

Exploring Customer Influence on the Agile Transformation of Service Providers

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Abstract—Transitioning to agile software development (ASD) practices is a long and difficult journey. Most existing literature assumes that agile transformation is solely the service provider’s task, attributing only a passive role to the customer. This study explores customer influence on the agile transformation of service providers, based on an exploratory qualitative field study at a multinational Danish software firm. Our preliminary results show that a customer’s risk tolerance and collaborative routines influence their service provider’s transition to agile teamwork practices, planning routines, and customer involvement practices. We outline a conceptual model of customer-mediated agile transformation.

Keywords—*agile development, agile transformation, agile adoption, practices, software, customer involvement, field study*

I. INTRODUCTION

In recent years, agile software development (ASD) has gained traction among many organizations, as it promises more innovative software, increased speed to market and more satisfied customers. However, agile transformation remains a challenging journey for businesses. Prior research has shown that customer involvement, which is one of the distinguishing features of ASD methodology, remains a particularly challenging feat for companies undergoing an agile transformation [1-3].

Service providers are typically required to sign fixed bid contracts in order to cater to the customer’s demand of fixed cost, scope, and time of a project. Such contracts often restrict flexibility, change, and customer involvement throughout a project [1]. Large companies in particular appear to prefer their service provider to develop software in plan-driven ways, expressing skepticism towards ASD methodologies. Additionally, physical distance often hinders customer involvement [1]. Hence, agile development teams often lack the required commitment from the customer, which complicates agile transformation [4]. Failure to involve the customer properly can compromise the agile transformation and may reverse the realized business benefit of ASD [1].

Despite the evident challenges with customer involvement, current agile transformation literature mostly assumes that the customer plays a passive role in their service provider’s efforts to become agile. However, customers rarely simply accept the premise of the ASD-methodology without resisting [1][5][6]. Understanding better how service providers could involve customers would be desirable to meet the demands of ASD methodologies.

Hence, this study explores how service providers and their customers can carry out agile transformation as a collective endeavor, rather than a solitary effort. We ask:

How do customers influence the agile transformation of their service provider?

II. RESEARCH APPROACH

As we seek to develop an in-depth understanding of agile transformation from a participant’s perspective, we conducted an exploratory qualitative study at one of Denmark’s largest IT service providers. We focus on a department currently undergoing an agile transformation.

Between January 2018 and April 2018, we conducted 13 semi-structured interviews of employees who are developing, operating and supporting an ERP-system for their pharmaceutical customer. We applied appreciative interviewing techniques to prompt participants to seek their past experiences and discuss desirable improvements [7]. Additionally, we conducted direct observations of agile routines in practice, such as sprint planning and daily stand-ups, to remain critical towards the interviewee’s claims. We documented observations as 11 pages of field notes.

We analyze and interpret the data using open, axial and selective coding techniques [8]. This enables us to explore data in a structured fashion, facilitating the emergence of concepts, categories and their relationship [9]. Ultimately, this defines the process of theorizing which results in the conceptual model presented in this paper. Figure 1 provides an overview of our research approach and the overall analytical process.

III. PRELIMINARY RESULTS

Two main preliminary results emerge from this study:

1. As a customer’s *collaborative routines* transition from static to dynamic, a service provider’s *customer involvement practices* transition from passive to active.
2. As a customer’s *risk tolerance* increases, a service provider’s *teamwork practices* transition from managed to self-organized and *planning routines* transition from fixed to agile.

These preliminary results are also visualized in the conceptual model of customer-mediated agile transformation in figure 1. Building on our qualitative data set, the conceptual model shows that, if a customer has a low risk tolerance, it will be difficult for the service company to transition from ‘fixed’ to ‘agile’ planning routines and from ‘managed’ to ‘self-organized’ teamwork practices. Because of their low risk tolerance, the customer is likely to enforce incentive schemes and governance practices that brings the agile transformation to a halt and hindering self-organized teamwork practices. Additionally, low risk tolerance may hinder agile planning routines, urging the service provider to plan the development in a stage-based fashion.

Our data further shows that if the customer has ‘static’ collaborative routines, it will be difficult to transition from ‘passive’ to ‘active’ customer involvement. The nature of static collaborative routines does not accommodate for active

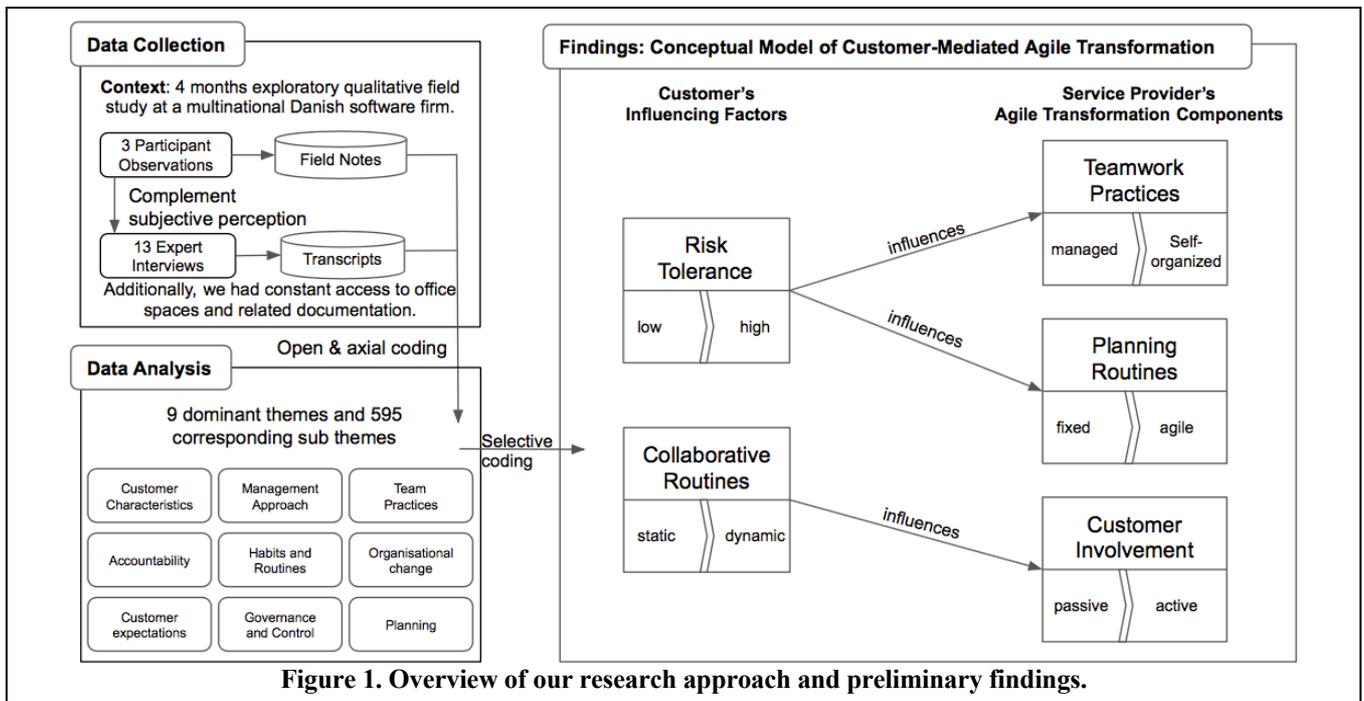


Figure 1. Overview of our research approach and preliminary findings.

customer participation, bringing agile transformation potentially to a halt.

IV. CONCLUSION AND OUTLOOK

This study explores how the customer influences the agile transformation of their service provider. Our preliminary results show that a customer's relative *risk tolerance* and *collaborative routines* influence the ability of their service provider to transition their agile components *planning routines*, *teamwork practices* and *customer involvement*.

Based on these preliminary results, we conclude that the relationship between customer and service provider in ASD is not merely characterized by one-sided dependence. Therefore, ASD methods should not put the customer in the audience seat, placing the burden of agile transformation primarily on the service provider who would then seek to perform the 'agile dance' at the customer's pleasure. Instead, agile transformation can only be successful if and when the customer takes center stage together with the service provider.

In conclusion, there are many things that an organization can do alone – but becoming agile is not one of them. Just as it proverbially "takes two to tango", meaning that two persons or entities are inextricably related in an active manner, agile transformation is not a "one firm show". Instead, ASD methodology and those who wish to adopt it need to actively involve the customer in the journey and account for the influence of their risk tolerance and collaborative routines on teamwork, planning routines, and customer involvement.

As a next step, we plan to explore how service providers can actively involve their customers in a collective agile transformation. From a theoretical and practical perspective, such further research may help both service providers and their customers to enable collective agile transformation by increasing the customer's risk tolerance and implementing dynamic collaborative routines. It could also be interesting to include the learnings gathered from this research in a multi case study following up on this exploratory study.

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