

Cloud Computing Lens in Strategic Alignment Model: Theory and Empirics

TREO Talk Paper

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Abstract

Although an intense research has been done about the strategic value of information technology using resource-centered view (Barney 1991; Dierickx and Cool 1989) and the contingency-based view (Fry and Smith 1987; Tosi and Slocum 1984; Oh and Pinsonneault, 2007), and leadership and management view (Wang and Ramiller, 2009; LEAD, 2014, Liu et al. 2016), research that assesses a value created by cloud computing (CC) at operational and strategic levels in organization has been scarce.

Our research aims to discuss and test the cloud-enabled mechanism of validated learning to achieve strategic alignment between business and IT. We develop the cloud computing lens of Strategic Alignment model, where strategic fit between operations and strategy levels is achieved through the moderating effect of CC. How does this happen?

We use strategic alignment framework and empirical evidence collected through survey data and text mining to examine the role that CC plays in validated learning at operations to facilitate IT and business strategy. We build on the extant Information Systems literature (Henderson and Venkatraman 1993; Hirschheim and Sabherwal, 2001; Peppard and Campbell, 2014; Coltman et al. 2015; Li et al., 2016) asking the following questions:

Does CC increase operational and strategic efficiencies in organization? If yes, then how? Can the strategic alignment framework help us to better understand information flows within organization and how strategic fit is achieved, including the role of CC in it?

We use online survey data collected from 271 European companies constitutes an important source of information at operational and strategic level in organization, a project sponsored by the European Commission within “LEAD: e-leadership skills for the SMEs” project <http://www.eskills-lead.eu/home.html>. The survey data demonstrated the role of CC in moderating the operational and strategic efficiency in organization. For purposes of content validity, semi-structured random telephone interviews with firm-matched CIOs and CEOs were conducted to evaluate the appropriateness of language and content of the measurement of efficiencies at the strategic and operational levels. More than half of the organizations who responded to our online survey come from the UK (29.7%) and Bulgaria (29.1%). Others come from Belgium (7.1%), Denmark (17.7%), Italy (4.8%), and Spain (16.3%).

In addition, we used massive online open course text data “Digital leadership: creating a value through technology” <https://www.futurelearn.com/courses/digital-leadership> with 6,482 active learners over three rounds in 2016. The results supported online survey findings and indicated that CC lens helps in understanding how strategic alignment between IT and business happens and how CC is associated with the process of improvement in operations and efficiencies.

Further research will aim to apply the CC lens to strategic alignment framework in organization of different types and within different institutional contexts.