

# Towards Understanding Technical Responses to Requirements Changes in Agile Teams

Kashumi Madampe\*, Rashina Hoda\*, John Grundy\*, Paramvir Singh\*\*

\* Monash University, Australia, \*\* University of Auckland, New Zealand

## Introduction

- Agile software development aims to improve the customer's competitive advantage by implementing the principle '*welcome changing requirements, even late in development*' [1].
- Requirements engineering (RE) practices are performed in every iteration using agile RE techniques that aim to preserve the agile value '*responding to change over following a plan*' [1].
- We wonder how agile practitioners **respond to requirements changes** in the real world?
- As a part of an extensive study on exploring the most appropriate techniques to handle requirements changes in agile development, we conducted a **pilot study** to understand how agile teams respond to requirements changes.
- Our pilot study identified that agile teams **perform various practices and techniques** – which we call “technical responses” – at three stages, when *receiving, developing, and delivering* requirements changes. These responses are technical activities as opposed to social activities the team perform to try and incorporate the changes.

## This Poster Answers:

How do agile teams *technically* respond when receiving requirements changes?

## Our Approach

Grounded Theory (GT) is used in studies where social interactions and human behaviors are studied [2]. Our focus was to understand how agile teams respond to requirements changes, we determined that GT (Fig. 1) was appropriate to conduct our research.

- Participants:** 10 agile practitioners (n=8 Nz; n=2 Au)
- Participant recruitment via:** LinkedIn, Twitter, Meetups, Facebook
- Data collection:** 50-60 min. semi-structured interviews (n=7 face-to-face; n=3 Skype and Zoom) + pre-interview questionnaire
- Data analysis:** Open coding → Constant Comparison → Theory

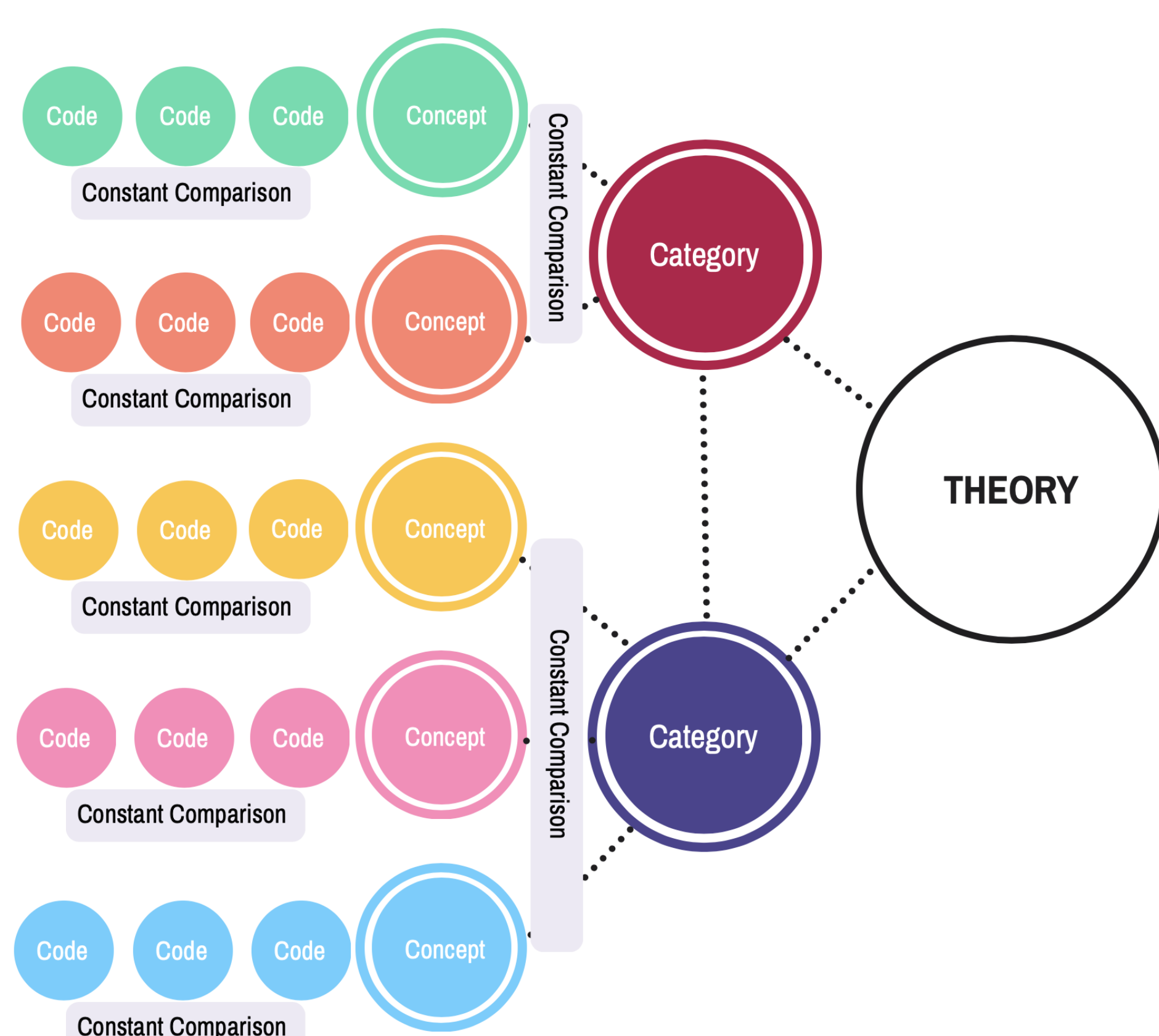


Figure 1:Grounded Theory

## Our Findings

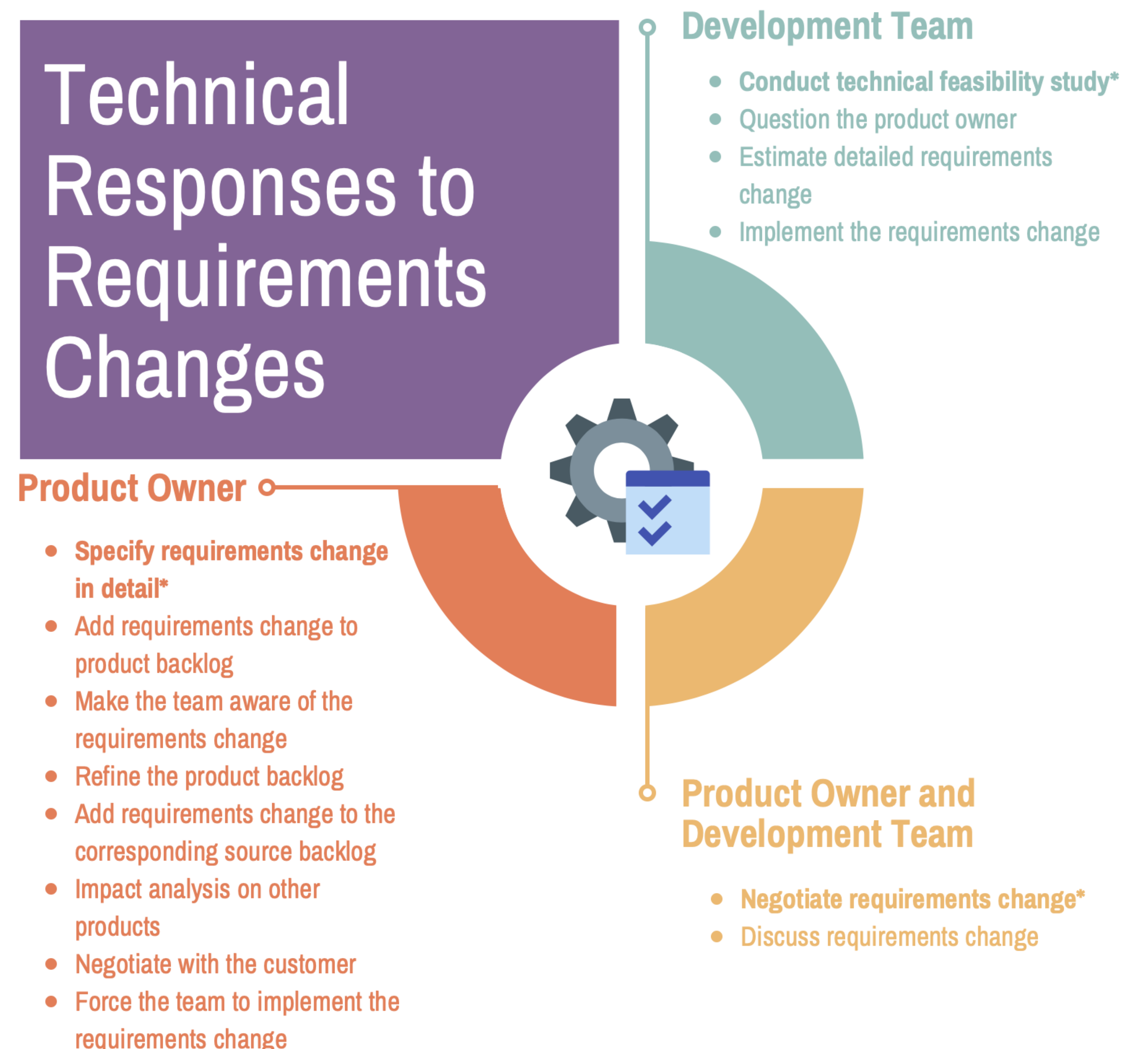


Figure 2:Technical Responses by Agile Roles when Receiving Requirements Changes (\*: most common technical response)

## Future Work

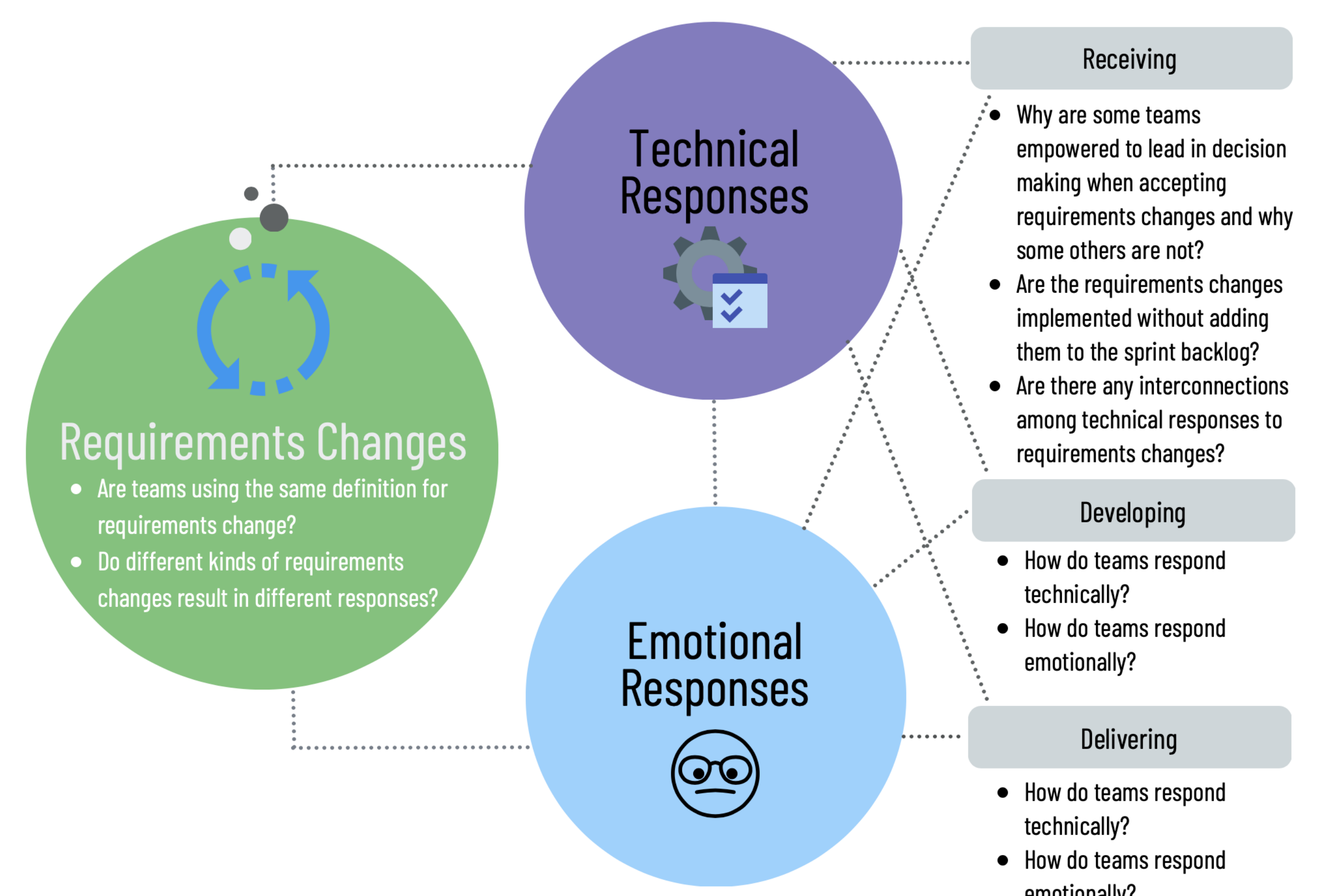


Figure 3:Future Work

## References

- Beck et al. Manifesto for Agile Software Development, 2001. URL: <https://agilemanifesto.org/>.
- Barney Glaser and Anslem Strauss. Grounded Theory: The Discovery of Grounded Theory. 1967.

## Contact Information

- kashumi.madampe@monash.edu
- <https://www.monash.edu/it/humanise-lab>