

Chapter 45

Considering Middle Circles in Mobile Cloud Computing: Ethics and Risk Governance

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ABSTRACT

Mobile Cloud Computing (MCC) is increasingly asserted as the technology with the potential to change the way internet and information systems are being utilized into business enterprises. It is rapidly changing the landscape of technology, and ultimately turning the long-held promise of utility computing into a reality. Nevertheless, utilizing MCC is never a trivial task, thus calling for a special approach to get the benefits, reduce risks and control operations. The main objective of this chapter is to provide some specific guidelines to provide governance directions to align MCC into enterprise strategy and reduce risks resulted from utilizing middle circle providers; In this context, this chapter also promote and discuss some ethics that help client enterprises and MCC providers understand roles and obligations in an ever changing environment.

INTRODUCTION

Mobile Cloud Computing (MCC) among, other technologies, has emerged as a growing trend of scalable, flexible and powerful computing, capable of introducing a paradigm shift in how technology is delivering value to the business, with significant global investments, MCC is showing the power to completely revolutionize the business mindset, and promotes new working styles.

However, several risks and issues are surrounding the mobile cloud utilization, where the concept of secure surrounding perimeter has been vanished with users getting more mobile while introducing internal or external service providers considered as middle circles, in addition to the substantially considerable effects for moving company's key applications, and corporate information to be processed in multiple devices that are not owned by the client enterprise. More challenge raised because the adoption of mobile cloud computing applications might begin outside the technology organization, causing plenty of loose activities and associations.

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This chapter aims to portray a picture for risk structures associated with the MCC shifts, and to introduce governance and ethics mechanisms to orchestrate such a heterogeneous environment; aiming to maximize the value generated from MCC platforms that is not yet mature enough to provide risk-optimized benefits with a combined performance management tools, risk governance has a unique value in such situations.

The chapter insight is putting risk, governance and ethics in the heart, while providing highly valuable experience to those looking for guidance while utilizing more middle circles in their mobile cloud journey, it aims to increase navigation clarity through the fear, uncertainty and doubt, and to provide answers of questions related to improving organizational readiness for cloud adoption in a structured and systematic approach. This chapter characterizes MCC middle circles and correlate responsibilities required for service decomposition and duties segregation.

A main objective of this chapter is to define the risk governance transformations necessary to understand the concatenated middle circles that provide altogether the MCC services, projections and effects in the real-world, additionally, this chapter aims to help enterprises manage the ethics surrounding MCC transformation projects and contracts in a smooth and efficient manner.

BACKGROUND

Mobile and Cloud Computing represents the network of business platforms (Baya, Mathaisel, & Parker, 2010) as a new way to conceptualize and manage the integration between business and technology, actually there is no universal way to measure business technology alignment in literature (HBR, 2011; De Haes & Grembergen, 2009), however risk and governance are gaining more space to reshape the cloud era. Major associated dimensions can be identified in literature, these being technology, governance, risk management, social, mobile and cloud computing, all are evolving with plenty of research dedicated to each topic individually or bi-combined with another (Aven, 2008; Ackermann, 2012; Goranson, 1999). “Digital transformation occurs when the physical and digital works, join forces” (Shelton, 2013), nowadays more research are correlating these topics.

“The miniature nature and resources limitations of smart mobile devices, crave for lightweight efficient distributed application framework with minimum possible resource consumption and maximum possible throughput” (Kant & Ruchi, 2014) this promotes the move into utility model of computing where “an application can start small and grow to be enormous overnight. This democratization of computing means that any application has the potential to scale, and that even the smallest seed planted in the cloud may be a giant.” (Sosinsky, 2011). Today “The whole concept of enterprise mobility is one that concerns employees and consumers at every level.” (Campagna, Lyer, & Krishnan, 2013).

Such scenarios promote the talks about technology risks rather that information technology risks, where “cloud computing and technology transformations have reshaped significantly the business domains” (Menken & Blokdijs, 2008). Usually we used to say that technology must support business strategy, nowadays, “there are times when technology will lead us into the next realm of the previously unthinkable” (Vice, 2015). This is obvious today with “many enterprises establishing technology in the core of their operations” (Turban, Leidner, McLean & Wetherbe, 2008). That is why board members are being directly accountable for technology and requiring strong governance in analogy to their responsibility for enterprise objectives and key assets (Hardy, 2006; Shawish & Salama, 2014).

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