Evolution of Scrum Transcending Business Domains and the Future of Agile Project Management

Richard J.J. Oprins, M.Sc. | XP2019, Montreal
Introduction

Richard J.J. Oprins M.Sc.

44 years

Married, no children

(we have some goats)...

Discover the world at Leiden University
Introduction

Scrum has become the defacto standard for Agile in the domain of IT.

And now it’s moving on...
Research question

“How does Agile affect domains outside of IT and their processes?”

• What methods are used?

• Which practices do organizations use?

• What are the challenges, advantages, and key success factors?
Literature - Scientific reports

- Sales
- Education
- Manufacturing
Literature - Blogs, articles, etc...

- Marketing
- Healthcare
- Finance
- Human Resource
Methodology

- Literature review: 2017
- Interviews with 18 people: 2017
- Internet search: 2017
- Coding and analyzing the results: 2018
Domains we found using Agile

- Communication
- Education
- Human Resource
- Geological Service
- Marketing
- Sales
Practices we found in the domains

- Work in iterations
- Daily Scrum / stand-up
- Sprint planning
- Retrospective
Enablers using Agile methods

- Team based
  - Multidisciplinary teams
  - Product or service orientation
  - Self-managing teams
  - Preference for co-location

- Continuous improvement
  - Development in Sprints

- Learning organization
  - Strong executive support
  - Acceptance of Agile methodology
  - Collaborative culture
  - Decentralized decision making
  - Entrepreneurial culture

- Customer involvement
  - New product or service development
  - Collaborative work
  - Creative work
  - Supplier involvement
  - Allows for flexible feedback
Future of Agile Project Management

- Management, business, and Financial
- Computer, Engineering, and Science
- Education, Legal, Community Service, Arts, and Media
- Healthcare, Practitioners, and Technical
Future of Agile Project Management

- Management, business, and Financial
- Computer, Engineering and Science
- Education, Legal, Community Service, Arts, and Media
- Healthcare, Practitioners, and Technical
Limitations

• **Bias and participant sampling**
  - Asked leadership and consultants about their perceived successes
  - Searched for participants using Google and LinkedIn

• **Reliability**
  - Only one participant per organization
  - Difficult to separate experience outside and within IT
  - Answers came from memory
Conclusion

We found...

1. Scrum is used in six domains

2. Characteristics for successful application of Scrum in non-IT environments

3. Most used Agile practices outside of IT

4. Four fields where, potentially Agile methods could be applied
Authors

• **Richard J. J. Oprins M.Sc.**
  Richard is a post academic student currently employed at the Dutch Rabobank as product owner Authentication for Online Banking and Agile coach/trainer.

• **Dr. Christoph J. Stettina**
  Christoph holds a PhD from Leiden University and is a frequent contributor to the domains of Agile management, including portfolio management, leadership, governance, contracting, and corporate entrepreneurship.

• **Helena Frijns M.Sc.**
  Helena is a PhD Student in Social Robotics currently employed at Vienna University of Technology.
Thank you