2nd Workshop on HCI and Services

Peter J Wild Institute for Manufacturing University of Cambridge pw308@cam.ac.uk

ABSTRACT

Services are considered to be one of the key areas to focus on for growth and innovation within local and global economies. Services and Service Design are emerging, crossing, and in some cases redefining disciplinary boundaries. Approaches to Service design have emerged that share HCI's commitment to working with and for people, albeit in the development of useful services, rather than IT artefacts. However, there has been little explicit interaction between the two communities. This workshop will explore HCI's actual and potential inputs to Service Design activities and vice versa, and builds on a similar event at HCI 2008.

General Terms

Design, Human Factors

Keywords

Services, Service Design, Design.

1. INTRODUCTION

As well as becoming an ever more important part of local and global economies; Services and Service Design are emerging, crossing, and in some cases redefining disciplinary boundaries. Papers have emerged in HCI venues that have explicitly examined services [e.g., 1-4]. Service has emerged as a frequent metaphor for a range of computing applications, both web based, pervasive and ubiquitous. Here researchers and practitioners often talk of services instead of applications [4, 5]. In addition Service-oriented architectures receive continued attention in Computing [e.g. 6], but research is often divorced from issues of concern to HCI.

In turn the user, value, and worth centred ethos of HCI of existing and emerging approaches, and is making its way into Service design approaches [e.g., the use of personas in 7]

Service definitions and Service design has often stressed the intangible, activity and participatory nature of service acts [8, 9]. Vargo and Lusch define Services as "the application of specialized competences (knowledge and skills), through deeds, processes, and performances for the benefit of another entity or the entity itself [9]." This definition stresses the activity based nature of services. HCI has much to offer in this area, from the foundation principles espoused by Gould and Lewis, through to

© The Author 2009. Published by the British Computer Society

approaches that provide sophisticated analysis of tasks / activities. In addition characterisation of Service such as Service as experience, Service as journey, overlap with experience oriented approaches that have emerged for analysing and designing computing [10].

In turn, many approaches to Service design either borrow, overlap or complement HCI's design focus and academic rigour [7, 11-13]. For example Parker and Heapy's [7] use of prototypes, personas, and measurement of the service experience.

However, explicit links between work on Service definition, Service Design and HCI are still emerging. There have been to few discussions on the complements and possible tensions between the areas.

2. GOALS

The following are goals of the workshop:

- to bring together researchers and practitioners to inform both research and practice into Service Design
- to continue the exploration of the relationships between HCI (and its applied manifestations such as Interaction Design, User experience) and Service Design
- to bring together people in different disciplines to discuss and address HCI issues in relation to Service Design; and Service Design issues in relation to HCI;
- to explore the wider implications of Service Design.
- to continue the building of a community of people with interests in the areas.

3. TOPIC RELEVANCE

The workshop relates to existing work and workshops on Services. Outside of HCI several major research projects and programs are undertaking research into Services in relation to products (e.g. KIM, IPAS, S4T). A recent AHRC network on service design has also been undertaken at Oxford [13]; and the IfM and IBM have developed one vision for moving services research forwards [14] and has resulted in a volume publication [13]. Cranfield University's IMRC has focussed around the Product-Service Systems concept [e.g., 15], in addition the Service Design Network [16] network is due to launch a multidisciplinary journal (Touchpoint), alongside its thriving facebook community.

The workshop also builds on the work that has attempted to look at Services issues in public services [7]; on existing general interest in HCI; existing general interest in service design [e.g. 17]; research into the definition of services [8]; and emerging paradigms for Services [9]. In addition the emergence of design consultancies focussed around services and the wider design and engineering communities growing interest in the topic [e.g. 15]. The workshop will build on the success of the 1st workshop held at HCI 2008 in Liverpool. This workshop brought together a small amiable, and focussed group of people

4. Topics

The workshop aims to include rather than exclude. Possible (contradictory) topics include:

- Do HCI approaches shed new light on definitions of service?
- Reports of experiences applying HCI approaches (e.g. Personas) to the design of services.
- Reports of experiences using Services Marketing (e.g. Blueprinting) approaches in HCI contexts.
- Service Quality (e.g. SERVQUAL) in relation to Usability / User Experience measures.
- Conflicts and complements between Service as Experience and 'harder' measures of Service quality.
- Adaptation of existing perspectives to the analysis and design of Services (e.g., task analysis, Activity Theory, Distributed Cognition)
- Why Services mean that existing perspectives can no longer apply.
- From Service to e-Service and back again.
- Educational perspectives.
- Participatory approaches throughout the HCI lifecycle
- The intersection between theoretical accounts of Participatory approaches and Value Co-Creation and Co-Production

5. WORKSHOP STRUCTURE

Participants will be invited to submit a 4 - 6 page position paper on their work, along with a candidate service for additional activities.

The morning session will be given over to the presentation and discussion of these papers.

The afternoon session will be split between analysis / design of two service examples using constructs explored in the morning.

There is also the possibility to run the workshop around the local Cambridge Service Systems Forum; this is a event that includes a range of local and national speakers within the service systems area.

In addition, there will be a workshop site linked into the main conference site that will remain active as a resource for the community.

6. PARTICIPANTS

Participants would be expected from industry and academia, invites to those in the Service Design community would also be made.

7. FUTURE WORK

The organiser has organised a number of workshops at HCI and CHI as well as additional locally organised workshops; and has brought one of these workshops out as a special issue [18], with another in progress.

At the first such workshop it was agreed that the area was still to immature to warrant a special issue. In the intervening time period it is hoped that the work has matured and investigations into a suitable venue for such an issue.

References

[1.] Blomberg, J. and S. Evenson, *Service innovation and design*, in *CHI '06 extended abstracts on Human factors in computing systems*. 2006, ACM Press: Montreal. p. 28-31.

[2.] Kim, H.-W., H.C. Chan, and Y.P. Chan, *A balanced thinking-feelings model of information systems continuance*. International Journal of Human-Computer Studies, 2007. **65**(6): p. 511-525.

[3.] Nivala, A.-M., L. Tiina Sarjakoski, and T. Sarjakoski, *Usability methods' familiarity among map application developers*. International Journal of Human-Computer Studies, 2007. **65**(9): p. 784-795.

[4.] Garzonis, S. and E. O'Neill, Factors Contributing to Low Usage of Mobile Data Services: User Requirements, Service Discovery and Usability, in Proceedings of the HCI'06 Conference on People and Computers XX. 2006. p. 221-236.

[5.] Wang, Y.-S., H.-H. Lin, and P. Luarn, *Predicting consumer intention to use mobile service*. Information Systems Journal, 2006. **16**(2): p. 157-179.

[6.] Papazoglou, M. and W.-J. van den Heuvel, *Service oriented architectures*. The VLDB Journal, 2007. **16**(3): p. 389-415.

[7.] Parker, S. and J. Heapy, *The Journey to the Interface*. 2006, DEMOS: London.

[8.] Lovelock, C.H. and E. Gummesson, *Whither Services Marketing*? Journal of Service Research, 2004. **7**(1): p. 20-41.

[9.] Vargo, S.L. and R.F. Lusch, *Evolving to a new dominant logic for marketing*. Journal of Marketing, 2004. **68**(1): p. 1-17.

[10.] McCarthy, J. and P. Wright, *Technology as Experience*. 2004, Bradford MA.: MIT Press.

[11.] Nelson, H.G., *Systems Science in Service to Humanity*. Systems Research and Behavioral Science, 2002. **19**(5): p. 407-416.

[12.] Jones, M. and F. Samalionis, *From Small Ideas to Radical Service Innovation*. Design Management Review, 2008. **Winter**.

[13.] Kimbell, L. and V.P. Seidel, eds. *Designing for Services - Multidisciplinary Perspectives: Proceedings from the Exploratory Project on Designing for Services in Science and Technology-based Enterprises.* 2008, Saïd Business School, University of Oxford: Oxford

[14.] If M and IBM, *Succeeding through Service Innovation*. 2008, Cambridge: If M, University of Cambridge

[15.] Baines, T., et al., *State-of-the-art in Product Service-Systems*. Proceedings of the I MECH E Part B Journal of Engineering Manufacture, 2007. **221**(10): p. 1543-1552.

[16.] Service Design Network <u>http://www.service-design-network.org/</u>.

[17.] Shostack, L.G., *Designing Services that Deliver*. Harvard Review of Business, 1984. **62**(1): p. 133-139.

[18.] Wild, P.J., C. McMahon, A., and S.J. Culley, Introduction to Special issue on Empirical Approaches in Design Information and Knowledge. Journal of Design Research, 2007. 6(3): p. 289-294.