

Agile User Experience

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Integrating user experience (UX) design into agile working is a challenge faced by many agile teams. Although the work of UX designers and developers complements each other, the different goals, processes and working practices of developers and UX designers pose challenges in practice. The Agile Research Network has documented working practices adopted and lessons learned from the experiences of one company integrating UX designers into their Agile (DSDM) process. From this industry based study we have been able to describe a number of areas of difficulty such as: communication between developers and UX designers, level of precision in upfront design; design documentation; user testing. Are these findings similar to those encountered by others in the field? Have others had experience of the working practices adopted or lessons learnt from our study? Are there other factors that may surface in different circumstances in different contexts? These are questions we would like to engage both our practitioner and academic colleagues in to further the research and knowledge in this area.

Agile Software Development; User Experience; Industrial Practice

1. INTRODUCTION

Agile methods, such as Scrum, XP and DSDM are growing in popularity and are being adopted widely in software projects. They provide an approach that encourages frequent delivery of working software, team working and responsiveness to business need. However, there are areas of practice where agile teams face challenges, and work is needed to understand and overcome these challenges. Integrating user experience (UX) design into agile working is one such area. Although the work of UX designers and agile developers complements each other, the different goals, processes and working practices of developers and UX designers pose challenges in practice.

UX is about designing “how the product behaves and is used in the real world ... how it works on the outside, where a person comes into contact with it and has to work with it ... every product that is used by someone has a user experience: newspapers, ketchup bottles, reclining armchairs, cardigan sweaters” (Garrett 2002). This involves producing wireframes, visual designs, interface widgets, user characterisations and performing user research and usability testing.

Adequately addressing the user perspective is critical for software system success (Abelein et al 2013), and good user experience design is fundamental to achieving this. How best to integrate user experience (UX) design into an agile project has been a concern of practitioners and researchers for many years (Constantine 2002, Sharp et al 2004, Chamberlain et al 2006, Cajander et al 2013). The main agile methods do not provide robust support for this integration, leading to several experience reports and much debate in the UX community. Several approaches to integration have been suggested including aligning processes, utilizing UX techniques alongside agile sprints, and co-location of experts. However challenges remain.

The Agile Research Network (ARN) is a collaborative network of researchers from the Open University and the University of Central Lancashire and was created in 2013 as a bridge between academia and industry. Dingsoyr et al (2008) have called for more research that has industrial impact to build a body of knowledge about agile methods that is relevant to practitioners. One of our focus areas is User Experience (UX) and Agile Software Development (ASD).

We have documented working practices adopted and lessons learned from the experiences of one company integrating UX designers into their Agile (DSDM) process (Plonka et al 2014). From this industry based study we have been able to describe a number of areas of difficulty such as:

- Communication between developers and UX designers
- Level of precision in upfront design
- Design documentation
- User testing

Are these findings similar to those encountered by others in the field? Have others had experience of the working practices adopted or lessons learnt from our study? Are there other factors that may surface in different circumstances in different contexts? These are questions we would like to engage both our practitioner and academic colleagues in to further the research and knowledge in this area.

2. WORKSHOP AIMS

The aim of this workshop is to encourage academic and industrial attendees to share their research results and first-hand experience on integrating agile development processes and UX, to contribute to:

- Understand challenges affecting agile and UX integration
- Identify and explore different practices and success factors for integrating agile and UX
- Pinpoint current issues for industrial practitioners
- Clarify future research directions for academic practitioners.

3. TOPICS

The workshop organisers will seek sponsorship from an industry-based organisation that is experienced in this area. The intention is that they will present their findings and challenges from working directly with end users and development teams. Preparation and activities prior to running the workshop will seek to elicit current challenges from other practitioners and researchers through online means. A shortlist of key topics will be created and advertised prior to the workshop to ensure relevant topics are brought forward for further analysis and debate.

4. PARTICIPANT INVOLVEMENT

The workshop is open to all interested parties whether from academic or industrial backgrounds. Participants are asked to contribute to the workshop beforehand, by contributing challenges to the Agile UX challenge wall on the ARN website www.agileresearchnetwork.org. Following a presentation from the industry partner the workshop participants will take part in break-out sessions to share experiences and discuss challenges, solutions and scenarios.

5. EXPECTED OUTCOMES

A list of challenges affecting agile and UX integration. An outline of practices and success factors identified by participants, and suggestions for further research directions.

6. PROVISIONAL WORKSHOP STRUCTURE

The proposal is for a full day workshop. The provisional structure of the day is:

09:00 Welcome

09:15 Keynote speaker to set the scene

10:30 Break-out groups to discuss a topic

12:00 Summarise and feedback

12:30 LUNCH

13:30 ARN presentation on an industry study

14:30 Break-out groups to discuss a scenario

16:00 Summarise and feedback

16:30 Final round-up

7. WORKSHOP ORGANISERS

Leonor Barroca is a Senior Lecturer in Computing at The Open University. Her research is in the Software Engineering area where she has published in international conferences and journals; she has recently been also carrying out research in the area of research skills development in distance education and open educational resources for software engineering. She has been involved with undergraduate and postgraduate teaching in software engineering.

Peggy Gregory is a Senior Lecturer in the School of Computing, Engineering and Physical Sciences at the University of Central Lancashire, UK. Her main research area is in exploring the interplay between organisational, social and ethical factors and the design and use of technology. Areas of interest are agile methods and eHealth. She is a member of the Agile Research Network -

<http://agileresearchnetwork.org/> - who aim to bridge the gap between academic research and industrial practice by undertaking empirical investigations into agile practice and disseminating findings to both practitioner and academic audiences.

Dina Salah has just completed her PhD in Agile and User Centered Design integration the University of York. She has a number of posters and papers on the topic in the International Conference on Evaluation and Assessment in Software Engineering (EASE), the International Conference on Software Engineering, the International Symposium of Empirical Software engineering, the Annual BCS HCI Conference, and the Irish HCI conference. In February 2013 she was the program chair for the workshop 'Agile and User Centered Design Integration Workshop – What Lies Beneath and What Lies Ahead (AUCDI 2013) by the University of York's Department of Computer Science.

Helen Sharp is Professor of Software Engineering at The Open University. Her research focuses on the study of professional software practice and she has been working with software practitioners since the early 1990s. She is very active in both software engineering and UX/interaction design communities and has had a long association with practitioner-related conferences. Helen is joint author of one of the leading textbooks on Interaction Design (id-book.com) now in its third edition. She is co-editor of the Voice of Evidence column for IEEE Software, and reviews for many journals and conferences. For more information see <http://mcs.open.ac.uk/hcs2>.

Katie Taylor spent many years as a self-employed consultant, working on a wide range of projects. She specialised in enabling communication between different levels of staff, especially during times of radical change. She is now Senior Lecturer and Course Leader of the UK's first MSc in Agile Software Projects within the School of Computing, Engineering & Physical Sciences at the University of Central Lancashire.

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3. REFERENCES

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