Enabling Open Innovation through Agile Development

Ken Power
Cisco Systems, Inc.
ken.power@gmail.com

Lorraine Morgan
University of Limerick
lorraine.morgan@ul.ie

Kieran Conboy
NUI, Galway
kieran.conboy@nuigalway.ie

Workshop Overview
In much the same way that XP and agile development radically changed the software development landscape, Open Innovation is transforming how organizations manage their innovation processes. In a traditional ‘closed innovation’ model all new business development processes and marketing and development of new products takes place within the boundaries of the organization. This approach is characterized by firms that invest in their own R&D, employing smart and talented people to surpass their competitors in new product and service development. Additionally, after producing a stream of new ideas and inventions, firms must thoroughly defend their intellectual property against the competition. Open innovation, on the other hand, fundamentally challenges how organizations innovate new product development ideas by extending the pool from which ideas are drawn. This model is concerned with combining internal and external ideas, as well as internal and external paths to market, to stimulate and advance the development of new products and technologies. This approach suggests that firms develop processes to ensure a flow of ideas across its boundaries because not all smart people work for the organization and there is an increasing geographical dispersion of knowledge. Although firms may not exclusively develop all the research they use, they can still profit from it. In addition, firms may acquire relevant IP and integrate it into their internal processes. Consequently, open innovation has implications for how we view ‘the customer’ in agile projects, but also presents many opportunities for agile organizations to benefit from a different type of customer engagement. However, getting innovative ideas into your organization is just one part of the problem. Many organizations still struggle with what to do with all those innovative ideas once exposed to them, and how to incorporate them into their products. Through our experience and research, however, we have found that Agile and Lean principles and practices create the right environment for Open Innovation to thrive.

The workshop is open to all XP2010 attendees and workshop attendees are invited to submit topics for discussion in advance if they desire. This can take the form of questions, position statements outlining experience with Open Innovation or innovation processes in general, problems encountered, or challenges currently faced.

Process / mechanics
• The workshop will commence with a 20-minute introduction to the workshop, including a discussion of the goals and objectives of the workshop (for both organizers and attendees), and the process for structuring the workshop.
• This will be followed by a 20-minute presentation on the principles of open innovation, for those who may be unfamiliar with these concepts.
• The next phase will involve an investigation of the attendees’ and organizers’ current experiences regarding open innovation in an agile environment. This investigation will examine practices already in place and the effectiveness of these practices in facilitating open innovation.
• We will then conduct an Open Space session, where attendees can brainstorm around potential advantages and disadvantages of open innovation in an agile environment, with an initial set of defined topics if attendees fail to generate new ideas to explore.
• The session will conclude with a 20-minute review of issues and a set of potential recommendations for extending and adapting agile practices to facilitate open innovation.

Learning outcomes
• Emerging areas in innovation
• Different types of innovation archetypes.
• Understand the challenges and barriers to identifying and incorporating ideas from external stakeholders in software development.
• Understand how agile practices can help the team identify and incorporate ideas from external stakeholders.
• Develop a set of recommendations for extending and adapting agile practices to help the team identify and incorporate ideas from external stakeholders.
• Examples of Open Innovation in action in industry.
• Shared experiences from workshop participants.

Organizer’s Experience
The workshop organizers have an ongoing collaborative relationship and are actively involved in researching agile development and innovation paradigms. A core focus of their work is bridging the academia-industry divide and finding practical applications for applying Open Innovation principles in an agile organization.

Ken works with Cisco Systems’ Voice Technology Group, and has 10+ years of hands-on agile experience in industry, in different roles with multiple organizations. He has been heavily involved in new product development, stakeholder engagement, and innovation processes. He has also run multiple workshops on a variety of agile related topics over the years.

Kieran is currently involved in numerous national and international projects examining agile and innovation, and has worked with many companies on their agile initiatives including Intel, Microsoft, Accenture, HP, and Fidelity Investments. Some of his research has been published in various leading journals and conferences (Conboy, 2009, Conboy, 2010, Conboy and Fitzgerald, 2011). Prior to joining NUI Galway, Kieran was a management consultant with Accenture, where he worked on a variety of projects across Europe and the US.

Lorraine works as a researcher with LERO at the University of Limerick and is involved in several projects examining agile and open innovation, open business models value networks and open source software. In addition, some of her research has been published in journals and conferences such as Database for Advances in Information Systems, European Conference of Information Systems (ECIS), IFIP 8.6 and 8.2 Conferences and the Open Source Systems Conference.

References
Acknowledgements

This work is supported by LERO, the Irish Software Engineering Research Centre, University of Limerick