Towards a Strategic Process Model of Governance for Agile IT Implementation: A Healthcare Information Technology Study in China

Say Yen Teoh, Business IT & Logistics, RMIT University, Melbourne, Victoria, Australia

Xi Chen¹, Institute of Information Technology and Economic Social System, School of Management, Zhejiang University, Hangzhou, China

ABSTRACT

To remain competitive in the present dynamic environment, ‘governance for agility’ has become a key solution. Past literature paid little attention to understanding how governance for agility, particularly in regard to the delivery of Information Technology (IT) implementation. Using agile organisation and IT-governance theory as lenses to analyse data from a hospital case study, a strategic process model of governance for agility is empirically derived. This model suggests that agile healthcare information technology implementation is achievable via phase-based IT-governance strategies and forms which authorise decision makers to maneuver resources strategically in a dynamic environment. Theoretically, this study contributes to the dearth of empirical understanding of IT governance in the Healthcare IT literature and advances knowledge by making a conceptual distinction through introducing the use of phase-based IT-governance strategies and forms to generate agile organisational capabilities to achieve agile Healthcare IT implementation. The findings serve as a foundation for future research within the information systems (IS) discipline. Practitioners could plan an agile Healthcare IT implementation by referring to the model—a systematic roadmap for governing and strategising hospital resources and capabilities.

Keywords: Agility, Case Study, Healthcare Information Technology (IT) implementation, IT Governance, Organisational Capabilities

INTRODUCTION

To stay competitive in the contemporary business landscape that is filled with constant change of consumer expectations and growing uncertainty, there is a widespread need for agile organisations that provide solutions for managing in dynamic and changing environments (Yusuf et al., 1999). With the recent surge in environmental changes, volatile patients need for better and affordable healthcare systems, while hospitals are increasingly concerned...
with their ability to sense and response to needs (Mathiassen & Pries-Heje, 2006) with strategic IT governance. That is, the ability to specify decision rights and accountability in the sphere of different degrees of uncertainty for healthcare IT implementation (Xue et al., 2008).

Our understanding of the relationship between agile IT implementation and IT governance is limited. Most literature on the agile IT implementation to date have largely overlooked how to be agile during IT implementation (Holmqvist & Pessi, 2006). The literature on IT governance is mainly focused on conceptual concerns with less emphasis on empirical evidence of the relationships between governance strategies for agile IT implementation. For that reason this was claimed to be an important barrier to Healthcare IT development (La Pao et al., 2009) as most institutional senior managers remain ignorant (Nolan & McFarlan, 2005). Because of limited recognition within the IS discipline as to how agility could be governed and executed (Van Oosterhout et al., 2006), the present study aims to explore the question of how to structure governance for agility in IT implementation. The intended contribution of this paper is to empirically explain and validate our finds on the dynamic use of IT governance forms and strategies on the potentiality of promoting agile organisation’s capabilities for agile IT implementation.

The Zhejiang Cancer Hospital (ZCH) located in Eastern China was selected for this research because of its efficient coordination in implementing a hospital-wide IS upgrade in twelve weeks and three days. Currently, this hospital is using its full-fledged integrated Healthcare IT to treat some 100,000 patients a year. There are lessons to be found in unpacking the mystery of the relationship between governance and agility. This case study can provide actionable solutions for practitioners, as our findings shed light on governance for agility in supporting Healthcare IT implementation. This complements the existing governance and agility literature for theoretical advancement, within a more holistic perspective. An overview of the literature is presented below, followed by an outline of the case study methodology. Analysis of the findings is then presented, based on the case study. Finally, highlights of the research findings are discussed and our conclusion draws attention to the theoretical and managerial contributions of this research.

THEORETICAL BACKGROUND

Agile Organisation

The study of agile organisation has been examined in multiple fields, such as in education (Masson & Udas, 2009), business management, and enterprise architecture (Roosmalen & Hoopenbrouwers, 2008). It has been suggested that agility is obtained through control and support of governance (Roosmalen & Hoopenbrouwers, 2008), strategic sensitivity, leadership unity, and resource fluidity (Hoyt et al., 2007) in the face of rapidly changing compliance demands. The insights on agility in fields other than IT, as discussed, are interesting for IS researchers and practitioners to understand further how governance for agility may be or should be in the field of Healthcare IT.

This study adopts the agile organisation definition common in the IT arena, known for efficient and effective (Seo & La Paz, 2008) abilities in sensing and responding to needs (Wèll et al., 2002). Sensing is regarded as the intellectual ability to find appropriate things upon which to act. Responding refers to the physical ability to act (Dove, 2001) in such a way that accommodating IT implementation may entail the re-alignment of resources, processes, and (or) organisational objectives (Seo & La Paz, 2008; Pan et al., 2008). In IT, when change is detected, an agile organisation reacts with a capability to adapt with a nimble, quick succession of decisions in response; it is ready for adaptation to expected and unexpected change events in the environment (Mathiassen & Pries-Heje, 2006).

How organisations can successfully survive and prosper in an unpredictable, dynamic, and ever-changing environment has been a prevail-
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