor of Usability and Design -- in addition to his ongoing duties as Senior Content Strategist at FatDUX Copenhagen and CEO of the FatDUX Group.

For decades, service gurus such as Ron Zemke, John Tschohl, Karl Albrecht, and Ray Considine, have been helping businesses understand the dynamics of customer service. Some of them finally woke up to the opportunities of the Internet around 2001 -- but their messages were buried in the rubble of the dot-bomb. Now, it's time to dig them out, dust them off, and learn from their experiences in the off-line world to more successfully address the challenges we face in the digital environment. After all, our world was built by applying old techniques to new technologies.

Several of these authors have now written e-service books (Zemke and Tschohl). However, we, as interactive specialists have been given an opportunity as this somewhat older generation of experts does not fully understand the full power of the Internet and its associated tools.

And we, too, have much to learn. As IAs, we often preach the value of our work by citing the self-service opportunities we can create. Yet far too few of us have actually examined the foundations of customer service.

WHAT IS "CUSTOMER SERVICE"?

The concept of "customer service" has been kicking around for over a century. More recently, we've seen it morph into "Customer Relationship Management." Basically, we're talking about the design and execution of a system of activities -- people, processes, and technology -- that ultimately build brand, revenues, and customer satisfaction.

A particularly useful definitions of customer service comes from *Introduction to e-commerce* by Turban and King (Prentice Hall, 2002): "Customer service is a serious of activities designed to enhance the level of customer satisfaction – the feeling that a product or service has met expectations." This can occur at any of the 15 or so established "brand touchpoints." Some experts, such as former SAS CEO Jan Carlzon, call these touchpoints "moments of truth" – times where satisfaction is put to the test.

"Met expectations" is the key phrase in the Turban and King definition. It suggests that not meeting expectations leads to dissatisfaction and exceeding expectations leads to a heightened degree of satisfaction. There is also a correlation between customer satisfaction and brand/product loyalty, although, loyalty first increases significantly when the satisfaction level exceeds 90%. This often comes as a surprise to companies who complacently bask in the false security of a 80% satisfaction rating only to find that their customer base exhibits far more churn than they would like.

SERVICE VS. USER EXPERIENCE

For many information architects and user-experience designers, "service" is sometimes acknowledge but ignored. Part of the problem appears to stem from a misunderstanding that "service" is not identical to "user experience." This is because while service is 100% about UX, UX is much more than merely service – although service remains a central element.

WHY SERVICES ARE HARDER TO MANAGE THAN PRODUCTS

According to Albrecht and Zemke (*Service America*, Dow Jones Irwin, 1985), there are 10 key reasons why "services" pose problems for companies who think of their service as a product:

1. A service is first "produced" at the moment of delivery.
2. It cannot be centrally produced, inspected, or warehoused.
3. The "product" cannot be demonstrated. You cannot send a sample.
4. There is nothing tangible. The experience represents the value.
5. The experience cannot be sold or passed on.
6. If the service sucks, it cannot be recalled.
7. Quality assurance need to happen before production.
8. Delivery requires some interaction between the buyer and seller.
9. Expectations are directly related to the degree of satisfaction.
10. The more people the customer must encounter during the delivery of the service, the less likely it is that he or she will be satisfied.

THREE BASIC TYPES OF SERVICE

The fundamental services include:

- Help me services (Scotty, beam me up)
- Enhancement services (Here's milk to go with your cookies)
- Fix it services (My doggone printer just ate my homework)

I shorten these three categories to the acronym HEF. Some are online, some are offline; often they are converged systems that address both areas. Let's examine these one by one.

"HELP ME" SERVICES

These are basic services that help people do something or understand something. Sometimes, they are as simple as a short help text. Other times, they are more complicated, such as the arrangement of a shopping cart. What people won't tell you directly is that they would like your help service to stroke their ego, make them feel wanted, and make their lives easier.

"ENHANCEMENT" SERVICES

Here, we're dealing with providing people with a happy surprise, an unexpected benefit, a better experience. Often, good contextual navigation plays a key role in creating these enhancements. Extra services, such as a how-to video also fall into this category, even though one could argue that this could be a "help me" device.

"FIX-IT" SERVICES

Perhaps these are the most straight-forward of all of the services. People want the service provider to sort out their problem in a speedy and efficient manner. They want us to keep things simple, not to waste their time, and keep them out of trouble.

FIVE CAVEATS

1. *We don't always understand the true pain points.* For example, for British Airways, flying on time was considered by customers to be a given, not a service. But the ability of front-line personnel to make decisions without having to check with a supervisor was considered a major service improvement.
2. *Beware of the easily measurable metrics.* Again, British Airways thought that flying on time was a good way to measure the quality of the airline. It is certainly one metric (lost baggage is

another). But as studies with passengers showed, this was not considered a customer-service metric.

3. *Make sure you're adding real value.* Customer service is a system, including three key elements: people, technology, and processes. Any single element taken out of context can actually decrease the value of a service if it disrupts another element.
4. *Encourage feedback.* Give your customers an easy way to contact you with comments and suggestions. A complaint is a gift. Accept it with gratitude.
5. *Fix everything two ways.* You buy a rotten vegetable at your local grocery store, which they replace. That's fixing things one way. If they examine the box your vegetable came from and remove more rotten produce, they fix the root of the problem. That's fixing things two ways.

10 THINGS CUSTOMERS WILL TELL YOU

My own research shows that when customers are irritated, their complaints invariably fall into one of 10 groups. Here they are:

- Don't tell me how great you are. BE great!
- Go the extra mile.
- Don't get in my way when I'm trying to shop.
- If I know what I'm looking for, help me find it.
- If I have questions, I want straight answers, not a salestalk.
- Tell me if you're going off to look for my size. Don't just turn and leave.
- If you expect me to buy something, tell me what it costs
- Are your own affairs so important that you feel justified in ignoring me?
- Don't make me feel stupid.
- If you make a mistake, admit it.

Keep these in mind the next time you design a site! Amazingly, these comments are as relevant online as they are offline. Remember, too, if we do not demand good service, we will never receive it. Don't just prevent bad things from happening, you can make wonderful things happen.

CONTENT ANALYSIS. THE HOWS AND WHYS TO UNDERSTANDING YOUR CONTENT

Fri 26
14:30-15:15
CINEMA

Chiara Fox, United States

Chiara Fox is a senior information architect for Adaptive Path. Chiara has crafted successful information architectures and user experiences for intranets, informational websites, and e-commerce sites. She's worked with a wide variety of companies, like Fortune 100 and 500 companies PeopleSoft, and AT&T, as well as organizations in a variety of industries including Business Objects, Target, L.L. Bean, Hewlett-Packard, Second Life, Citysearch and UCSF Medical Center. Because of her background as a librarian, Chiara specializes in content analysis, metadata and taxonomy development, and building architectures from the bottom up.

Content analysis is the process of assessing the nature of content on a given website or web application. It's about figuring out the patterns and relationships that exist between the content items that make up your site. It's a methodology used by information architects and experience designers to inform their bottom-up information architecture designs.

Content analysis is about looking for patterns. Patterns help you figure out what types of organizational schemes are needed or would be appropriate for your content. For example, you might discover that

there are certain genres or types of content that belong together; perhaps all press releases should go in one area. There might be security requirements; this content is for logged-in users only and this content is for the public. The content may be specialized for a certain audience; this content is for customers and this is for partners. There may be physical formats that belong together; all videos go in one section. Or it may just be a feeling in the pit of your stomach that says these content items belong together.

Relationships between content items also give you clues to how it might be organized. Common relationships include hierarchical relationships, such as parent and child. This is often seen when general documents point to more specific or detailed documents. There might be dependencies, such as sequences or procedures. On a support site, it might be important that specific steps are followed when applying a patch or a fix. You'll want to organize things in a way to honor these relationships and make them clear.

Content analysis is done when you need to better understand what you have on your site. Many sites have "grown organically" over the years. This is a polite way of saying they have gotten out of control and are such a mess it's hard to find anything. Performing a content analysis is a way for you to look into the forgotten and dusty corners to see just what it is that you have on your site. You might be surprised at the amount of cruft that has accumulated over the years, especially if you run an intranet.

It's a good idea to do a content analysis at the beginning of a site redesign project, or anytime you are thinking of redoing the information architecture or global navigation. Doing a content analysis is also a good idea when implementing a new content management system (CMS) or installing a new platform. Content analysis is also needed when doing a task analysis of your users' mental model of the site. Basically, anytime you need to know what you have to work with so you can do something with it is the right time to do a content analysis.

The content analysis process is made up of three activities: the content inventory, the content audit, and the content map. While similar, each process is tailored to a different situation and results in a different set of deliverables. Which process you should follow depends upon the outcome that is needed to support your larger project and goals.

The content inventory is a meticulous accounting of every item you have on your site. Content inventories are most effective when used during a content migration. They help you keep track of the status of items as they are updated and moved from one system to the other. That way you are sure that nothing gets forgotten or falls through the cracks. You can also use it as a tool to estimate how long migration will take and how much staff will be required. It becomes a common game plan, so everyone on the team can clearly see what direction the content is headed in.

Because they are so detailed, content inventories are labor intensive and have a short shelf life. Websites change all the time, so the information in a content inventory is only accurate for a short period of time. But that doesn't mean they aren't worth doing. There is no better way to know the ins and outs of your site than clicking through it page by page.

The content inventory involves recording each page, asset or item on the site. It gives you a chance to review the items to determine if anything is ROT (redundant, outdated or trivial) and should be removed or updated as part of the migration process.

The content audit differs from the content inventory, in that it is a sampling of content. It is the Noah's Ark approach to content analysis. Rather than striving to look at every piece of content, the content audit looks at a few examples of each kind of item. To put it another way, when auditing you are not concerned with how many press releases there are on the site, but just the fact that there are press releases and what attributes they have. What is important is that you identify all the different types of content you will have to accommodate in your design.

Conducting the content audit is not nearly as time consuming as doing a content inventory, but it still takes time. It usually takes about one minute to gather the item and two minutes for the analysis. If you have a very large site, that will add up. It doesn't take a lot of documents to get a feel for the patterns and relationships on the site. A sample as small as 3.5% of the site is all that it takes. Don't worry if it takes you longer at first. You will get faster as you go along and the more you do this.

Begin by gathering the content sample from the site that you are going to examine. The easiest way to do this is to "walk" the site, collecting appropriate pages as you go. You can think of this as if you were picking apples. You are going to look at more apples than you put in your basket, since you only want to pick the best and most ripe ones. The same is true with the content items; you only want to collect the most representative items.

There are some things to keep in mind that will help you get a representative sample:

- Sample rare and common items. You want items that are unique (there are only a few documents like this in the system) as well as documents that are ubiquitous (there are hundreds of documents like this in system).
- Samples from sections don't have to be equal. If all content in an area is similar (e.g., each product description page has the same elements), fewer samples of that area are needed.
- Identify as large a cross section of content as possible. It’s better to have one of everything than 10 of some document types and none of others.
- Don’t overlook content sources. It doesn't matter how the content is served, whether it is text-based, static content, dynamically generated content, or applications or tools.

There are some pages that you are definitely going to want to include in your sample. The home page, global navigation section pages, and subsection navigational pages are good places to start. They will give you a feel for the breadth of the site. From there, you want to be sure that you click your way to the bottom-most page in the hierarchy, collecting interesting pages you see along the way. Work your way up and down a section a few times to make sure that you captured examples of all the different types of pages. Be sure to include supplemental navigation items, such as a site map or site index. Tools such as search and a shopping cart should also be recorded.

The content map is a visualization of what is in the audit spreadsheet. Not everyone on the project team needs to interact with the spreadsheet. For executives and project sponsors, the content map provides the right level of detail without being overwhelming. It allows you to pull back and see the larger picture. It is possible to do a content map without doing a spreadsheet. However, you may find that completing an audit spreadsheet will make it easier to build the content map because it focuses your thinking and makes it easier to keep track of what you have seen.

The content map is an abstraction and distillation. The map is just a graphic showing the different types of content genres on the site. There is not a one-for-one match between the spreadsheet and the map. You may have a number of press releases in your audit spreadsheet, but they would only show up once in the content map as "press releases." You are generalizing the pages by identifying the content types, objects or genres that they belong to. What level of granularity to create your map at is the biggest challenge, and each map is slightly different. It's better to start out with more types and consolidate them as you go than to have holes you need to fill in later.

What is a content type or genre? In the non-digital world, we have physical clues to help us figure out what things are. We know by the shape, type of paper it's printed on, and colors used that a map is different from a newspaper, even if we don't speak the language it is written in. Different resources have different purposes. You wouldn't look to the newspaper to tell you which hotel to stay in, but you would use it to figure out what was going on at a local nightclub.

In the digital world, those same types of genres of resources exist; we just don't have decades and centuries of use to fall back on. They are still evolving and changing. We have to be more explicit about them so people know what to expect. Luckily, there are some genres that have matured enough that people have built-in expectations around them. Phrases like press releases, product overviews, contact information, case studies and shopping carts call to mind certain characteristics and expectations of use.

The level of granularity of your content map depends upon the nature of the content on the site. On one site it may be important to distinguish between similar items, such as calling out each department of a university separately, e.g., "art department overview," "history department overview." On another site, simply having a box for "department overview" may be enough. If the proposed genres are used differently, then you want to make them separate. It's always easier to start out with more things, such as the individual department names, and collapse them down if you find that you don't need that level of detail. You should aim to have approximately 100-150 items in your finished map. Less than that and you probably haven't been detailed enough while more than that means you are being too granular.

The content map can be used in a variety of ways. You may use it as a communication tool, to explain to executives and others not involved with the project. It can be used in the task analysis process to map content to users' tasks and goals. It can be used for redesigning the architecture of a site, taking each box and finding a new "home" for it, so you are sure that all content is accounted for. It's important to note that these uses are not mutually exclusive. You may use your map in multiple ways, so always be sure to keep a master copy in case you need to tweak it for a specific purpose.

Whether you chose to conduct a content inventory, audit or to create a content map, you will end up with a deep understanding of the content on your site. You will have deliverables you can reference throughout your project and sometimes beyond. You will have insights into the patterns and relationships inherent within your content. These insights will directly impact your redesign or information architecture work.

Fri 26
15:30-16:00
THEATER

CAMPUS 5.0
THE EXPERIENCE OF REDESIGNING THE UOC VIRTUAL CAMPUS

Eva Patrícia Gil-Rodríguez, Spain

Eva Gil is a Doctor in Social Psychology, professional with more than 5 years of experience in the HCI field with an emphasis on contextual centred design. She is the lead researcher in user experience in a Universitat Oberta de Catalunya. She's also an active member of UPA, and is the co-founder of its Spanish Chapter.

In this text we will explain the practical case of the redesign of the Open University of Catalonia's (UOC) virtual campus. The UOC is an entirely virtual university. Our explanation will focus of the first level of the menu and the home page as key points in the Information Architecture. We will explain the solutions created for specific problems considered in the redesign, and the processes that gave rise to those solutions.

The theoretical framework for this work is to be found in the fields of social psychology, learning in general and e-learning in particular, and in our expertise in virtual learning environments and User Centred Design.

INTRODUCTION

In mid-2007, following a long period of gathering and analysing requirements, one of the most ambitious projects to take place in recent years at the UOC was set in motion: the redesign of its virtual campus. This work began with changing the general IA, including the home page, the navigation and some of the principal applications in the environment, such as the classrooms or the webmail.

One of the most important values to consolidate in a virtual learning environment is the sense of community. This concept is to be principally understood from the point of view of communication and relationships between the members of the group (which, beyond the simple act of communication must also be understood in terms of creating knowledge). Secondly, it must be understood from the more general perspective of belonging, shared values, etc.

Until now, the UOC campus had a section in the menu dedicated to this issue, through which you could access different communication tools, of more or less formal character, such as online forums or chats. Although that responded to one of the principal requirements for creating community, that is allowing communication among the community members, it was very limited. The goal was to break with that classic formula and instead of focussing the efforts on a single point, distribute them throughout the campus so that every part of the IA strengthens the idea of community.

The bibliography on the topic stresses the importance of a “common purpose”, “common needs”, "collective milestones", “common interest” in creating community. Our analysis of the behaviour of users in the campus and the way they interact with each other confirms this. In fact, we found examples of the same on many of the most popular social websites currently online.

NAVIGATION

Looking at the menu, one of the goals was to make each of the sections a point of interest in itself: a focus capable of joining the greatest number of people interested in the topic, and, at the same time, to give those people the necessary tools to carry out the process of creating community, basically communication and visibility tools.

The next problem we considered when defining the menu was that of the profiles, and more specifically the multiplicity of profiles a single user may have.

In a virtual learning environment, as in a brick and mortar university, there are a variety of actors with different and well defined roles that in our campus we call profiles. The most spread profiles (due to the number of users making up that group or their importance within the educational process) are: student; consultant (in charge of the virtual classroom); professor (in charge of the course and the consultants that teach it); tutor (gives transversal support to the student throughout all their studies); and admin personnel (the university staff).

However, this scheme is not fixed and immobile. A consultant, for example, in charge of an International Law classroom, may at the same time be studying for the official Masters in Education and ITCs, and working as a secretary at the UOC. That is to say, a single user can have multiple profiles. When the consultant in our example accesses the campus, she does it with the profile she was using when she last logged out and will only see the information corresponding to that profile. If the consultant wants to enter her Masters classroom she will have to change profile: from consultant to student. The initial idea was to break with that multiplicity of users. However, the implications of that required more in depth analysis; both from a technical and user level. It was therefore decided, in the end, to look for a solution that maintains the difference between the profiles and represents the minimum possible impact on the mental structure the user makes of the site and the different roles he or she develops there.

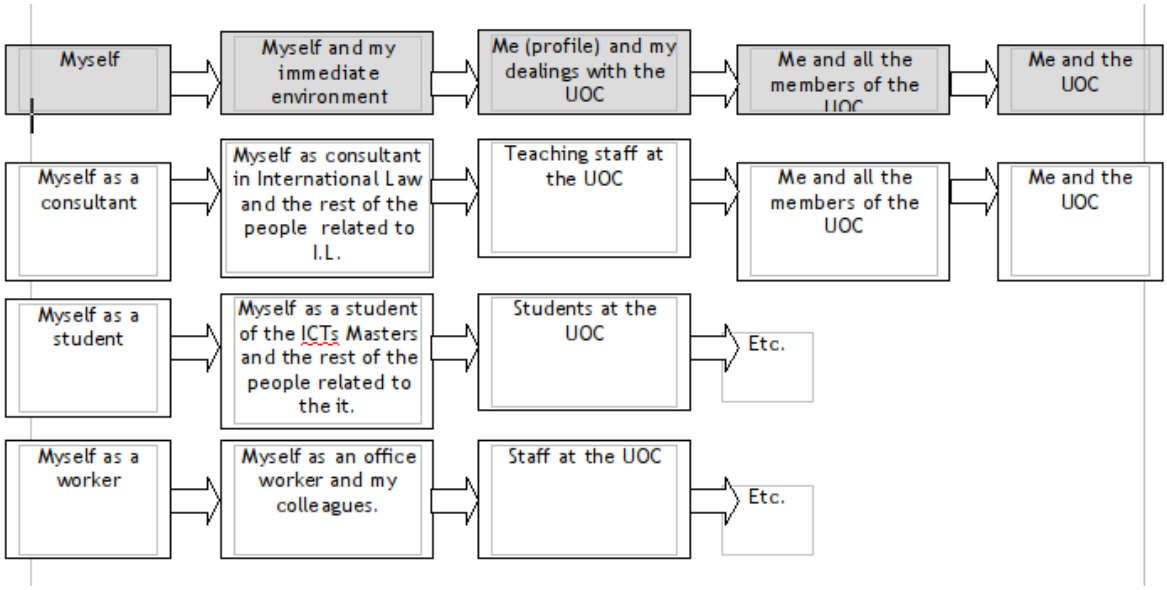
We therefore needed a menu that on the one hand created a sufficiently attractive focus of interest that the user wants to navigate, and at the same time be flexible enough that on changing profile it does not lose its meaning.

To a certain extent the solution was provided by the users themselves. Through a variety of UCD techniques it was made evident that the users divide the content according to how frequently they use it and the level of relationship they have with it, from close to distant. So, a student would make the

following distinction: the daily tasks I have to carry out within the UOC, the studies I am undertaking on a more general level, the institutional tools I need, the tools for communication with the rest of the members of the UOC and, finally, the University as an institution.

Starting from that basis, the initial concept, which responded to the criteria of organisation according to campus content, was transformed into one based more on social criteria. That is to say that the focus shifted from the relationship between the user and the content to the relationship between the user and the rest of the members of the community with which they will interact in each section. Thus we pass gradually from the more specific to the more general, from the more personal to the more social: from the individual to the group.

In the case of the example of the consultant/student/UOC worker it would be represented as the following:



With this solution we were addressing the two challenges we had set ourselves: on the one hand we were creating a focus of interest and relating it to the people involved, and on the other hand we solved the problem of the different profiles, as while the content shown in each section would be different, it is to be found within the same level on the individual-group relational scale.

In the final section, that represents the University as an institution, the sense of belonging to a community is created not so much by communication as by raising awareness of the values of the UOC, its repercussions in the outside world, its reputation, spreading information... through elements such as research, institutional news, the advantages of being part of the UOC and, in general, the kind of content that, ultimately, reinforces the sense of pride at belonging to the UOC community.

THE HOME PAGE

We wanted to give the home page special meaning. We started with a very clear idea: the home page must be personalizable, that is to say, the user must be able to chose the content and adapt it to their preferences.

The chosen name for this section was particularly meaningful: “My UOC”. On the one hand that title incorporated the idea of personalization, of making the content offered by the UOC *mine.* On the other hand we managed to make the first page belong to the person. Finally, we return once again to the idea of community: I belong to the UOC and the UOC belongs to me. In the sense, the “I” of the home page,

as social psychology explains, cannot be separated from the social component, in this case of the community.

With this new design, the first time a user enters the UOC, once logged in, she / he will access a page defined according to her / his profile, which will display the most important elements for that user in the form of modules that can be moved and distributed on the page, minimized, hidden etc. The ordering of those modules within the page again reproduces the relational scheme of the menu: from the closest to the most distant. Furthermore, the elements of the IA that are displayed on the first level within this page once again respond to the double importance of the information: firstly, their visibility is important for the users daily tasks and their communication with the members of the different groups they belong to, and secondly, it is strategic for the institution in order to reinforce the collective identity.

FINALLY

The initial reactions from users to the work we have done has been very positive. The final adjustments to all this work will take place in September and new studies will be started in order to evaluate the real impact of the changes.

The Campus 5.0 project was born with the intention of having a continuity. The underlying philosophy is the constant improvement of the UOC virtual campus, involving the users in all stages of its development.

HOW TO REDESIGN A BUSINESS CRITICAL WEB APPLICATION WITH BILLIONS OF UNIQUE PRODUCTS?

Fri 26
15:30-16:00
CINEMA

Floris Ketel, The Netherlands

Floris Ketel works for an online full service internet company called Mirabeau and is based in the Netherlands. He was responsible for the creative department for 3 years and worked for several different clients like KLM, Vodafone, ABN AMRO, etc. Now working as a Creative Director for Mirabeau he is responsible for the quality and creativity of all creative work form Mirabeau. Floris has a Master degree in Interaction Design from the Utrecht School of the Arts.

A billion of unique products, it sounds a lot but is in fact only one product, the airline ticket. It can recreate itself every second by changing its price and availability. Have you ever tried to book a flight that had a consistent price over time? One day a ticket is € 500,- the next day the same ticket changed to € 750,- and you don't know why. That is why it is so important in being transparent in offering the best price for the best ticket to the customer.

THE PROJECT

For KLM the Electronic Booking Engine (EBT) is the core of their online - and e-commerce activities. The percentage of tickets sold online is still small but rapidly climbing. KLM has the ambition to grow from 15% to 40% in online sales vs offline in the forthcoming years. The redesign of EBT has a mayor role in fulfilling this ambition. The previous redesigns where modifications based on new insights and technological capabilities.

With the 7th version of EBT, KLM decided to not only redesign the user experience but also built the whole application within new technology. This gave KLM the possibility to redesign the booking tool from the ground up and made it in this way one of the largest redesigns in the history of all previous versions. With the redesign of the 7th version of EBT there were three main drivers:

- New technology (new inventory- and pricings engine)
- Business & sales (new impulse to sales growth)
- User experience (customer feedback)

Three parties also represented these three drivers within the project team. Each and every one responsible for their own expertise:

- KLM represented the business
- Accenture represented the technical capabilities
- Mirabeau represented the user and user experience

The growth in selling tickets online and the sheer volumes of sold tickets makes E-commerce activities for KLM more business strategic than ever before. When E-commerce becomes more business strategic for an airliner like KLM, than the stakes are high and the risks in changing and redesigning applications have to be done with utmost precaution.

In this matter the user experience has a predominant role in the selection process of the traveler. Within the whole user experience the user must feel that he/she gets an appropriate offer within EBT (business), but also that he/she can order 24 hours a day (Technology) and as well find the right product through an interface (User Experience) that is easy to use, helps in during the selection process and gives the trust when buying the product.

Most travelers go to airline websites to order tickets and they know exactly where they want to go and at what time period they will travel. This makes selling ancillary products like hotels and cars a challenge. Most travelers perceive KLM and other airlines as a company that sells tickets for transportation. The ambition is to become more and more a travel company that helps to get travelers not only from a to b but also offer products during their stay on their destination.

The core had to be selling a ticket and secondarily offer the user products that are needed or additional to their travel or stay. The design challenge for EBT-7 was in this way: changing from an online ticket machine to an online travel shop. This meant that the fundament of EBT became an E-Commerce shop with a checkout cart and a shopping mechanism that not only offers ticket but also extra travel products.

THE USER INVOLVEMENT

During the redesign and development of the new EBT-7 these previously mentioned three parties worked in one room on the same project. As Mirabeau was responsible for the User Experience which consisted of the following activities:

- Creative concept development
- Visual design
- Information architecture
- Front-end development
- Usability research and validation

This was done on an iterative basis (*see also Figure 1*) were the input from the user had a crucial role. Consulting the user on a regular basis was needed and was organized by Mirabeau during the whole design process. Mirabeau did not conduct the usability tests but acted as a program manager for all usability research.

This was done mainly because Mirabeau has a standpoint in not conducting own research and advice on own created material and deliverables.

The whole project was for a large part relied on User Involvement. By performing usability tests and conducting interviews with users we validated the choices being made during the design and development phases.

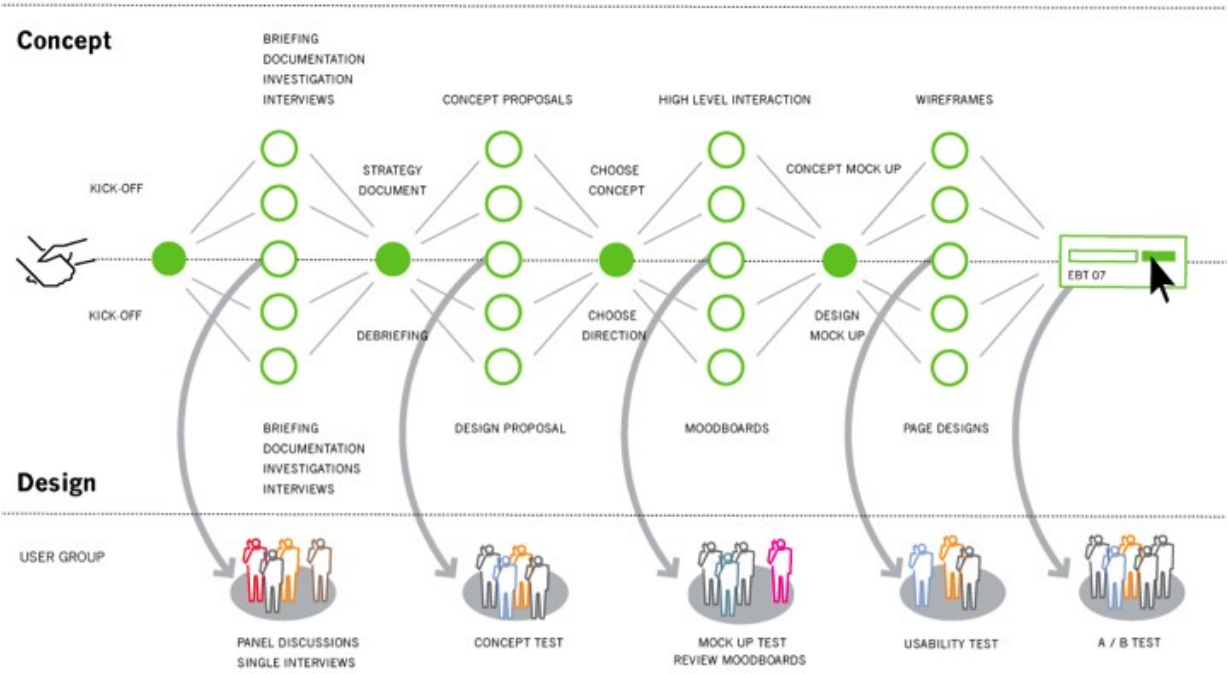


Figure 1

In order to validate the new user experience the following tests were conducted:

- Customer value propositions test (Qualitive test)
- Co-creation test (Qualitive test)
- Mock-up test (Qualitive test)
- Prototype test (Quantitive test)
- Expert reviews (Qualitive test)
- Usability test (Qualitive test)
- Beta test (Quantative test)

The outcome of every test was evaluated and implemented within the next iteration of the process. The tests were not only done based on interaction designs, but also first drafts of several propositions were tested in the early stages of the redesigns. These propositions represented a draft of what KLM was going to offer to the user (descriptive functionalities). This gave the team in a really early stage a feeling what proposition and functionalities where needed for a successful new EBT-7. The amount of ticket variations gives information architecture challenges in how to represent tickets on the screen. Offering the right ticket to the user where price and date are parameters that user want to influence gives users a broad range off possibilities that not always helps in the selection process. Also the parameters for selecting the right ticket vary per user. Where a business traveler would like to select a ticket by date, a leisure traveler is more price-minded. At first we started to develop personas for each segment (business and Leisure).

These personas were used during every phase and iteration for the concept and information architecture phases of the project. Not only the design process was primarily based with these two personas, but also every user involvement test had people selected based on the characteristics of these two personas.

Fri 26
16:00-16:30
THEATER

BUILDING SOCIAL WEB EXPERIENCE

Laurent Goffin, Belgium

Laurent Goffin is Strategy & User Experience director at Emakina interactive agency in Brussels, Belgium where he manage of a team of 20 experts in user experience design, Information Architecture & web strategy. He is working since 12 years in digital experience conception and has been practicing usability and information architecture since 1998. He worked on some of the biggest Belgian customer in almost all sectors & markets including Audi, Volkswagen, Porsche, Fortis, Proximus, Belgacom, Electrabel, Total , Brussel Airlines, Thalys, Dexia, etc.. He is currently helping many companies planning and redesigning their User Experience. He likes to push companies to take all potentialities of social media and web2.0 and has already developed 5 social web initiatives He is passionate about 2 things: web & cooking. In order to mix both, he initiated a cooking website and a web2.0 food community for all frenches speaking bloggers. You can follow his blog on http://www.gwix.net.

What are the key elements to take in account when an information architect works on a social web/network project? Social networks are not just a web2.0 geek tool and it's not just a trend, it will last!

"People have been interacting with other people for much longer than the internet has been around, so give them the tools, and set them free" - Rolf Skyberg

Why would it be different on the web? More, a social network can be used in many different contexts: intranet employee social network, customer & supplier network, communities, customer care initiative, knowledge management tools, etc. Information architects can meet this kind of project and must be prepared. All profession must evolve to be able delivering social web experience. Even if we won't work on social network, we have often to embed more and more social web behaviours in most of the site. Here is a list of findings, observations and new skills an information architect should embrace in order to develop a social network. Those finding are based on designing 5 European level social networks or social minded website.

BUILDING SOCIAL WEB EXPERIENCE REQUIRE TIME AND A ROADMAP

More than any kind of website, building social web experience is not a "design & launch website" process. Real things start when the website goes live. Thus, it's essential to know

- It's better to go live as soon as possible and avoid too much pre launch evaluation.
- Be focused on each step during the different phases of the social web experience creation. Ex. : focus on acquisition when you don't have enough members
- Be agile
- Different phases are : social website building, teasing, launch, member acquisition, social behaviours creation, loosing control.

BUILDING SOCIAL WEB EXPERIENCE REQUIRES MEMBERS: ACQUISITION FIRST!

Social web experience requires members!!! Focus first on member acquisition because a social website without members is just worth nothing. Acquiring members is more important than being highly usable during early stage of social network! Interface elements, information architecture and all efforts must be focused in acquiring new members. Thus we'll need:

- Generating traffic, being visible in search engine and using the natural "virality" of a social based system
- Displaying and communicating clearly the value of joining this social system. Value can be different for each user and value evolves within the social website lifecycle. Amount of user or social homogeneity are also clear value

- Creating a very efficient conversion system : clear value, clear answers, clear call to action and very usable registration process
- delivering a global experience and using offline socializing moments to propose our digital social experience

BUILDING SOCIAL WEB EXPERIENCE IS NEURONAL INFORMATION ARCHITECTURE

We have to see a social website as a faceted neuronal architecture where each individual is content. Developing such architecture requires:

- a deep understanding of folksonomies
- an ability to create faceted information architecture and multiple system of navigation
- Understanding RSS, search engine will increase direct access and deep linking. User can enter in the system from any points.
- Architecture will evolve with the social activity, connections, User Generated content and amount of user always increasing.

BUILDING SOCIAL EXPERIENCE HAS SOME KEY BEHAVIOURS AND TYPE OF USER

Social web experience generates some kind of generic kind of user profiles: the connector, the star, the opinion leader, the curator and the addict. Each profile has some key characteristics and each one can be measured by some social KPI's and web analytics. Those profiles create some kind of social ecosystem and we need to propose some different UI and functionalities to each profile in order to maximize usage of their social potential.

BUILDING SOCIAL EXPERIENCE REQUIRES CONNECTING PEOPLE

There are many different ways to connect people. Once you have member on your social web, you need to put fire to this to create the value of social experience. Delivering a value for each kind of user with a social web experience is based on few profiles and little behaviour we need user to develop though different functionalities. We have to find for each social web the right mix of functionalities based on sharing, developing content, bookmarking, tagging, etc.

BUILDING SOCIAL WEB EXPERIENCE NEEDS UI IN PERMANENT EVOLUTION

Social network user interface must evolve social network's maturity and user behaviour / personas. User interface evolve in different stages: members acquisition, connexion creation, content creation, profile completion, etc… At each stage, UI will focus more on certain kind of functionalities in order to develop some kind of behaviours. Interface must also evolve according each user profile. A very popular user needs an interface showing how much popular he is while a connector person always try to find new person to connect with.

BUILD MORE THAN A SITE, BUILD A USER EXPERIENCE

Information architect must think further than a website's structure interface. Social network must be a part of the social web ecosystem, must be findable, can be used in different context and should be hackable and mashable. Last, we must consider much more than the web. Social network is part of life, depends of mobile experience, meet up, conference … experience architecture must take all in account!

CONCLUSIONS

"Building social web/network experience" requires IA's to evolve. Creating such experiences requires mixing lot of expertises. We all can turn our user cantered mind into a social centered mind only aiming creating social media value. IA's can be an important actor in this game but we need opening ourselves to many other disciplines such as web analytics & business intelligence, marketing and communication skills, persuasive interface technique, entrepreneurship, etc.

Fri 26
16:00-16:30
CINEMA

GETTING THE RIGHT TICKET BEFORE THE TRAIN LEAVES
THE CHALLENGES OF USER-CENTERED DESIGN FOR THE SWISS FEDERAL RAILWAYS (SBB)

Jacqueline Badran & Andrea Rosenbusch, Switzerland

Jacqueline is a biologist (neurobiology and ethology, dipl.phil.II University of Zurich) and political scientist (lic.rer.publ.HSG University of St. Gallen). In 2000, she co-founded Zeix AG, the Agency for Usability and User Education, and is now its CEO and responsible for the development of methods, social research, quality mangement, legals, finance, and strategic partnerships. Jacqueline has a large range of experience with User-Centered Design projects, from telecommunications to the public sector, from banks to industry.Jacqueline is member of the board of «Access for All», a Swiss foundation promoting accessible web sites, and a representative in the council of the city of Zurich.

Andrea was trained as an historian (lic.phil.I University of Zurich) and worked for several years as a project manager for the Swiss Federal Archives in the area of archival information systems, digital archiving, and exhibitions. In 2004, she joined Zeix, where she is a senior consultant specializing in information architecture of complex web sites and applications for e-government, public transport, economics, and others. Andrea blogs at informationaccess.ch.

Public transport is highly developed in Switzerland. The geographically segmented market has lead to a complex system of tickets and prices for regional, national and international tickets. During the last two years, Zeix developed three applications for purchasing tickets for the Swiss Federal Railways (SBB) with the method of user-centered design. The three applications consisted of

- a touch screen application for end-users for regional and national tickets (redesign and upgrade of ca 1000 vending machines with touch screens in railway stations).
- an rich client application for the sale of international tickets by the SBB's clerks
- a web-interface for end-users for international tickets. This was an adaptation of the professional application for the web, using the same back-end system.

The issues treated in the three projects were manifold. In this paper, we will point out the main challenges for making the applications user-friendly, and mention some aspects of design and feasiblity.

BUYING THE TICKET BEFORE THE TRAIN LEAVES – IMPORTANCE OF SPEED

Most train connections in Switzerland are available on an hourly basis or more frequently. Buying a ticket is something often done at the last moment, and a fast process is crucial. The SBB have been using touch screen vending machines at stations for many years, and they have become very fast over time. The vending machines are highly efficient for regular users who are accustomed to the machines and know which ticket they need. However, the SBB aim to increase the ratio of self service at the stations from 60 to 80 percent and to reduce manned sales points. This means that more people need to use the machines – also those who would prefer not to, e.g. elderly people. It also means that the vending machines have to sell a larger range of products and that more information about these products has to be available. All of these factors produce an increase of difficulties in the decision process and loss of speed.

GETTING THE RIGHT TICKET – IMPORTANCE OF ITINERARIES AND PRODUCTS

Getting the right ticket is even more important than purchasing the ticket before the train leaves. The main obstacles users – regular users of public transportation in Switzerland – encounter when buying a ticket in the self-service mode consist of the following:

- Itinerary: The best connection cannot be expressed in absolute terms. «Best» can signify
  - the train leaving next (not necessarily the fastest one)

- the fastest trip (not necessarily the best train)
- the most comfortable connection (e.g. not having to change trains)
- the closesest (and therefore) route
- the one with most beautiful landscape, etc.
- In order to make an informed decision on the itinerary when options are available, the traveller
- needs a timetable and possibly some knowledge of Swiss geography.

- Transportation systems: Larger agglomerations have integrated regional transportation systems with their own pricing systems. Even regular users of public transport in Switzerland have difficulties understanding the regional vs national pricing systems and seldom have a clear understanding of the borders of the regional transportation systems. These borders are purely geographical and have no influence whatsoeveron the trip; itineraries, carriers and vehicles are identical. Example: If you buy a train ticket from Zurich to nearby Dietikon, the fare conditions are different from taking the same train and getting off one stop later.
- Products: Almost needless to say, every transportation system has its own products. National products can – but must not necessarily – be valid on regional transport (and vice versa).
- International travel: Every country has its own pricing systems, products and discounts. When taking the train from Zurich to Amsterdam, you can choose which countries to pass through (Germany or France and Belgium) and multiply the effects described above.

USER-CENTERED DESIGN

Train buffs and SBB clerks take a lot of pleasure finding out the best itineraries, dates and products for getting from A to B. Most users don't. This is where user-centered development comes into play. Our goal was to make the decision process as straightforward as possible and appropriate for the target groups. The different premises of regular users of public transportation on the one hand and the clerks on the other hand were taken into account during the design process, and the applications were tested with the appropriate users. By building testable prototypes and conducting usability tests and interviews with participants from the target groups, we identified critical obstacles in the processes and made changes to the applications before any technical implementation had begun.

The main challenge of the touch screen vending machine project was to optimize the process of selecting the known attributes of a ticket (e.g. one way or return) while giving the user the right amount of information to make the more difficult decisions about the product to buy. Because of the restraints of the touch screen interface (limited space and scarcity of navigation elements), the focus lay on showing users appropriate alternatives to the user, e.g. a supplement for local public transportation in the city the user was travelling to. Another important issue was to optimize the user interface for people with visual impairments using appropriate fonts, size, colors, and contrasts.

In the web and professional applications for international train travel, there was more room for adaptation. The starting point of these two projects was a major re-engineering of the back-end systems for the sale of international tickets. The development of the user interface was made at a stage when it could still influence the design of the back-end systems. While the application for the clerks did not require much change of traditional processes, the order of steps in the booking process proved strange to ordinary users and was substituted for a more common process. This, in change, required major changes on the technical side.

The optimization of the interface for clerks consisted of designing screens clearly displaying large amounts of information. There was not much need for contextual information which clerks either know or have routines to look up. However, the application had to offer a large amount of shortcuts and

alternative paths which cater to different needs and levels of experience of the clerks. Last but not least, clerks are trained to use their PC without a mouse, making it necessary for all functions to be able to be controlled from the keyboard. The web-interface to the same back-end application as the clerks use looks entirely different, and, as mentioned above, it is different to the extent that the order of the steps in the booking process was changed. The amount of information delivered to the end user was partly reduced in favor of quotes which can be clearly explained and are distinguishable from each other. What was not necessary in the clerks' professional application and not possible for the vending machines at the stations could finally be solved for the web: The products and processes which were never designed for self-service by end users were adapted in a way that they resembled concepts users had in mind from similar booking processes.

IMPLEMENTATION

All three projects are now more or less implemented. This process was a difficult one, as technical difficulties – from poorly documented legacy systems to a vast array of complex peripheral systems had to be solved. From the user's point of view, it was rather sobering that many improvements could not be implemented due to technical problems and deadlines. But the projects also showed that good information architecture helps motivate the project team in their plight, and the visualizations of screens even convinced a steering committee on the verge of discontinuing one of the projects to give it another chance. Have a look at the applications:

About the touch screen application:
http://mct.sbb.ch/mct/en/reisemarkt/services/bahnhofsinfo/billettautomat.htm
Demo version: http://mct.sbb.ch/mct/en/reisen-bats.htm
Online booking of international railway tickets for end users – works only for direct connections between Switzerland and its neighboring countries France, Germany, Austria, and Italy, e.g. Basle – Milan or Zurich – Vienna: https://www.sbb.ch/mct/wi/shop/b2c/adw.do?7731

Fri 26
17:15-18:00
THEATER

CHANGE IS INEVITABLE. WHAT SEMANTIC WEB AND WEB 3.0 MEAN FOR IA

Claudia Urschbach, United Kingdom

Claudia Urschbach has been working as Senior IA for the BBC since early 2007. She is leading the user experience team in the BBC's central content management group and has worked on an intranet redesign, metadata and personalisation strategies and knowledge share initiatives for the BBC's UX staff. Claudia got interested in IA and developing products following a user-centred design process while studying for a communications degree at Ludwig-Maximilians Universität and working as web editor. After taking on a freelance role to advice the university on usability issues she became the user experience lead in the university's internet department.

Trends in web and software development impact Information Architecture by informing what types of products we work on and defining what skills we need. For this reason looking at current trends and linking them to the IA discipline and every day working life can assist the individual IA to identify where to re-draw the outline of his/her professional remit, which area to skill up in and which best-practice to review.

Don't expect all current trends that could possibly impact IA to be highlighted in this talk. There simply are too many. I'm taking a rough snapshot of the status quo and pointing out some areas that to me seem worth flagging. It would be naïve to believe we can all agree on what an IA should focus on. Also, wouldn't it be boring if one day you meet another IA at the lunch buffet of a Euro-IA event and you would understand what this IA's every day life and deliverables look like? Do we not all

occasionally benefit from the fact that our discipline is still rather vaguely defined – which allows us in a certain project or job to state what's inside and outside our remit?

PREFACE: THE CURIOUS MIND OF THE IA PERSONA

Is there such a thing as an 'IA Persona'? Without having scientifically proved it I dare to say YES. If you call yourself an Information Architect (or something similar or UX related) you are likely to be someone who is versatile, not too scared of the unknown and happy to invent solutions and experiment with new techniques. You would usually enjoy the excitement and, in a strange way, also the pain of being progressive and working in a field less explored and described than accounting. Otherwise, you would have chosen a 'safer bet' career matching your interests and talents, if still drawn to technology then maybe as a project manager or software developer - something your mum still does not understand but at least your best friends would have an idea of.

In my observations the IA-Persona entails being a genuinely curious person, always having antennae stretched out to hear about new trends while at the same time being someone who enjoys handling details, focusing on semantics and embracing granularity. And there lies the challenge: The IA-Persona lives a stressful life. One is constantly trying to watch n spaces and is pestered by the urge to grasp all details, links and dependencies involved. Under these circumstances it would be good for the IA-Persona to consciously make decisions regarding what subjects, trends and developments to focus on and which to acknowledge but omit from the list of things to pursue. However, I personally find it a hard thing to do. It's against my nature to say 'This is interesting but I anyway don't want to find out more'. I would like to encourage myself and other IAs to overrule their instinctive behaviour in this case.

BEFORE LOOKING AT WHAT HAS CHANGED, LET'S LOOK AT WHAT HAS NOT CHANGED

Is it safe to say that most of us deliver sitemaps, wire frames, taxonomies and navigation schemas, at least occasionally? Probably yes. However, some of us don't deliver wire frames but straight away clickable prototypes. Some develop taxonomies with 50 terms in it; others enhance existing taxonomies with thousands of terms to complex ontologies. It's even hard to think of user centred design methods that IAs across the discipline would have in common. Card sorts? Possibly, though I know IAs that have not done one in a year or two. Focus groups? Maybe, but some projects have 'Human Factor Engineers' now that do that for us (whether that's a good or a bad idea is another topic). Let's drop this chapter, you get the idea.

CURRENT TRENDS TO CONSIDER

As stressed earlier, the following does not claim to be a complete list.

Personalisation – Google does it, the BBC does it and intranets do it. Personalisation seems inevitable. With users customising services & content for their individual needs there is no such thing as THE user journey, at all times there are plenty. Widgets rule. The task of designing user journeys is changing, wire framing becoming less straight forward. What's the best approach to planning & documenting for personalised products? Where are the templates? What is the best software? Let's discuss best practices.

Semantic Web Technologies – RDF, OWL, SPARQL, GRDDL, MOAT, SIOC, RESTful… When do you need to know what these abbreviations stand for? Is it enough to understand the Linked Data principles or should an IA champion certain technologies? Social Media is a highly sellable knowledge area for IAs, adding a layer of expertise around Social Media enabling technologies can only be an advantage. The Semantic Web also creates a great opportunity for IAs with a librarian background. The way it relies on unique identifiers to match vocabularies and create ontologies feels like it is 'information management come full circle'.

Mobile, interactive TV, Wii, XBox - Cross-platform & dynamic publishing as such are not new. We are though moving away from a 'Create a content model for a web site & a print product catalogue' scenario. The types of content have increased; content has become richer and is via XML, RDF or ATOM feeds regularly combined in multiple ways on multiple platforms; often mashed together by strangers outside its home domain.

Mobile being the fastest growing platform will require many more IAs with Mobile UX knowledge. Mobile is a fascinating UX field but the speed with which the Mobile world develops is truly challenging. Mobile is one of those areas where it is impossible to keep up with if you have not made it a priority.

Interactive TV has not yet hit all European countries but is likely to. Designing for a platform users navigate with a remote control is quite different from designing websites or software. To me it seems more like designing a machine. Professionals with a background in human-machine interaction design might find designing for interactive TV applications interesting.

CONCLUSION

Staying on top of all arising knowledge areas, technologies and platforms is impossible; acknowledging this and making choices vital. Though there will always be work for IAs with a general, broad skill set in the next few years, many exciting projects are likely to also ask for IAs with specialist knowledge. My prognosis is that some of us will apply to job ads looking for 'Mobile IAs', 'Ontology Specialists', 'Social Media Analysts' and 'Linked Data Developers'. Which one will you apply for?

Fri 26
17:15-18:00
CINEMA

COMMERCIAL ETHNOGRAPHY AND INNOVATING INFORMATION EXPERIENCES

James Kalbach, Germany

James Kalbach is a user experience designer with LexisNexis, a leading provider of legal and news information, where he develops interfaces for web-based search applications. He previously served as head of information architecture with Razorfish, Germany. James holds a degree in library and information science from Rutgers University, as well as a Master's degree in music theory and composition. James is an assistant editor with Boxes and Arrows, a leading online journal for user experience information (www.boxesandarrows.com). He also is on the organizing committees for the European Information Architecture conference (www.euroia.org) and the IA Konferenz in Germany (www.iakonferenz.org). James is the author of the book Designing Web Navigation (O'Reilly, August 2007).

Ethnographic research methods have many potential advantages for businesses, including helping to:

- Identify opportunities for innovation based on deep insights into user behaviour
- Discover new business opportunities, vital enhancements to existing products, and reveal potential differentiators from competitors
- Make the real world visible to design and development teams, as well as to the business.

Unfortunately, the IA community has only marginally and indirectly dealt with the subject of ethnographic research. It's essential in understanding human information experience and in innovating information services around those experiences. This presentation addressed this gap in the IA canon. The talk has two parts. First, I'd like to share a method we've developed in house for Commercial Ethnography. This includes practical details of the method based on our experiences and failures, such as setting up and resourcing projects, conducting and analyzing the research, and innovating products.

There are six phases to our approach for Commercial Ethnography: Evangelise: Ethnography methods are making strong ground in business contexts. Still, many businesses and even practitioners (including

the IA community) don't take advantage of ethnographic methods. A recent study shows that ethnographic methods are the most effective for innovation, but least used in commercial settings when compare to other design techniques [1]. Evangelising the technique is still needed and often an uphill battle. To get buy-in, you have to demonstrate the value of ethnography—perhaps with a pilot study—as well as gain stakeholder support by making sound business arguments.

- Prepare: In general, preparation for an ethnographic study is similar to setting up a usability test. But there are important differences. Because sample sizes tend to be smaller (5-6 participants), you have to be very careful about who you visit. Also, recruiting may be more difficult because you need to be at the participant's place of work. What's more, clear business goals have to be set. To help with this, be sure to involve business stakeholders from the beginning.
- Conduct: Commercial Ethnography relies on observational interviews. While in the workplace of the participant, you need to employ open questioning techniques to uncover natural work habits and previously unexpressed needs. Start broad to get an overview of the organisation, actors, and roles involved. Then use critical incident questioning to zoom in on work behaviour. This involves having the participant recall when something went particularly wrong (or particularly good), and retracing the steps and actions they took. Taking notes is necessary, but ultimately plan to audio records each session for analysis later. You should also take photos if allowed.
- Analysis: Keep in mind that with qualitative research like ethnography, the data you'll be analysing are the texts from the interview sessions. And even with a study involving just six participants, you'll end with a mountain of it. The more-thorough way to analyse the data is to transcribe the text of each session and then code this with topics. You can then compare user data across topics. Or, a shorter way is to slot in thoughts and concepts from the interviews into pre-existing themes. This can be done in columns of a spreadsheet for instance. It saves you the time of having to transcribe each session. To further ease analysis and focus the findings, we've developed a re-usable framework of themes. These are grouped into four areas: Work environment, people and work, Artefacts, and opportunities.
- Ideate: Producing a report is not the final goal of this type of work. Instead, you must make the findings actionable. Involving stakeholders and decision makers along the way helps, but we've found a workshop or two towards the end of the research really brings the findings to life. First, having stakeholders gathered together is a good opportunity for you to present the findings. Second, use the research as a springboard to innovate products and services, and better positioning your company strategically. Identify concrete ideas for new products and enhancements to existing products. Collaboration is essential.
- Validate: Iterate your understanding of users' work by validating findings. This involves going back to users and presenting your understanding of their work. Show them they scenarios you have written, and walk through them together step by step. Or, present them with some diagrams you have created. Do these ring true with them? Also show them your ideas for new product or product enhancements for preliminary feedback.

In the next portion of the presentation, I'll focus on a specific set of findings to illustrate one type of information behaviour we've observed with the information workers we studied. In particular, the notion of 'real' documents, as we call it, refers to a range of qualities offline documents have that often get lost with online information. In particular, we focused on understanding why legal information overwhelmingly prefer paper. Some of the reasons were obvious:

- People use paper resource out of habit.

- Reading online is tiresome and often difficult.
- Security and backup of completely electronic resource is a large concern.
- The more you have in electronic format, the more you are dependent on a third party for technology support.
- Paper sources are easily portable and can be easily shared with others.
- Paper let's you make annotations and highlight text easily.
- But we also gained a deeper understanding in some other aspects of offline information use:
- Paper gives better overview and allows for comparison, something legal information do often.
- Visual qualities of documents were frequently used in information organisation. Colour coding, in particular, was frequent a primary way of organising information. Books were referred to as the "Red" book, for example, and client files were located and filed based on colour alone.
- Physical and spatial aspects of paper-based resources help manage workflow. For instance, physical piles of case files are used to sort and prioritize them. The location of piles of paperwork then indicates type of task, as well as how much work is still to be done.
- Orientation and navigation of information are done via form and genre. Book types and document types set expectations and allow people to navigation content quickly.

To contrast, a complete virtualization of legal information work requires a much more strict routine and discipline. In the end, we observed a range of reasons why people prefer paper resources. The opportunity now is to be able to simulate or transfer these qualities to online environments.

These types of information experiences can then be generalized to broader contexts. Examples range from the color-coded folders on Gmail to sophisticated systems like Press Display (www.pressdisplay.com). Or, consider the increased (not decreased) use of printers in offices to bring digital information to paper.

In the end, online information systems often fail at delivering an optimal information experience, and offline work habits still persist in many contexts. Better understanding human information behaviour is key to increasing the adoption of the innovations we create. This talk offers practical information for designing for better online information experiences.

[1] Robert Cooper and Scott Edgett, "Ideation for product innovation: What are the best methods?" Stage Gate Product Innovation Best Practices Series, 2008: http://www.stage-gate.com/downloads/working_papers/wp_29.pdf.

Sat 27
09:30-10:30
THEATER

ESTABLISHING A COMMON GROUND FOR IA PRACTICE AND THEORY. MISSION IMPOSSIBLE?

Panel

A. Resmini (Chair), K. Byström, D. Madsen, N. Pharo, L. Rosati & S. Skorka

ABOUT THE HIGHER EDUCATION IN IA WORKING GROUP

The Higher Education in IA Working Group was started in late January 2008 under the auspices of the Information Architecture Institute, with the ultimate goal of defining the boundaries and the contents of a shared IA curriculum in higher education. Although IA is a well-established profession and a thriving community of practice nowadays, it is not yet fully recognized as an academic discipline and it is not, with a few notable exceptions, an acknowledged course of study in most of the EU. As a result, most educational efforts are local and heavily dependable on pre-existing competence, dispositions, structures, and general focus of the institution. We believe that for development of IA to a full-fledged profession, adequately branded education is a necessary element. To reach there, coordination, networking and forward thinking are required to enable a reasonably coherent field of study.

We also think this effort ought to be the responsibility of those people currently working and teaching IA. However, although this Working Group is an academic-driven, European project, our goals are global and they cannot be achieved without the help and contribution of the larger IA community. Moreover the gap between the existing field of practice and the emerging field of study needs to be bridged since 1) IA practice needs – to prosper and mature – the recognition within academia, exactly as other professions does, and 2) IA academics need to legitimize their work within the IA community and in the IA field in their respective institutions. Awareness of the issues at stake by both sides of the coin is the key: academia focuses on IA from the perspective of theoretical and conceptual development and practice seeks the core of IA as a profession, and one needs the other for creating a solid ground for the field to flourish among other disciplines and professions.

THE PANEL

The panel aspires to create a fluent thread of discussion where everybody brings their different contributions and unique point of views. We want to understand where IA theory and practice in the professional and academic world stand today, and to facilitate the important dialog between the two. We currently have plenty of questions, a vivid ongoing discussion, and very few answers: in a way, we would like this panel to be some sort of call to arms.

Some of the questions sound simple enough, and some are trickier but unavoidable. One of them is: What is the understanding of Information Architecture on which higher IA education programmes are established is? And another might be: Do we really need a scientific discipline? And a third: How to ensure that the rapid development in IA-field is reflected accordingly in IA education? We will offer our stance on this, introduce what is currently being done through a few selected examples and illustrate the connections and disconnections between them, the wealth of different disciplines that contribute to the field, the strengths and weaknesses of the current situation, and finally draw some conclusions.

In addition to presenting our academic take on the field, the panel seeks to utilize this opportunity to enrich the discussion amongst the members of the Working Group by inviting other interested parties to join. Enlighten us with your take on educational issues: how do you define musts, desires and pitfalls as a practicing information architect, a teaching academic or as an employer.

THE RELATED TASKS OF THE WORKING GROUP

As the group moved from thinking to planning and finally to meeting it became obvious that we had to go for wider goals than what originally planned. To understand where IA stands in education in Europe today and to be able to draw conclusions and sketch proposals we had to do more than simply collating some existing resources and do some brainstorming. To this extent, the Working Group is currently pursuing the release of a survey aimed at scholars in the EU to help us assess what is being done today, and the publication of a journal, to present the larger IA community .

The main goal, that of an IA curriculum framework, needs both these preparing steps. The survey is going to tell us what is being done, who is doing it, and how they are doing it. It will map what IA currently is in higher education, but it will not obviously tell us if this is the real thing or what we should ultimately envision IA is, or what we should aim at when establishing an IA programme. The journal is going to provide the perspective and the forward thinking on the field, and here the help from the professionals becomes strategic to discuss findings, improve on them and lay out that common language which will allow for the creation of some collective-wisdom-driven Education in IA White Paper. This would hopefully help lay the foundations of a shared understanding of IA as a whole and as a scientific discipline.

Both the survey and the journal will be briefly outlined either during the panel or at the IA Jam.

Sat 27
09:30-10:30
CINEMA

A ROADMAP TO A STRONGER, EUROPEAN IA/UX NETWORK

Panel

F. Borloo (Chair), W. Nöding, S. Muus, J. Ponya, A. Resmini, P. Bogaards, P. Boersma & S. Cottong

It's about our future as European Information Architects and User Experience Designers, and how we can improve our network, despite the constrains of being European. Early Saturday morning, this panel will present the draft for a roadmap to a stronger, permanent, European IA/UX network, inviting anyone at the conference to discus the ways we can follow to get there.

The roadmap is the result of the combined effort of a range of European Information Architects and User Experience Designers, who had a workshop the last weekend in August, held in Copenhagen, which was entirely devoted to this subject. This workshop found and formed the draft for a roadmap for improving our network on the basis of the existing platform, such as this conference, in addition to other measures, which we will present and discuss on this panel.

After a (very) short presentation of the panel, we will present conditions and challenges of the European IA/UX community, as we see them (where we are). We will explain our goals and ambitions (where the go). And finally we will present the roadmap (how we think, we can get there). This will take approximately half of the time, so in the remaining time, we will be pleased to discuss this, leading us all to a constructive conclusion at the end.

The participants of the panel are: Judit Ponya (.hu), Andrea Resmini (.it), Peter Bogaards (.nl), Peter Boersma (.nl) and Silvain Cottong (.lu). The panel is moderated by Filip Borloo (.be) and was initiated by Wolf Nöding (.de), Søren Muus (.dk), who's also part of the panel.

BACKGROUND

Last day on last years EuroIA conference in Barcelona, there was an improvised panel discussion entitled "The Future of European IA" on the topic of the measures to be taken, in order to strengthen the European IA network (in the future).

The improvised panel was partly inspired by a poster presentation and survey made on the same summit, on the same subject. And the message from the audience, at both the poster session and the panel discussion was very clear: there are many information architects, who acknowledge the need to structure and support the professional field of Information Architecture in Europe. And that it's necessary to make a roadmap for this field of profession, in order to help establishing it.

The idea of a workshop to foster this roadmap, came up as a good idea. And immediately more than 50 interested participants, who would like to take part personally in such a workshop, were identified.

THE WORKSHOP

During the year that went, leading up to the present conference in Amsterdam, we have been planning and making a workshop ahead of the panel discussion. And we are now proud to present the findings; A roadmap for improving European IA/UX network.

The workshop have given us information and defined tasks for the roadmap, in a creative atmosphere. Many topics were identified: IA in Education, IA Research, IA Methodology, Business Network (Cross Country), etc..

In order to receive a maximum outcome of the two day workshop, we've used several established workshop methodologies, such as Backcasting.

THE GOAL

We hope that our initiative and the presentation of our draft for this roadmap, will give us a constructive and inspiring discussion, that can show us more paths to lead us further on to a stronger network between European IAs and UXDs, to the benefit of our industry.

TAKING THE 'OOH' OUT OF GOOGLE
GETTING SITE SEARCH RIGHT FOR NEWS

Sat 27
11:00-12:00
THEATER

Martin Belam, United Kingdom

Martin Belam is an independent Internet Consultant and Information Architect, currently based on the island of Crete. Originally from London in the UK, Martin has nearly a decade of experiencing working with global brands like Sony, Vodafone, The Guardian and the BBC. Martin specialises in advising traditional media companies about search, widgets, RSS, email broadcast and user-centred design principles. He blogs prolifically at currybet.net, and is a contributing editor for FUMSI.

Search has become the ingrained primary navigation method for getting around the Internet. In fact, for the majority of Internet users, Google is their map of the Internet. If Google hasn't indexed it, then, for them, it simply doesn't exist.

This presents news publishers with several challenges. They rely on Google to send them traffic, but they also have to allow Google to 'scrape' and index their valuable content. In some cases, as with Copiepress in Belgium, publishers have resorted to the courts to try and define the limits of what Google can or cannot store and present to users.

Another question is, if Google is so ingrained into the search habits of the bulk of users, why have site search at all? A lot of companies and publishers spend a lot of money on having a search engine technology index their content, but is it necessary? And if so, what makes it worthwhile?

Google's performance at indexing your content and presenting it to users has to be the benchmark against which you judge your own site search. If you can't produce something better, or something that offers alternative functionality, you might be better off setting up your own Google Custom Search Engine that just looks over your domain, and taking a share of the adverts Google publishes against your content. Seriously.

Now, that sounds a little like simply 'giving up' and handing all of search over to Google - but when you frequently observe user behaviour around search, you realise you need to do a hard cost/benefit analysis of providing a site search service. Time and again in user tests we see that if a user is on a page within foo.com, and you ask them to find all the information about 'bar' on foo.com, they go straight to the Google box in the top right-hand corner of their browser and type in something like "bar foo.com", rather than even looking for a site search input box.

However, there are lots of things that you know about your content that Google doesn't, and lots of things specific to your publishing knowledge domain that you know about, that Google doesn't. The trick to taking the 'Oooh' out of Google and putting it back into your site search is to use that information to provide a different and distinctive way to search your content.

Looking at a Google search engine result is like looking at the a map of what Google knows about your page. But it is also a map which can help tell you the things that you know about your content that Google doesn't.

Google appears to know the title of your story or article, for example. Well, strictly speaking all Google knows is what is in the contents of the <title> tag in your HTML. That is liable to have all sorts of other

information in there as well, like the name of an author, the date of publication, the name of your site sponsored by such-and-such - you get the picture.

For site search though, you can ignore all of the extra information in the HTML - you know exactly what your headline is. So, use the actual title of an article in your search results, not just the HTML title.

Google produces a short excerpt of the information on the page. The extract is chosen by a machine, and the algorithm tries to present to the user a meaningful snippet of text that helps them to identify the relevance of the result to their query. You, however, in building a site search, have access to the information from your CMS, which almost certainly includes a short introductory 'standfirst' or tag-line or description for an article.

Google's snippet algorithm has to cope with delivering a relevant clip for all types of query. You, however, know that someone is searching for an article from your publication. You know where the opening paragraph is in your content, and you can make sure that you present that in the results instead of Google's 'guess'. Instead of a bunch of computer-generated snippets of text, you can make a search engine results page that you can skim read.

Google knows which website domain published an article, but it doesn't know who the specific author of a piece is. It may have that information indexed as part of the HTML, but it doesn't have it semantically indexed and can't manipulate that information. You, however, know who the author of that article is, and so you can display it as part of the search engine results. You can also use your search engine results to provide lateral navigation links. If you are listing the author of each article, make that a clickable link to allow the user to explore a profile of the author, or to find a list of everything they have written for you.

Likewise, Google knows the date it indexed the content, but you know the date you published the content. These can be significantly different, and you can make a virtue of it. Definitively say an article is published on such-and-such date, and make that a link to all the articles published that day, to allow users to explore your results by the dimension of time - one that Google can't offer.

Many people have argued that having an 'advanced search' form is in itself an admission of retrieval technology failure - it shows that users have to work hard to get the results that they were looking for. However, you need to think carefully about the users of your site search. They have already exercised an 'advanced user' choice when they decided to use your site search rather than plug another two-point-five word query into the Internet's global "I'm feeling lucky" box.

Some news sources make a virtue of displaying their advanced search interface on their search engine results page. 'Il Tempo' in Italy, and 'El Pais' in Spain invite users to formulate a more complex query at the foot of their first page of results. 'El Pais' in particular uses cues like '¿Qué?', '¿Dónde?' and '¿Cuándo?' to help users frame their more advanced search.

Not everybody gets this right however, and providing an 'Advanced search' interface can still go very wrong. The Athens News in Greece, for example, has a form which marks both an input field for the name of the author and an input field for article text as mandatory. In fact, it is an either/or choice. If the initial form presented to the user wasn't complicated enough, there is an even more advanced option, which introduces such end-user friendly concepts as searching for an article by its numerical code.

Having a greater understanding of how your content is structured means that you offer users a great variety of ways to access content via search. Only returning results from a specific date range, from a specific publication section, or from a specific author are all relatively easy 'advanced' techniques to implement, and are all search refinements that Google cannot offer.

'La Repubblica' in Italy is exceptionally good at this. The search results allow users to filter the information not just by intrinsic metadata like publication date, but by semantic metadata like people and entities. Searching for 'Ronaldo' offers you options to differentiate between the Brazilian Ronaldo and Portugal's Cristiano Ronaldo. You can also filter by the people also mentioned in the stories, like 'Hector Cuper' or by associated terms like 'Manchester United' or 'Nike'. Again, this kind of refinement is only possible with an understanding of the structure of your data, one that Google is, as yet, unable to grasp by simply crawling the web.

I mentioned earlier that you need to understand the audience for your site search, and web metrics can help with this. One of the key indicators you need to look for is the number of people heading to your site from Google, and the number of people using site search. A comparative keyword analysis between the two sets of data can also be enlightening.

Your search logs can help you define the feature set of your search. If a lot of your queries are one word navigational type searches for specific sections of the site, then you may want to consider employing a 'best bets' system to direct users straight to the relevant index page without worrying about what your search engine algorithm is returning. If you find a large number of keyword search for specific authors within the logfiles, you might want to consider providing prominent links to author profile pages in your content, navigation and search results.

You might notice people adding a time-frame to their searches, if so, what sort of time-frames do they look for? Year? Month? Day? This could be used to influence the date refinement options you provide for users.

Finally, you need to find a way to benchmark your search performance. I usually recommend that you produce a 'bucket' of 100-or-so search terms that have been used on the site. Get a good spread of them - one word queries, names, navigational queries, mispellings, long curious multi-word queries from the end of the tail, queries with dates in etc.

Then you need to do a comparative test with Google. If you have a helpful technical team available you may find it is worth investing a little time in writing a script that will automate this task. However you do it, what you need to do is look at the results from Google for 'query#1 site:yourdomain.com' and your own search engine's results for 'query#1'. If Google is bringing back 'better' results, then you need to work out why, and tweak the algorithm of your site search accordingly.

Taking the 'Ooh' out of Google isn't easy, and for some businesses it may not be worth the time and investment required. However, once you realise that someone carrying out a site search is already making a specialist advanced query compared to the bulk of your users, then that is a good starting point for working out how the interface and functionality should support them in that task.

URL DESIGN FOR INFORMATION ARCHITECTS

Sat 27
11:00-12:00
CINEMA

Deanna Marbeck & Silver Oliver, United Kingdom

Deanna is an Information Architect at the BBC, focusing on Audio and Music products. She is currently working with semantic web afficionados on the music section of the BBC website. Deanna was educated in New Zealand, with a degree in Music History and diplomas in Librarianship and Business Computing. Her professional career has moved from librarian to database trainer to helpdesk analyst to data wrangler to project manager, before settling on information architect.

Silver is an Information Architect at the BBC spending most of his time working with metadata and taxonomies. He trained as a librarian, and has worked with information architecture and metadata for a number of large government organisations (DirectGov) and the British Library before settling at the BBC.

URL design should be part of our everyday work as Information Architects. URLs are not only part of the site structure, but also part of the user experience of our sites. We discuss the user experience of URLs and how to design and document them, including some BBC user testing and sites.

USER EXPERIENCE

URLs are one of the public-facing elements of any Web-based service and need to be of as high quality as the logos and navigation we design. Users interact with URLs all the time. A person might come across a URL in a number of ways, such as:

- Follow a link
- Use a previously bookmarked URL
- Copy and paste a link from an email, IM or document
- Guess a domain name
- Type a domain name into a search engine
- Read the results list from a search
- Hear or read URLs in advertisements
- Type a URL in manually from paper, word of mouth or memory

All of these interactions have implications for URL design.

Once it is realised that the design of the URL structure is a user experience issue, we should take care to create thoughtful URL conventions. We shouldn't just choose the easiest technical path - this could result in URLs that are unwieldy, overly long, not "hackable", and worst of all, impermanent.

There is currently little research regarding interaction with URLs by users. However, the BBC has conducted some user testing looking at URL literacy including the following scenarios:

- Beginning a session
- Sharing web pages
- Receiving URLs in emails
- Dealing with broken links
- Finding new content
- Assessing search results

In completing these tasks users showed that although not necessarily familiar with the term "URL", they had a variety of coping strategies for getting where they needed to go. This frequently involved directly interacting with URLs - typing, reading and manipulating them as was necessary to complete the tasks.

URLS AS PART OF THE DESIGN PROCESS

IAs routinely investigate and understand user and business requirements. To help understand and document the data available, we create a domain model of the main objects. The domain model documents the data objects which are addressable, and the relationships between those objects. After creating data schemas, the URL structure is created based on the domain model. Every data resource has an URL, and the same class of data sits at the same level in the URL structure. High level URLs are likely to aggregate highlights of data from lower level URLs. For example, http://www.bbc.co.uk/music/artists/070d193a-845c-479f-980e-bef15710653e includes, among other things, Prince's latest 5 releases from http://www.bbc.co.uk/music/artists/070d193a-845c-479f-980e-bef15710653e/releases. Different representations of the data are available by simply adding the file type to the URL, eg .xml or .rdf. In many instances, this URL structure replaces the sitemap.

DESIGNING THE URLS THEMSELVES

The content of URLs needs to be carefully designed. The 3 guiding principles are:

1. Persistent
2. Readable
3. Hackable

A persistent URL is one that does not change for that data. Because URLs are linked to, bookmarked, printed out, and searched for, changing the URL breaks the user experience, and means that users are unable to find your site. To facilitate persistence, URLs should not contain content which is likely to change over time, such as software mechanisms or document status.

A readable URL is one which is understandable by humans. This gives context around expected page content and enables easier communication of the URL, for example in speech and in advertising. When creating human readable URLs, consider how to deal with special characters, spaces, length, and names which may change over time.

A hackable URL is one which humans are able to understand and manipulate by changing or removing sections. This enables recovery from error, such as removing the last part of a URL to get from a broken page to a working page, and provides an alternative to using site navigation for power users. It also gives users an idea of the structure of the site. For a URL to be hackable, it should be predictable and consistent.

It can be difficult to create URLs which meet all three of these principles. IAs must be able to balance business and user requirements and prioritise accordingly. Refering to Maslow's hierachy of needs may help in this process. Mapping our findings to this model we find that persistence of URLs is fundamental to the everyday tasks that users are engaged with. Value is added by making URLs readable and hackable.

- Useful – persistent
- Usable – readable
- Delightful – hackable

IA DELIVERABLES

As in all facets of IA, it is important to document and communicate URLs. The whole of the project team should be involved in discussions around the URL structure and design. Having URLs as post-its on the team wall is useful for both the project team, and any other teams who need to be appraised of the site structure and naming conventions, as it is immediately visible.

Traditional IA deliverables such as sitemaps, in our experience, tend to be overshadowed by the more tactile URL walls. Developer documentation such as spreadsheets of URLs, routes, controllers and actions are also useful within the team and can be easily adapted to lists of "pages" with explanatory notes for other stakeholders. Wireframes or schematics for each page are also heavily used for communication to other stakeholders, but as always a working prototype is the most easily understandable documentation.

CONCLUSION

URL design affects the user experience of a website, where a broken link is the worst experience you can provide. Even basic web users are seen to read and edit URLs so it is clear value is added by providing easy to read, meaningful and logically structured URLs. Good URL design comes from a clear understanding of your data, and provides a framework for structuring your site in an elegant and extensible way. Well Designed URLs are Beautiful!

(With thanks to Michael Smethurst)

Sat 27
11:30-12:00
THEATER

IT'S A DIY FUTURE

Joe Lamantia, United States

Joe Lamantia has combined deep insight and elegant design to create meaningful experiences for people in a wide variety of industries and settings since 1996. His clients range from Fortune 100 enterprises to startups, non-profits, digital product companies, and social media. Joe is a frequent contributor to BoxesandArrows and UXMatters, and speaks regularly on the intersection of business, culture, design, and technology. He enjoys creating tools to share with the user experience community. Joe is currently based in Amsterdam, working as a strategy consultant for interactive agency Media Catalyst. He blogs regularly at www.joelamantia.com.

The Web is shifting to a DIY [Do It Yourself] model of user experience creation, one where people assemble individual combinations of content gathered form elsewhere for expressive, functional, and (many) other purposes. The rapid growth of widgets, the resurgence of enterprise portals, the spread of identity platforms from social network destinations to blogging services, and the rapid increase in the number of public APIs syndicating functionality and data, are all examples of the DIY shift.

ARCHITECTS OF THE FUTURE

For design professionals, the defining characteristic of DIY future is co-creation: the participation of a broad spectrum of people in creating experiences. In this new world, the role of designers is to define the tools co-creators use to assemble experiences for themselves and others. These tools will increasingly take the form of design frameworks that define the modular components of familiar structures such as social networks, functional applications, collaboration platforms, personalized dashboards, and management consoles.

WHY FRAMEWORKS?

Frameworks are the future for three reasons. First, everyone can create sophisticated information structures now, and we no longer serve as a gateway. Second, the definition of frameworks allows designers to continue to provide valuable services and expertise in a cost effective manner: It's something we can sell in a commodified digital economy. Third, we have an good combination of human insight and architecture design skills; this hybrid way of thinking can serve as a differentiator and strength.One example of the sort of design framework information architects will create more of in the DIY future is the Portal Building Blocks system described herein. Providentially, this design framework addresses many of the problems inherent in the current architectural schema for DIY self-assembled experiences.

HISTORY REPEATS ITSELF: THE PROBLEM WITH PORTALS

The rise and fall of the Web 1.0 portal form offers a useful historical lesson for creators of the new generation of design frameworks underlying DIY self-assembled experiences. Despite early promises of utility and convenience, portals built with flat portlets could only grow by expanding horizontally. The resulting experience of low-density information architectures was similar to that of navigating postwar suburban sprawl. Like the rapid decline of many once-prosperous suburbs, the inconvenience of these sprawling collections of portlets quickly overwhelmed the value of the content they aggregated.

The common problem that doomed many very different portals to the same fate was the complete lack of any provision for structure, interaction, or connection between the self-contained portlets of the standard portal design framework.

Looking ahead, the co-created experiences of the DIY future will repeat this cycle of unhealthy growth and sprawl - think of all those apps clogging your iPhone's home screen right now - unless we create design frameworks that effectively provide for structure, connection, and interaction.

THE BUILDING BLOCKS - AN EXAMPLE DESIGN FRAMEWORK

The building block framework is meant to serve as a robust architectural foundation for the many kinds of tools and functionality – participatory, social, collaborative – that support the vision of two-way flows within and across the boundaries of information structures. This means:

- Allow for rapid growth and change
- Establish a common language for all co-creation perspectives
- Encourage construction of scalable, reusable structures
- Create high-quality user experiences
- Enable sharing of assets across boundaries
- Enhance social dynamics, such as 2-way conversation flows

The Building Blocks framework defines two types of information architecture components in detail – building blocks (or Containers), and navigation components (or Connectors) – as well as the supporting rules and guidelines that make it possible to assemble complex user experience architectures quickly and effectively. The Containers and Connectors specifically provide for structure, interaction, and connection at all levels of the information environment; from the user experience – visual design, information design, interaction design, information architecture – to functionality, metadata, business rules, system architecture, administrative processes, and strategic governance.

CASE STUDY: EVOLUTION OF AN ENTERPRISE PORTAL SUITE

The Building Blocks began life as an internal tool for lowering costs and speeding design during the course of sustained portal work done for a Fortune 100 client. Over a span of ~24 months, the Building Blocks provided an effective framework for the design, expansion, and eventual integration of nearly a dozen distinct portals. The design framework evolved in response to changes in the audiences, structures, and contents of portals constructed for users in different countries, different operating units, and several organizational levels.The portal suite went through several stages of evolution and growth:

- Experimentation
- Rapid expansion
- Consolidation & integration
- Stability and continuity
- Lessons In Designing Frameworks

Successful co-created experiences - Flickr (commercial) and Wikipedia (non-commercial) - combine deliberate top-down architecture and design with emergent or bottom-up contribution and participation in a new kind of structure Kevin Kelly calls the “hybrid”. Frameworks support hybrids!

APPLE, IKEA AND THEIR INTEGRATED INFORMATION ARCHITECTURE

Sat 27
11:30-12:00
CINEMA

Davide Potente & Erika Salvini, Italy

Davide Potente has an High School specialisation in Computer Science. In March of 2006 he took his degree in International Communication at University for Foreigners of Perugia, Italy, discussing a thesis about the information classification model for a web-software interface, focusing on the information scent and the berrypicking process. During his studies he started to get interested in Information Architecture: how users operate with different types of interface and classification models, so he decided the topic of his thesis, from which an article was published on <http://trovabile.org/articoli/itunes-profumo-informazione >. He attended a master in Web Communication and Design at European Institute of Design where he specialised himself in User Experience Design. He is an Information Architect consultant and he would like to focus on Bridge Experiences and their relationships with wayfinding

strategies.

Erika Salvini took her degree in Linguistics and Multimedia Communication at University of Florence, Italy in 2005, discussing a thesis about the study of cinema's aesthetics.She is taking the degree in Advertising Communication and Strategic Design at University for Foreigners of Perugia. During her studies she focused on Human-Computer Interaction, Information Architecture and their relationships with Communication and Marketing.

An integrated model of information architecture must be designed taking into account every context and the information they allow to get access to. A chain store with its on-line store, paper catalogue, products, all of them convey sets of information that must be integrated in an homogenous model of human information interaction.

Products' classification model used in a paper catalogue must reflect the products' classification on the website and on the on-line store; information have to be accessible, on the website and inside the physical space, by following the same model of interaction: a navigation menu can find an equivalent considering various areas inside the physical store.

BRIDGE EXPERIENCES AND CONTEXTS OF INTERACTION

Experiences straddle various environments are not isolated. We can think about the experience of buying a product: it could start on the web or on a paper catalogue, it can cross handheld devices to end inside a physical space like a store.

People must perceive no fractures about the flow of this experience, continuity can be provided through bridge experience: users must keep the same mental model along the steps of experience to provide always a homogeneous model of interaction.

Bridge experiences synthesise this process by identifying continuous passages:

- from the web or a software environment to another
- from the web environment to the software one
- from the software environment to the hardware one
- from the web environment to the physical one.

In his article "Design for Bridge Experience" Joel Grossman asserts Bridge Experience involve situations in which people must traverse different domains in order to communicate successfully, complete a task, or elicit a desired physical, mental, or emotional response.

Information Architecture principles are independent from the context by which the information is conveyed (physical archives, digital resources, physical environment). The information architecture is a key element to build bridge experiences as a consequence, in order to obtain consistent models through different contexts. The evolution of IA leads to a crossing and integrated information architecture, a component of the bridge between various user experiences.

AN INTEGRATED MODEL OF HUMAN INFORMATION INTERACTION

Knowledge therefore information that compose it, cross various contexts. An integrated model of information architecture can define an organization of the information between contexts that conveys a coherent model of human information interaction.

A retail store, an on-line products' catalogue, a paper catalogue, the interface of a device bought in that specific store, can be considered as patches of information. People can search for information through patches, these must feature a coherent information structure in order to support a crossing information-seeking process between them.

People are able to estimate what kind of information they will get access to. This is possible thanks to the information scent: text content, labels, graphical elements on a website or on physical or digital archive interfaces, directions and wayfinding signals inside a physical space.

The lack of information scent leads people to wander in a physical space (archives, libraries, stores, airports), or in a digital environment (websites, applications, on-line database).

WAYFINDING STRATEGY

Wayfinding strategies can be seen as a way to convey information scent inside a specific context. Signage, hoardings, symbols, icons and textual directions work as proximity cues in a physical space. Navigation menu, labels, links, icons, symbols work in the same way on websites, web applications and software. They represent a way to evaluate how much of information can be found in a specific context.

An integrated model of information architecture must be designed taking into account every context and the information they allow to get access to. A chain store with its on-line store, paper catalogue, products, all of them convey sets of information that must be integrated in an homogenous model of human information interaction.

Products' classification model used in a paper catalogue must reflect the products' classification on the website and on the on-line store; information have to be accessible, on the website and inside the physical space, by following the same model of interaction: a navigation menu can find an equivalent considering various areas inside the physical store for example.

Marcia Bates' integrated model for information seeking strengthens previous berrypicking model: an evolving search is better defined from a mix of information-seeking strategies. We can cross all strategies on a website, starting with a known-item information seeking, switching than to a browsing activity to broaden or to narrow search results. Between these two information seeking status, humans experience various conditions, from a monitoring status to an awareness one.

The information scent plays a relevant role in suggesting where to look for information and the information need itself, on the Web as much as in the phisycal space.

THE CARNEGIE LIBRARY OF PITTSBURGH

The Carnegie Library of Pittsburgh shows a model of integrated Information Architecture that crosses the library's physical space, the website and all classification structures.

This case is of great interest because it leads to the development of a model of human information interaction. Maya Design, who was involved in this project, first investigated the mental models of users and the organizational schemes of the library. After sessions of interviews and observations one of the first thing they discovered was information overload conveyed by library jargon and ad hoc solutions, which produced a disjointed system over years.

The library jargon issue is related to a typical labelling issue on the Web: designing effective labels means considering the content, users and context, this is even more important for an integrated model of information architecture like the one for Carnegie Library. In this case, labels cross different contexts and must be consistent and understandable across these contexts: library jargon badly affects labelling systems neglecting the users' vocabulary, so a given information on the website (words, wayfinding signals, …), could not find an equivalent information in the physical space because it was replaced by the library jargon.

APPLE INTEGRATED INFORMATION ARCHITECTURE

The analysis of Apple website and the Apple Store RomaEst gives an enlightenment on the role of information architecture in building bridge experiences. It can cross various contexts of experience to

convey a unique model of human information interaction by the organization of information flows and tasks.

Menu labels on global navigation are in connection with areas inside the store:

Website	Store
Home	Hoardings on the walls as products' preview
Store	All tables showing products with related details
Mac	Area showing Mac computers
iPod+iTunes	Area showing iPod, iTunes and Apple TV
iPhone	Area showing iPhone
Downloads	Area showing applications
Support	Genius Bar for products' support

Inside the store, lcd screen terminals could be provided in every area to show products' details and related accessories. They could highlight products related to the area inside the store we are visiting. Computers will be shown on displays if we are inside the Mac area, iPod and the Apple TV if we are inside the iPod area, the same for iPhone with a specific physical space thought there are connections with iPod related to accessories and applications. Accessories can be shown on displays contextually to related Mac and iPod areas. Moreover, by the lcd screen, the Store could support popular accessories on the website, in order to show popular selections by on-line users even in the physical space.

IKEA INTEGRATED INFORMATION ARCHITECTURE

IKEA approaches the information they provide in different ways:

- products catalogue approach
- web site approach
- exhibition approach.

There is not a unique and coherent model of interaction between people and information, which could be adapted to any domain. The catalogue is built on a hierarchic-enumerating classification: 15 classes highlighted by different colours and relative subclasses for each one.

An integrated model of information architecture could be obtained through the use of the same products' classification in the three domains and the use of distinctive colours for any individual class in all three domains, adapting to the different peculiarities.

Three types of interventions are possible to transfer web advantages to the physical shop:

- more access to departments, in harmony with the web-faceted classification
- maps and information points to make the customer's mobility easier, to make them aware of where they are (wayfinding) and the distance they have travelled (breadcrumbs)
- lcd screen terminals in the central area of the store to show products, with relative characteristics and placing coordinates inside the shop (findability).

REDRAWING THE MAP: AREA DESCRIPTION DIAGRAM

The purpose of the area description diagram is to provide a context for the content and functionality in a physical space. It is a useful deliverable to bring information architecture from digital to physical environments.

On the ADD we can show information about placement of products inside the store through racks and shelves. In the same way is possible to highlight relevant areas where specific services are provided like information and support areas, electronic catalogues of products, customer services. This deliverable is not a physical oriented document, rather it is about designing contents and functions inside a physical space. It highlights connections between contexts:

- navigational menu related to wayfinding cues
- hoardings that work as products' preview on the website
- support areas coherent with related sections on the website.

The area description diagram shows connections between Apple home page and the Apple Retail Store. A careful analysis suggests a deepen relationship between this document and other webpages: Mac and iPod+iTunes webpage share a common information design and the area description diagram designed for the home page is suitable also for these sections. It can be considered as a unique model that crosses the physical space and multiple webpages.

The ADD worthiness to different contexts is a proof and it testifies that the integrated information architecture organises information flows and tasks by crossing digital and physical spaces, conveying a unique human information interaction model. Through these area description diagrams is possible to notice that the Apple Retail Store is representative of the entire Apple website and vice versa.

REFERENCES

Bates, Marcia J., 1989. The Design of Browsing and Berrypicking Techniques for the Online Search Interface, <http://www.gseis.ucla.edu/faculty/bates/berrypicking.html>.

Brandon, Kelly. 2003. Wayfinding. Kelly Brandon Design, <http://www.kellybrandondesign.com/IGDWayfinding.html>.

Card, Stuart K. - Pirolli, Peter, 1999. Information Foraging, <http://www2.parc.com/istl/projects/uir/pubs/items/UIR-1999-05-Pirolli-Report-InfoForaging.pdf>.

Grossmann, Joel. 2006. Designing for Bridge Experiences, UX Matters, June 30, <http://www.uxmatters.com/MT/archives/000105.php>.

Reiss, Eric. 2001. Rediscovering wayfinding. e-reiss.com. January 14, <http://www.e-reiss.com/Articles/Redescovering%20wayfinding.aspx>.

Rosati, Luca. 2006. Creare esperienze-ponte. Verso un'architettura dell'informazione trasversale. July 6, <http://lucarosati.it/blog/esperienze-ponte >.

Rosati, Luca. 2007. Architettura dell'informazione. Trovabilità: dagli oggetti quotidiani al web, Apogeo, Milan.

Salvini, Erika. 2008. Un'architettura dell'informazione integrata per Ikea. Trovabile, April 28, <http://trovabile.org/articoli/architettura-informazione-integrata-ikea>.

Sat 27
12:15-13:00
THEATER

TAKING SOCIAL NETWORKS GLOBAL: DESIGN PATTERNS & TIPS

Peter Van Dijck, Belgium

Peter Van Dijck is an independent information architecture consultant, and author of the book "Information architecture for designers". He has developed information architectures for clients ranging from Fortune 500 companies to internet startups. Peter is passionate about things that have been known to put angry adult african elephants to sleep, like the internationalization of information architecture and the co-construction of users and technology. Peter's website is at http://petervandijck.com.

Social networks are being created all over the world, and growing exponentially. However, there isn't a true "global" social network yet, one that's used everywhere, by everyone. Perhaps there will never be one. Different platforms lead in different areas of the world.

What are the global information architecture challenges of a social network? This talk is about global IA, made social.

Orkut was Google's attempt at a social network, but only leads in Brazil. Google has now moved operations and development to Brazil. Other social networks follow similar paths: born in one country, unexpectedly successful in another, then the move. Friendster is focusing on Asia now, where it has a significant impact in certain countries.

Facebook and Myspace are no match in Japan for Japan's own Mixi – a social network focused on the mobile experience. The pattern is clear: there is no social network that rules them all. Why is that? We will argue it's cultural: the specific mix of features, the particular user experience that a social network provides will work in certain cultures, but not in others.

How are the IA's of these networks managing this? What patterns and strategies do they use? What are the challenges? What works and doesn't?

Belgian social network Netlog is one of the biggest sites on the web you've never heard of. They've specialized in a multilingual, multicultural environment. It's evident from their global gateway page, best in class.

We'll discuss different strategies, and different information architecture patterns used in global social networks. Myspace opens country offices – Facebook does not. What works better, and why?

When your social network takes off in a country with a difficult advertisement market, what should you do? The standard western business model is ads, and that has influenced features and user experience. You can't export the business model globally, because the environment isn't there: the advertisement market is doing great in the US, but not everywhere. Asian social networks have grown up in a different environment, and have developed different business models (pay for items to display in your profile, …), which in turn encourage different features and user experiences. They experience the same problems when trying to export their sites to the west.

Still, users from all over the world use Facebook. Is it then possible to create a user experience that works globally? Isn't there a sort of cultural homogenization of internet users worldwide? An internet user in India uses Gmail just the same as me, a user in Japan blogs just like me, right? We'll talk about the myth of cultural homogenization, and what it really means when the same artifacts are used in different cultures.

Facebook has followed Google's lead to crowdsource its translation. Compare with other social networks: is the strategy to go after markets, or is the strategy to be available in every single language, and see what happens?

And practically: when you have a social site and you want to expand its reach into different languages and regions, where should you start? What features should you develop? Beyond translating, should you change the user interface?

We'll talk about design patterns such as global gateways or locale switchers, and social network specific global design patterns, such as showing a user people close to them, etc.

There is a lot happening right now in the world of global social IA. Social networks are inventing new ways of interacting, experimenting, often unconsciously using IA elements that betray their originating culture. At the same time, these networks are being appropriated by audiences all over the world, with sometimes unexpected consequences.

With examples from some well-known and a few not so well-known social networks, this talk will give you a good insight in how social networks are going global, and what the IA challenges and some possible solutions are.

DOCUMENTING MOBILE 2.0 IA

Sat 27
12:15-13:00
CINEMA

Scott Weiss, United Kingdom

Scott Weiss is the Executive Director for Europe, the Middle East, and Africa, working from Human Factors International's London office. Currently, he leads projects that span desktop, mobile, medical, consumer electronics, and enterprise business needs with regard to design, research, and usability institutionalisation. Prior to joining HFI, he led teams of researchers and designers for eleven years as the Principal of Usable Products Company, which he formed in New York in 1996. While running Usable Products Company, Scott led usability and design projects for Dun & Bradstreet, GlaxoSmithKline, Intel, JP Morgan Chase, Samsung, Sprint, and Vodafone, among many other well-known global companies. Scott's team produced annual benchmarks of mobile user interface technologies, including Media Downloads, Music & Video, and Mobile Search. Scott's book, "Handheld Usability," was the pioneering design, prototyping, and usability text for the mobile industry. Prior to forming Usable Products Company, Scott held career roles at Apple, Microsoft, Sybase, and Autodesk. He speaks frequently and globally on the topic of usability, with special interests in mobile design and quantitative usability benchmarking.

Documenting mobile designs differs from documenting desktop designs. Oddly, mobile designs are trickier to clearly describe, since soft key labels change as the "focus" moves about the screen. These IA's are further complicated when animation becomes not just adornment but an integral part of the interaction of an application. Touch, surprisingly, is more closely aligned with desktop UI's, due to the direct manipulation parallels; however, gestural user interfaces present yet new challenges.

Mobile design is further complicated by the business requirements of the telecoms industry: 1. Multiple versions of a design are required to accommodate different brands and different feature sets; 2. Designs must be delivered on extremely tight and often-changing schedules; 3. Equipment samples are rarely available until after designs have been finalised. These challenges have contributed to this lightweight, quick-to-generate method.

The documentation methodology presented here has been honed from years of client-facing experience and the maturation and melding of several different strategies to produce a clear and easy to follow strategy. The method starts with a finished design, breaks it into its design and documentation components, and details the widgets found in each component through consistently labelled rows in a follow-on table. The columns of the table correspond to the relevant label, button states, and link information required to implement the design.

DOCUMENTATION EXAMPLE

As this summary is plain text, I will describe what will be presented at the Euro IA Summit with visual examples. The following mobile user interface will be stepped through during the presentation, along with other documentation examples. An animated demo will be shown to illustrate the sequence.

Imagine, if you will, a detailed mock-up of a list user interface, with a title at the top; most of the rest of the screen is a list of items, and the soft keys are at the bottom. One of the list items has the user focus, is highlighted, and has a set of action buttons on it. The highlighted item is the only item that has associated action buttons.

Adjacent to the mock-up of the list application is a Component Drawing: a simpler schematic of the same UI, broken into three boxes. The top two are labelled A and B, with the third unlabeled. A is above B, and depicts the title area. B is larger and immediately below, representing the list area. Letters are used instead of descriptive titles in order to enable labelling tight spaces and to fit the labels in a small row of the widgets tables that follows hte component drawing. The highlighted item in the list does not get a box associated with it, as it is not stationary. The soft keys are boxed in but unlabeled, as they are constant in a mobile phone's UI. As such, the component drawing is meant to enable abstraction, for further detailed clarification. Most documentation methods show the primary UI and have callouts, which result in confusing clutter. This method of abstracting the UI into components facilitates detailed documentation and easy referral to UI elements by abbreviated codes, such as A1, B2A, etc.

The mock-up is shown first to provide full context. From there, the UI is taken apart step-wise to its smallest bits, articulating it in sections, then widgets, so that it can be built by a developer, or tested by a quality assurance engineer—or documented by a technical writer.

Following the mock-up and component drawing is a table with the following columns: ID, Name, Focus & Soft Keys, Label/Contents, and Description. The ID corresponds to the widget item, whose nomenclature is its associated component and a number if there is more than one component. For example, A is the Title, with "-/-/-" for the Left, "Fire," and Right soft keys. The Label/Contents field contains "<Name of List>," with the angle brackets ('<', '>') meant to indicate a variable that is filled in when the UI is rendered at run-time. The Description field contains "Non-functional title; scroll bar does not reach the Title, but starts below it." These brief descriptions are often all that is needed to clarify how the UI works and should be developed. The step-wise documentation format enables a fast flow to describing the UI, with more time spent describing how the UI works than would otherwise be spent on how the documentation looks.

The flow and organisation of these columns covers the static information necessary to describe the user interface. The rows contain each of the widgets. B contains the following fields: "List of Items," "See B1A," "Each item has its own label; active item has a set of buttons," and "This feature is a scrolling list with a button set for the active list item. See Active Items section, below, for details." So 'B' is the entire component description, with B1 the "Active List Item,"B1A as the "Active Button," "B1B..." the "Button <X>," and so on. "B2..." is named "Non-Active List Item." The ellipsis ('...') depicts the first of a set. The component labelling system switches from letter to number to letter to show the hierarchy.

A table layout affords efficiency with documentation and rapidity with lookups to reference items. Further descriptions often follow the tables. Flow charts and navigation maps can precede the mock-ups to show a screen's relationship with other screens in the user interface, just as flow charts following the tables can depict animation sequences and detailed interactions between widgets, unique to Mobile 2.0 user interfaces.

Documenting dynamically animated user interfaces requires time-based descriptions, which are best depicted with flow charts. In the presentation, an animated version of the user interface is shown

adjacent to a flow chart that highlights as the UI traverses through the sequence. The list item traversal flows as follows: Start (Down button pressed), Restore base colour and original size to active row, Colourise and shade lower row, Stretch lower row and shift rows underneath one pixel at a time over one second until lower row accommodates button height plus ten pixels, Paint buttons one at a time, Colourise and shade left-most button, and Stop.

CONCLUSIONS

The format for this summary is text-only, which provides clear justification for the methodology's visual focus—the text descriptions unfortunately do not do the method justice. The strategy is to show the user interface in its idle state, with a sequential breakdown into components and then further into widgets. Animated and highly interactive features precede and follow these descriptions with flow diagrams, and multimedia animations support and clarify the method.

I'M NOT YOU

MODELLING AND CONCEPTUALIZING PERSONALIZATION IN INFORMATION ARCHITECTURE

Sat 27
14:30-15:15
THEATER

Bogo Vatovec, Germany

Bogo Vatovec has over 15 years of experience in user experience design, information architecture, project management, software engineering and knowledge engineering. He is a popular speaker and presenter at conferences in Europe, USA, Israel, England and New Zealand, a senior member of the Society for Technical Communication (STC), a recipient of the STC Distinguished Chapter Award and a manager of the STC Information Design and Architecture Special Interest Group (SIG.)

SUMMARY

Personalisation has been a marketing selling argument for years and many websites support various levels of personalisation. However, there are very few know methods and practices in the information architecture and interaction design community on how to conceptualize, model and specify personalisation behaviour when creating the site.

This case study demonstrates the experiences conceptualizing a large online social community:

- Challenges in working with an international client and several design and IT agencies.
- Methods and tools defined to specify the interaction and personalisation behaviour
- Integrating various tagging concepts like editor tagging, tag clouds and user tagging.
- A critical view at what worked and what not and what would we do different now.

PERSONALISATION – A BUZZ AND A CHALLENGE

Latest since Amazon started to define the online shopping experience, personalisation - in the broadest sense of the word - became a much discussed topic. However, it's not Amazon that brought us personalisation. It is the complexity and sheer volume of the information space. Like Amazon facing the problem of the amount of products being sold, any information portal or an application performing tasks on a larger amount of data need to find ways to reduce the complexity to the user and increase the probability that the user finds right information.

An information architect working on a project involving personalisation faces several challenges:

- In a typical project, every competency and stakeholder will have a different definition of personalisation, making discussions and decisions extremely difficult.
- The IA community doesn't really have any widely accepted methods and tools to conceptualize and model personalisation and make it transparent to the stakeholders.

- When technically implementing personalisation, technical tools span from nothing to monstrous tools with functionality and a price tag no-one really needs.
- Finally, personalisation needs to be tested. Since we are hitting a moving target, this is a complex task on its own.

PERSONALISATION – A WORD AND A MEANING

Defining what we mean by personalisation is the first critical task in the project. Several other professions and disciplines use other terms to refer to the same or similar topic: adaptive user interface, adaptive systems and computer learning.

Generally, personalisation can be classified into:

- Explicit personalisation: the user makes explicit decisions and tells us about his preferences.
- Implicit personalisation: the system makes decision based on user explicit actions, collected information about user behaviour, user environment or user interface interaction capacity (IP-TV, mobile, computer, …)

Additional classification deals with community:

- Individual personalisation: based on user decisions or behaviour. The most famous example here is content based filtering: if the user is looking at article X, he may be interest in article Y because they have certain similarity.
- Community-based personalisation: based on behaviour of users from the same community. The most famous example here is collaborative filtering: if user A is looking at article X, and user B looked at article X and also article Y, then article Y can also be of interest to user A.

In addition to such classification, another possibility is to look at the content of personalisation, that is, what is actually being personalised.

- Content: made famous by Amazon and most online ebusiness platforms. The content shown is selected based on user explicit, implicit or community preferences.
- User interface: made famous by Microsoft Office and Vista. The user interface itself is modified based on user explicit, implicit or community preferences.

Here it is worth noting additional terms like customization and individualization. Both typically refer to the explicit personalisation of the user interface. This classification – although not all comprehensive - worked well for us on most projects. Various classifications can also be combined and result in, for example, an explicit individual personalisation.

PERSONALISATION – CONCEPTUALIZING AND MODELLING

In order to conceptualize a system using personalisation, an IA needs to use various techniques and modelling tools, which also help communicate the concepts to the stakeholders and gets them to approve them.

In our practice, we found the following techniques to be very helpful:

- User profiles
- Content profiles
- Relationships and Bayesian model
- Aspect-oriented use cases
- Descriptive personalisation rules

We typically differentiate the following user profiles:

- A0: Anonymous first time visitor

- A1: Anonymous returning visitor leaving traces
- R1: Registered user (essential profile)
- R2: Registered returning user (essential and extended profile)
- RP1: Registered returning user with behaviour (essential, extended and behavioural profile)

Of course, there are also other variations possible.

For each of these profile categories it is necessary to define the attributes (data) stored. We typically also define whether this data will be used for personalisation purposes – that is, is actionable - or just stored.

Similarly, content profiles provide abstract presentation of the content object, the simplest example being the common meta tags or a tag cloud. Since we need tags to identify related content, creating a tag structure and tags taxonomy across the information domain is mandatory.

Relationships model refer to various visual presentations of relationships between objects, such as user and content profiles. At the beginning of the project, such models can be extended to cover real world objects and various user groups. Bayesian model is one form of such a relationship model and will be outlined in the presentation.

Aspect-oriented use cases is a methodology used to describe the so called cross-cutting concerns. We first define the functionality by describing the essential use case with no personalisation. This matches also the A0 user profile. Then we add personalisation using use case extensions that apply under specific conditions – personalisation rules. This proved for us to be a very effective way allowing us to add complexity step-by-step as the understanding and conceptual picture develops. It is also beneficial for other stakeholders in the process: business stakeholder can see how the solution will work without personalisation, programmers can add personalisation step by step by implementing first the essential use case and than the extensions, testers can in the same way devise their testing strategy.

Once this is done, we still need to describe the personalisation rules. They specify under what conditions something will change and/or be shown. Since we usually work in an abstract space before the actual technical tool is selected and we basically define the requirements for the tool, we use plain descriptive language that works for all stakeholders on the projects. In the aspect oriented use cases we define the conditions under which the personalisation extensions apply (extend the behaviour). The matching algorithm itself can usually be best described as a combination of text and a formula. For example, a formula defines how weight is assigned to specific content tags and a plain text describes what happens when there is a match.

In the presentation, we will show examples of various modelling tools and usages from the practice, as well as some cases of how personalisation has been implemented.

EXTENDING THE GAMING EXPERIENCE TO CONVENTIONAL UIS

Sat 27
14:30-15:15
CINEMA

John Ferrara, United States

John has worked in information architecture for 9 years, designing interfaces for websites, desktop applications, and web-based video games. He currently serves as the lead user behavior specialist in his role as a senior IA with Vanguard. Before entering the professional world, John earned a BA and an MA in communications. His graduate degree was paid in part through a fellowship coaching speech & debate, so he'll welcome contrary arguments from anyone attending his presentation. John's professional loves include search engines and quantitative log file analysis, but his heart belongs to his wife Amanda. He lives in the Philadelphia suburbs. Website at <http://worldwideintertubes.com/>.

The video game industry produces an enormous volume of highly innovative user interface experiences, but this rich source of creative thinking is largely unseen by communities dedicated to conventional

software or Web design. There is substantial overlap between these disciplines; as games are becoming more Web-like, the Web too is becoming more game-like. As gaming becomes a ubiquitous activity among a vast worldwide customer base, its direction and conventions will become not merely relevant to HCI design, but indeed impossible to ignore.

This presentation will:

- Define the game experience, first for games in general, then video games in particular.
- Look at games in vital contexts.
- Review common patterns (conventions, characteristics, and metaphors) found in games.

DEFINING THE GAME EXPERIENCE

A set of common characteristics underlie all games and define their experience. Summarizing the writings of several theorists, I've put together a concise schema to describe them:

- Static objectives: An explicit, measurable condition that all players are trying to attain.
- Environmental constraints: The physical spaces and materials that enable play.
- Formal constraints: "The rules", a set of binding boundaries around behaviors.

Video games add only one characteristic to this basic definition:

Interface-based arbitration removes the burden from human beings to distinguish win from loss and fair from foul, allowing games to be both more complex and more efficient.

This characteristic also suggests why video games are so compelling. Since the game arbitrates events in response to human behaviors, it becomes a method of operant conditioning. In the same sense as a Skinner box, games are complex, formal systems of rewards and punishments, carrots and sticks.

To do that, games must be able to offer currencies in exchange for play. These may include points on a leaderboard, magic swords and invisibility cloaks, or access to locked content. Such currencies are exceedingly cheap to produce, yet sufficient to motivate real human behavior. This is critical to understanding how game experiences can be applied to conventional UI's.

GAMES IN VITAL CONTEXTS

There's a cultural bias that games must always be symbolic in nature: inherently frivolous, with no real import beyond their own scope. This bias is reflected in Katie Salen and Eric Zimmerman's book on game design, "The Rules of Play", where they propose the concept of the Magic Circle.

They write that while game spaces fall within the domain of real life, they're also separated from it by a clear boundary. The game space creates its own reality, and players mutually agree to leave the norms of real life behind for the duration of their stay in the Magic Circle. Salen and Zimmerman go on to couple this with artificiality, reflecting the writings of earlier theorists such as Johan Huizinga in "Homo Ludens" and Roger Caillois in "Man, Play, and Games".

I agree that games create their own reality, but the prejudice that it is therefore artificial is much more a matter of convention than of necessity. For example, game shows, gambling, and the Olympics all illustrate that games need not be merely symbolic. The earnings, losses, and industry that they engender are all very real in our world.

I would instead suggest that it's better to think of the edges of the Magic Circle as permeable. While it remains a subset of broader experience, elements of real life can enter into the game space to be processed and then returned as output back into real life.

This all leads us to a critical insight: Games do not need to be (and often are not) purely artificial or symbolic activities. This in turn leads directly to the inevitable conclusion that games can solve real problems. There are several stellar examples of games that solve real-world problems:

- The IA Summit conference's trading card game facilitated social networking.
- Google Image Labeler uses a game interface to tag images for search.
- Yahoo! Answers keeps a leaderboard for the best answers to user questions.
- Fold.it awards points to players who find better ways to fold protein chains.
- TopCoder runs software development as a competition with cash prizes.

The game experience can be extended to any real-world interface where the human task can be defined using our criteria for games. Such tasks are not just game-like, but indistinguishable from games – and can benefit from the same things that make them compelling. For example:

PERSONAL FINANCE SOFTWARE

We can extend the game experience to products like Quicken and Microsoft Money by:

- Allowing the interface to arbitrate success. The user might specify the initial objective (e.g., contributing €3000 to a retirement plan in the next 6 months), while the software ensures that remains static over time and serves as the final arbiter of success.
- Giving the interface access to currencies, such as transaction control for online accounts.
- Issuing rewards when objectives are met. If the retirement account balance has gone up by €3000, the software automatically moves €100 from the user's savings into checking, with a note to enjoy a dinner out.

EDUCATION

Games are a natural fit for education. Suppose that:

- A computer issues a series of tests on the solar system. For a given number of correct answers, a monster appears onscreen for a short period of time.
- If the student clicks the monster before it escapes, that monster is "caught" and available in the student's personal zoo. Capturing more exotic monsters attracts more visitors, and generates higher revenue for the zoo.
- The interface also allows students to trade monsters, playing up their personal strengths and interests.

GAME PATTERNS

Even for activities that cannot be reinterpreted as games, there's still tremendous benefit to be gained from their study. A growing population has a built-in familiarity with game patterns, and in this section I'll review several of them and discuss their applicability to conventional UI's.

PHYSICAL PRESENCE OF THE USER

It's common that the player has some robust physical representation of "you" in a game, but in conventional UI's "you" are just a pointing finger. While the Web is like a surface that we touch, video games are environments where we're physically present. This idea has been applied beyond games; for example, Second Life is a chat room transformed by physical representation.

TEMPORAL MOTION

In a video game, the passage of time mirrors the temporal motion of the real world. Conventional software has history stacks and undo lists, but these are simply ordinal, with no sensitivity to time. With disk space now very cheap, there's no reason why websites couldn't store complete browsing

chronologies for each user, so that on return visits you could access a timeline of all of the products you've viewed or articles you've read, organized by date to assist re-finding.

ADAPTIVE EXPERIENCES

Many games afford very different experiences for different user proclivities. "Star Wars: Knights of the Old Republic" allows you to develop your character as a fighter, healer, spellcaster, or whatever you like. The experience scales to the way you prefer to play.

Website could build different user experiences for different user attributes. For example, users who submit queries to a search engine using Boolean operators and longer strings may earn points that provide a more advanced interface for limiting the results that are returned.

UNCERTAINTY

Elements of risk, luck, and randomness make games interesting by putting the outcome in doubt. Uncertainty is similarly integral to any UI experience that involves churn, like news RSS feeds. But uncertainty can furthermore be built into a user experience; for example, Woot.com posts only one item for sale per day until it sells out. Since it's uncertain whether a given day's item will be a good deal, the user runs a risk of missing out if she doesn't check the site early and often.

MICRO/MACRO READINGS

Many games have mini-maps for environments where context and detail are both important. In "Age of Empires III", a mini-map shows the broader area, objectives, and locations of all troops. On most websites we see narrower explanations of the parent context like breadcrumb trails.

HEALTH BARS

Health bars provide a simple, constant measure of scarcity in a resource. An application like Microsoft Outlook could easily calculate the amount of time you have outside of scheduled meetings, then display it constantly as a bar showing the work time you have remaining today.

TUTORIAL LEVELS

Tutorial levels expose the player to a broad set of the gameplay elements in an environment with lower stakes. These allow the player to jump into the game right away, without needing to read the manual. By contrast, tutorials have been dropped from many desktop applications, perhaps to increase the value of training for ever more complex software. While video games have moved toward greater learnability, conventional software has gone in the opposite direction.

ONLINE COLLABORATION

Video games are blazing the trail to online collaborative workspaces. "World of Warcraft" allows players to spontaneously form groups with up to 5 other people to go on collaborative dungeon crawls, that can in turn be chained into supergroups to mount raids on entire cities. All of this requires command structure and strategies that the players must bring to the game. The player community is thus a massive worldwide laboratory for researching collaborative user interfaces.

CONCLUSION

Much of this discussion is a significant departure from our status quo. However, change is unavoidable – and indeed, underway. In the boundless imagination of games, we can begin to see the shape of future interfaces. We should not be apprehensive about exploring this. Rather, we should simply continue to go where our users are.

EXPERT PERFORMANCE AND CONCEPT DESIGN

Victor Lombardi, United States

Victor works as a product and service development consultant, teaches at the Pratt Institute, and heads up Smart Experience, a school offering Internet, mobile, and software education. He helped found and served as President of the Information Architecture Institute. You can learn more about him at http://victorlombardi.com/

Sat 27
15:30-16:30
THEATER

What I'm going to talk about is expert performance in design. I think that's something that is very important to everyone at this event, that is, how do we become experts at what we do?

What I'm going to argue is that designers of digital products and services like ourselves can dramatically improve our work by generating more concepts early in our projects, and that concepts are easier to create when we use tools for collaboratively making them.

What are design concepts? They are the concept cars from Pininfarina. They are the futuristic scenes rendered by Rem Koolhaas's Office for Metropolitan Architecture. They are the Christian Lacroix designs on the runways of Paris.

In digital design, they are the devices of the future from Philips and Nokia.

Concept design is an early phase of the design process that explores far-ranging design ideas. The options are plausible, but often set aside immediate technical and situational constraints. In short, they exhibit what I call fantastic plausibility: they go beyond our present capabilities and yet seem feasible. According to classic design theory and product development process, thinking broadly about a problem and generating several conceptual designs early in the process will lead to a better solution at the end.

At one group at Apple, for each new product they create ten mock-ups. These aren't just sketches, they are pixel-perfect designs. Of these, 3 finalists are selected and refined over a matter of months. Of these, one is the winner.

And this is actually what people who study expert performance in other fields say that experts do. Whether it's playing chess or solving a physics problem, typical strategies of experts are top-down and breadth-first approaches. They explore several possible solutions first, then they go deep into solutions that hold potential.

Interestingly, several studies show that expert designers don't do this (Cross 2004). They design in a different way from what design theorists say should be the case. Some designers use a breadth-first approach, others use a depth-first approach. Reading the design research literature this is sometimes explained by saying expert designers might work differently because we have a different challenge: we are solving ill-defined problems. Winning at chess or tennis is a clearly defined task, whereas it's never entirely clear when a design is right or finished.

CONCEPT DESIGN BEYOND THE DIGITAL DESIGN INDUSTRY

But this level of uncertainty is also true of new product development (NPD) teams. In fact, their task is even more uncertain. Not only don't they know how something is going to be designed, when they begin they don't even know what that something is. And yet, if we look at the literature we find solid case studies of concept design in NPD process (for example, Keinonen 2006). Product development is a relatively mature discipline as practiced in fields such as industrial and automotive design, so there are more formal methods and tools for doing it. It would difficult to imagine Mercedes-Benz or Airbus developing a new automobile or a new aircraft without an extensive concept design stage.

Personally, I used to think concept designs were frivolous exercises in design exhibitionism. Because they often didn't solve any of the many current problems at hand, they struck me as impractical and narcissistic. And this seemed to be the unspoken opinion in the web and software design industry,

because I didn't see anyone making them. I've worked in consulting and inside companies of different industries, with international operations and with formally-trained designers, but no one was generating concepts the way industrial designers and architects did.

In 2004 I made a career switch from designing websites to more of an advisory and facilitative role that involved leading and teaching teams product and service development. I found myself in a position where developing concepts were not only helpful in getting to a working design, they were powerful communication tools for convincing company management to commit the time, staff, and money necessary to run a successful design project.

I found that design concepts are powerful artifacts for both planning and persuasion for several reasons: the primary use of design concepts is to take a broad view of the situation. A breadth-first approach helps us explore the entire space of all possible designs. As an extension of idea generation exercises like brainstorming, it generates new options at the beginning of the project when more issues can be addressed with less expense. Concepts afford a great degree of control over a project because they allow us to frame a problem in a way that can make the solution easier or more interesting. By controlling how a problem is framed, we can address new kinds of issues, including big, strategic issues we wouldn't ordinarily be given. Concepts are sexy. By using rich visualization, language, and attitude we can evoke strong emotions and thoughts from our audience.

The NPD projects I worked on involved

- interdisciplinary teams: strategy, information architecture, visual design, programming, and technical architecture, as well as marketing, sales, customer support, etc.
- co-creation with clients and consumers, including public beta tests
- complex product and service development practices that include rapid prototyping and agile development

In 2008 projects like this are not unusual. As software becomes more complex, it's increasingly rare for the lone digital designer to go into a studio and finish a project alone.

I see this as an opportunity, to bring concept design practices from the field of new product and service development to user experience design.

WHAT KIND OF TOOLS ARE THESE?

Bill Buxton showed us the how of concept design in his recent book *Sketching User Experiences*. My tools strive to be the what of concept design, to help us answer the question, 'What do we sketch?' When we convene a team of people to address a particular design goal, what is the content of our concepts? Given a blank sheet of paper, where do we begin?

I keep these tools simple; I imagine they are something you turn to shortly before a meeting to help facilitate concept generation. In my talk I will introduce a handful of them and I will post more of them online at http://smartexperience.org/conceptdesign, but I hope you'll see they are useful and simple enough that you will want to create your own.

REFERENCES

Cross, Nigel. "Expertise in Design: an overview." Design Studies, Vol. 25, No. 5, pp 427-441, 2004.

Keinonen, Turkka and Roope Takala (editors). Product Concept Design: A Review of the Conceptual Design of Products in Industry. Springer (2006).