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Pervasive Information Architectures as Architectures of Meaning for Complex Cross-channel Systems

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Workshop Outline

The aim of the workshop is to reflect on how the practice of information architecture (IA) as “*the structural design of shared information environments*” (Rosenfeld & Morville 2002) has been changing in the past few years under the influx of media convergence and ubiquitous and pervasive computing, outline how IA is uniquely positioned to help improve the design of successful user experiences and customer journeys in pervasive, cross-channel environments, move the discourse on IA towards indeterminate problem solving, and help establish a common language and grammar for both practice and research in the field.

The workshop will first introduce the grounding concepts of classical IA, the shift from classical IA to pervasive information architecture (PIA) (Resmini & Rosati 2011), and how this shift ties into the general ideas of convergence, cross-media (Jenkins 2006), and systems thinking (Norman 2009).

Information architecture has always been primarily concerned with sense-making (Wurman 1997). Traditional forms of IA, although deeply concerned with the experience of the user, have resorted to defining that experience in relationship to the artifacts of the practice. For example, with web sites. But the primary artifact of IA, unlike other fields of design, is abstract: it is this “sense-making” – the arrangement and organization of the information structure that in its truest form exist primarily in the mind of the user as a conceptual model. Physical characteristics of information architectures such as navigation, labeling, search, or site maps, are akin to a sign in a way-finding system: elements that represent a whole idea, and that even when fully collected still fall short of “being” the whole idea.

Pervasive information architectures introduce an added layer of complexity: the systemic approach which spans channels redefines the base IA artifact to be designed (Resmini & Rosati 2011). *The artifact is no longer a pervasive service, nor is it merely the service touchpoints that the user will encounter on their journey through that service. The design artifact in PIA is the specific journey that users co-design for themselves, as they orientate through a service, as a process of sense-making and place-making in digital and physical space.*

The responsibility of designing sense-making from meaningful and specific user perspectives implies that the design process initiates outside of the field of practice and outside the specifics of any domain-contained approach. Hence, the practice of pervasive information architectures design is essentially structuring an approach to indeterminate problem solving for information spaces, emphasizing the sense-making approach first outlined by Wurman (1997) and hence providing consistent conceptual models that can be seamlessly translated across channels to reduce the users' cognitive overload and unfamiliarity with complex pervasive processes (Resmini & Rosati 2011).

Objectives and Dissemination

The goals of the workshop are: 1) *to reframe information architecture and its role as the enabling layer for pervasive systems where information permeates physical space and products become cross-channel services (Norman 2009); 2) to tackle established problems within the field with a multi-disciplinary perspective (Youngjin 2010) centered on indeterminate problem solving;*

3) to identify new directions of research in this specific area which might advance both the theory and practice of information architecture in pervasive information spaces; 4) to promote the shared understanding of issues, challenges and opportunities among individuals and institutions that participate in the creation of complex, pervasive digital / physical information spaces or services from a user-centered perspective.

As such, the workshop targets researchers and practitioners coming from such diverse backgrounds as architecture, information systems, design theory, library and information science, product design, interaction design, visual and information design, business and marketing, and service design, and welcomes both theoretical reflections and academic perspectives, and case study-related best practices and insights.

The proceedings of the workshop will be further disseminated as either a special issue of the Journal of Information Architecture, an open-access peer-reviewed scientific journal in the field of IA (journalofia.org), or through a specific website to be created in association with the Information Architecture Institute. All results from the workshop will be distributed according to an open access policy. Negotiations are under way to include selected parts of the workshop in either an upcoming book on information architecture for Emerald, or in Morgan Kauffman - Elsevier “Insights Series”.

If technically and logistically possible, the organizers plan to document the full length of the workshop in video.

Format of the Workshop

All participants will be required to read workshop materials beforehand, in order to have common grounds on which to articulate a meaningful and insightful conversation, and to allow for the “Stump the speaker” sections (see below).

A tentative schedule for a full-day workshop follows. Hours of the day are provided for the sake of clarity and exemplification only:

A	09:00 – 10:00	Introductions and initial framing
	10:00 – 10:30	Coffee break
B	10:30 – 11:00	Stump the speaker – 5min lightning talks
C	10:30 – 12:30	Conversation
	12:30 – 13:30	Lunch
B	13:30 – 14:00	Stump the speaker – 5min lightning talks
C	14:00 – 15:00	Conversation
	15:00 – 15:30	Coffee break

C	15:30 – 16:30	Conversation
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D	16:30 – 17:00	Conclusions and wrap-up
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Following up on experiences in previous workshops, participants will not be required to just “lecture the audience”, ie simply present their papers, but rather the organizers will provide a continuous thread for discussion in the form of a round-table conversation around the themes and questions brought forth in “Workshop Outline” and in individual contributions, and will both allow free interventions and ask participants to introduce relevant concepts and insights from their contributions whenever appropriate.

The reason for this format is the desire avoid the workshop to simply replicate the content of the individual proposal in a social context, and move the conversation one step further, foster the development of novel reflections on the themes being discussed, and allow free-flow, brainstorming-like interactions.

In detail, the workshop will be structured in loosely timed sections, providing time for an introduction to the workshop themes (A), moderated conversation (C), and 2 30-minute sessions (“Stump the speaker”, B) during which participants will be required to convey in no more than 5 minutes someone else's contribution, randomly chosen by the organizers, highlighting strengths and weaknesses. A wrap-up section (D) will conclude the workshop setting the agenda for further research and dissemination.

Ideally, the workshop will engage 10-12 active participants (plus the organizers): the relatively low number will help keep the conversation focused and allow for discussions to expand. Non-speaking attendance, appealing to researchers or practitioners who might have an interest in the discussion but no formalized contribution to bring forward at this point, is being considered. A final decision in respect to this point will partially be dependent on the logistics of the event and on the availability of an appropriate space.

Submissions

A website or webpage will be created and placed online, and will serve as the central point of attention for the workshop, both before and after the event. The website will contain information on how to proceed with a proposal, including structured instructions (if any) on topics, format, expected length of one's contribution (in time and number of words), information to be provided to the organizers, and any legal framing that might be necessary.

A call for papers will be formally announced and circulated both through the official website and mailing lists such as those provided by SIGs, the Interaction Design Association, AIGA, and IAI.

The workshop will be announced through the Information Architecture Institute Newsletter, reaching roughly 2000 members, in either December, January or February and will be publicized on the upcoming issue of the Journal of Information Architecture due late December 2011.

The workshop will be also be announced and publicized at the 13 ASIS&T IA Summit in New Orleans, Louisiana, March 2012.

Finally, the organizers will also promote the workshop and its call for papers through their own networks inside the respective institutions, partner institutions through projects (as for example EU projects), and personal social networks on platforms such as LinkedIn and Twitter.

Submissions proper will probably be handled via email, to guarantee a rapid and personal response to all submitters.

Selection of Participants

A program committee is being created consisting of both academics working in the various fields that touch upon the design of shared information spaces in pervasive environments, and practitioners working in the field of user experience and with experience in cross-channel architectures. This is because the need to bridge the two different perspectives is clearly emerging as one of the major milestones in the development of information architecture as a discipline (Hobbs Fenn & Resmini 2010, Resmini & Instone 2010).

Contributions to the workshop will go through a 2-stage process consisting of an initial blind peer-review of proposals, and a second public collective review whose goal to assure a balanced program and, if necessary, to trim down the final line-up if the number of accepted submissions exceeds the available slots or allotted time.

Precedence in this second stage will be given to assuring the workshop represents a variety of perspectives, theoretical viewpoints, disciplines, and practices. In the event of proposals which pass the peer-review stage but are not admitted to the workshop because of the necessity to fit the allotted time, further dissemination within the proceedings of the workshop will nonetheless be proposed to the authors (see *Objectives and Dissemination*).

References and Bibliography

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Organizers

The organizers are experienced teachers at the undergraduate and graduate level, and have successfully led workshops for professionals in Europe, the USA, and Africa.

Andrea Resmini holds a Master in Architecture from the Politecnico di Milano (IT) and a PhD in Legal Informatics from the Alma Mater Studiorum, University of Bologna (IT). He is currently a lecturer and a researcher at the University of Borås and the IT University of Gothenburg (SE). Andrea teaches information architecture, co-design, interaction design and game design, and his current research focuses on the design of cross-channel information architectures for co-modal transport systems. Andrea is the author of “*Pervasive Information Architecture*” for Morgan Kauffman (2011, with Luca Rosati). A leading figure in the information architecture and user experience communities, Andrea is the current President of the Information Architecture Institute. His personal website is at <http://andrearesmini.com>.

Terence Fenn is based at the Multimedia Department at the University of Johannesburg, where he is the principle lecturer in interactive and information design. His primary research area is the development of explicit approaches to teaching design thinking in design education. He is specifically interested in the role of pervasive information architecture in conceptualizing and responding to indeterminate design problems. Terence holds an undergraduate degree in Fine Art and a Master in Art and Design Education at the University of New South Wales, Australia.

Jason Hobbs is a user experience professional and an IA practitioner with more than 14 years experience working for international agencies in Africa and Europe. Jason started his own design consultancy firm JH-01 / Human Experience Design in 2005, and is currently a research affiliate and lecturer to the FADA Research Center at the University of Johannesburg. Jason is a previous advisor to the Board of Directors of the Information Architecture Institute and the founder of the SAUX Forum, an organization fostering the growth of the user experience community of practice in South Africa.