Chapter 67 The Impact of Cloud–Based Digital Transformation on IT Service Providers: Evidence From Focus Groups

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ABSTRACT

Cloud-based digital transformation is having a profound impact on new and incumbent information technology service providers. In transitioning from traditional to cloud-based service provision, some IT service providers are experiencing substantial difficulties in realizing effective business models. Taking the perspective of 20 large business model mature and small and medium enterprise born-on-the-cloud multinational IT service providers, this focus group study contributes to the dearth of research examining the broader impact of cloud computing on IT service providers' business model. The study provides two core insights. First, using the STOF business model framework, the paper provides a vivid contextual understanding of the nuanced impact of cloud computing along four core business model domains: service, technological, organisational and financial. Second, the study identifies a number of salient challenges which are impacting IT service providers' efforts to effectively leverage the benefits of cloud-based digital transformation.

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1. INTRODUCTION

"It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change..." (Megginson, 1963, p. 4). This quote rings no truer than in the current information technology landscape. A landscape where new and incumbent IT organizations are attempting to leverage the benefits of digital technologies such as the internet of things, 3D printing, big data, augmented and virtual reality and so on. Cloud computing technologies continue to become mainstream from an adopter and provision perspectives. The Forrester consulting group predict that cloud computing will continue to experience rapid growth with market revenues surpassing \$240 billion by 2020 (Bartels et al., 2014). As a transformative technology and a significant paradigm shift, cloud technologies not only impact "...every aspect of our lives, be it working, shopping, or watching movies...[but they will] continue to revolutionize the ways we store, process, and use information, creating a wealth of possibilities for individuals, teams, organizations, and societies..." (Benlian, Kettinger, Sunyaev, and Winkler, 2016, p.1). However, while there is a health body of research which has examined the impact of cloudbased digital transformation from an adopter perspective, the manner with which IT service providers are deriving value from cloud-based digital transformation is under researched. This is significant as there is evidence to suggest that these organizations are experiencing substantial difficulties as a result of provisioning cloud technologies (e.g. Clohessy, Acton and Morgan, 2016; Winkler, Benlian, Piper, Hirsch, 2014; Khanagha Volberda, and Oshri, 2014). Whereby, "...the cloud is the latest example of Schumpeterian creative destruction: creating wealth for those who exploit it and leading to the demise of those that don't..." (Weinman, 2012, p. 4). Thus, this research is motivated by the following factors. First, digital transformation is concerned with the changes digital technologies can bring about in a company's business model, which result in "...modifications to organizational structures, processes and skills sets that are necessary to cope and exploit new technologies..." (Hess, Benlian and Wiesböck, 2016, p. 2). Extant research argues that in order to ensure the long-term business viability and sustainability of the computing paradigm further research is merited into how IT supply-side organizations can develop effective business models which align with the nuanced value propositions afforded by cloud computing (Chang et al., 2013; Morgan and Conboy, 2013; Weinhardt et al., 2009). Second, a number of international surveys of IT service providers have identified that a lack of business model innovation pertaining to cloud products, services and business uses in the market (CSA and ISACA, 2012) and an inability to produce compelling business cases for customers (KPMG, 2012) represented salient challenges which were currently stagnating customer uptake of cloud technologies. According to Linthicum (2012), "...the core problem is that most cloud technology providers believe what they do is innovative. To them, that means adopting the strategies of the market leaders, replicating their features and APIs (call for call), and hyping the market..." The author argues that while such a fast follower ethos may have worked effectively in the past, modern technological savvy business customers require concrete assurances pertaining to the business value of adopting a cloud computing solution (Linthicum, 2012). Extant and widely cited research has shown how early information technology service providers can encounter salient business model difficulties when attempting to incorporate a new digital technology within their organization (Christensen, 1997; Lucas and Goh, 2009; Teece, 2009). This business model metamorphosis, if not managed solicitously, is strewn with many abrogating repercussions (Christensen, 2001; Teece, 2009). The emergence of new digital technologies has created winsome opportunities for

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