Aalto University School of Science Degree Programme in Computer Science and Engineering

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Lean software development and the effects of working with unfamiliar technology

A case study

Master's Thesis Espoo, December 1, 2015

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Supervisor: Professor Marjo Kauppinen, Aalto University

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Aalto University School of Science Degree Programme in Computer Science and Engineering

ABSTRACT OF MASTER'S THESIS

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Asiasanat:	innovaatio, palvelut, palvelusuunnittelu
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Nyckelord:	innovation, tjänster, service design
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Introduction

1.1 Background

Aim to reduce waste...

1.2 Scope

1.3 Structure of the Thesis

The thesis is split into two distinct sections. First, chapter 2 covers service design and new service creation frameworks. Second, chapter 4 covers the findings of a project involving new service creation using new and untested technology for end-users.

Litterature review

In this section I will present the existing litterature and what general guidelines or conclusions it presents. I will refer to the main concepts presented in books and compare those findings to case studies that have implemented the relevant concepts in order to find some commonalities if there are any.

I will also present the process for finding and analyzing the material I have chosen.

- How was the litterature review conducted?
 - Scholar
 - Key articles then their sources
 - Same author, look for more
 - Same conference/journal, look for more

Keywords: new service creation, digital service creation, service-dominant, design thinking, new service development

2.1 Research problem and question

This chapter will end with the research problem and questions.

The research problem is defined as follows:

What are the commonly accepted and used lean software development practices and how do they change when working with new and unfamiliar technology?

To investigate this problem three research questions have been set up in table 2.1.

Question	Litterature	Empirical
	review	study
What are the currently available best	X	
practices for lean software projects?		
Which of these best practices need to be		X
adapted when working with new tech-		
nology?		
How do these best practices need to		X
adapted?		
Which best practices remain valid?		X

Table 2.1: Research questions and their respective sections

Methods

In this section I will describe how I conducted the empirical study.

- Interviews
 - 2-3 project members
 - 2-3 customers
 - -2-3 end-users
 - 1-1.5 hours each (5-10min for end-users)
- Semi-structured interviews

Results

In this section I will present the results of the empirical study. This section contains the raw data of the conducted interviews. This section does not analyze or compare the results with the litterature.

Discussion

Here I will discuss how the findigs from my empirical work relate to the litterary review. What are the similarities and differences when comparing what the litterature says and what the interviews showed.

Conclusions

Time to wrap it up! Write down the most important findings from your work. Like the introduction, this chapter is not very long.

2 pages

Bibliography

Appendix A

Interview questions

Here goes the questions from the interviews.