

# Barriers to Agility in a Large Company's IT Organization

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## ABSTRACT

The ability to detect and respond to change with ease, speed, flexibility and dexterity – referred to as agility – has become a necessary ability for almost any IT organization. In fact, today's IT organizations need to deliver products and services faster and in a more agile manner than before. Despite its importance, there is a lack of research on what barriers exist towards achieving agility in IT organizations. This article explores what factors inhibit agility within an IT organization in a large company in Sweden. The data was collected using interviews, internal documents and observations. An IT organization agility dimensions framework was used to identify and contextualize the barriers to agility. The findings show that agility is as much a tactical and managerial issue as it is operational. The holistic approach of exploring barriers to agility in an IT organization fills a knowledge gap in research literature, and extends the existing body of knowledge concerning agility for IT organization.

## KEYWORDS

Agility Dimensions, Barriers, Case Study, Holistic Approach, IT Organization Agility, Large Company, Sweden

## INTRODUCTION

The contemporary dynamic business environment poses new challenges for information technology (IT) organizations' who need to be fast, nimble and flexible while still having stable operations with high control and low costs (Gerth & Rothman, 2007). The ability to detect and respond to change with ease, speed, flexibility and dexterity is referred to as agility, also called "...the dominant competitive vehicle for all organizations in an uncertain and ever-changing business environment..." (Tseng & Lin, 2011, p. 3694). Companies' are increasingly dependent on IT and the demands from the business are changing fast (Tapanainen et al., 2008). Therefore, the IT organization itself needs to operate with agility so that it can facilitate IT changes to the business in a fast and flexible manner (Tapanainen et al., 2008). The concept of agility can be applied to any type of function or organization and has gained great interest from researchers and practitioners in several different fields such as manufacturing, logistics and information systems/information technology. In a study done by Kappelman et al. (2017) agility is ranked as a top ten IT organizational management issue and is generally noted as a big concern for IT organizations in today's companies. Agility has been associated with being an especially troublesome endeavor for large enterprises (Baker, 2006; Stettina & Hörz, 2015; Kappelman et al., 2017). While prior research within the IS field has focused on

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agility in many different ways, agility in terms of software development and IT infrastructure have gained the most attention (Salmela et al., 2015). Moreover, the research on agility within IT and how IT organizations can attain agility is often isolated to a certain sub-area of IS (i.e., software development) (Salmela et al., 2015). Hence, the growth of knowledge in scientific research about agility is characterized as being in silos (DeSouza, 2007; Salmela et al., 2015). The siloes research enables detailed exploration in specific areas of the IT organization but leaves a lack of research taking a holistic view of agility within IT organizations, where the concept is studied in an integrated and holistic manner (DeSouza, 2007; Salmela et al., 2015). Therefore, we argue that there is a gap in prior research on agility that considers all constituents of the IT organization. This gap, and need for a holistic understanding of IT organizational agility, has been highlighted by for example Nurdiani et al. (2014) and Salmela et al. (2015). Thus, IT organization agility need an empirical and holistic exploration to aid further research in this area in order to provide a more comprehensive view of agility within IT organizations in the future.

For organizations in general, and IT organizations in specific, it can be concluded that agility is a challenging endeavor (Gallagher & Worrell, 2007; Tseng & Lin, 2011; Kappelman et al., 2017). Despite its importance, and the abundance of research on agility in isolated IT/IS areas, we noticed that it is not well elaborated how IT organization agility can be achieved (Salmela et al., 2015), nor is it well established what barriers there exist towards achieving department wide agility in an IT organization. Current empirical research is to a large extent framed around technologies and software development methods (Salmela et al., 2015). Thus, there is a need for empirical research that in a holistic manner identifies and contextualizes barriers to achieving agility for IT organizations. Such research would contextualize, clarify and add value to the existing body of knowledge in the different sub-areas of agility in IS/IT research, and also further build upon existing research having a holistic view of agility as initiated by Tapanainen et al. (2008). To address the gap in research on agility this study aims to empirically explore the following question: What are the barriers to agility for a large company's IT organization? To identify the factors that inhibit agility we have conducted a case study in a large company's IT organization (ITABC). ITABC has more than 200 employees and serve more than 12000 end users within the company. The findings of this research will bring empirically based knowledge around agility, by identifying and contextualizing the barriers to agility in a large company's IT organization and shed light on the increasingly important "agility challenge" posing today's IT organizations.

## **RESEARCH BACKGROUND**

### **IT Organization and Agility**

IT plays an important role in enabling agility within an entire enterprise (Overby et al., 2006). It has been described as a double-edged sword that can be both an enabler and disabler of overall agility within any company or organization. Therefore, agility in the internal IT organization within a company is an important factor in the overall agility of the company (De Michelis et al., 1998; Tapanainen et al., 2008). In this research, the IT organization is treated as a sub-unit (function/department) within the overall organization. We share the view of Patten (2004) who describes the conventional IT organization as a service-based internal organization that manages the information technology infrastructure, information systems, and related products and services. Furthermore, the customers of the delivered products and services of the IT organization are usually the other sub-units and employees in all other departments within the firm (Patten, 2004).

Previous IS research addressing agility can be categorized as having three broad focuses, being either focused on (1) the technology's contribution to enterprise agility, (2) the agility of the technology itself, or (3) on agility for internal IT organizations inside a company/organization. In this study, we focus on the latter one – agility for internal IT organizations – which merely is an organisational concept

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