# Linking Information Systems Capabilities for Service Quality: The Role of Customer Connection and Environmental Dynamism

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**Abstract :** The purpose of this research is to explore the link between IS capabilities, customer connection, and quality performance in the service context, with investigation of the impact of firm's stable and dynamic environments. The application of Information Systems (IS) has become a significant effect on contemporary service operations. Firms invest in IS with the presumption that they will facilitate operations processes so that their performance will improve. Yet, IS resources by themselves are not sufficiently 'unique' and thus, it would be more useful and theoretically relevant to focus on the processes they affect. One such organisational process, which has attracted a lot of research attention by supply chain management scholars, is the integration of customer connection, where IS-enabled customer connection enhances communication and contact processes, and with such customer resources integration comes greater success for the firm in its abilities to develop a good understanding of customer needs and set accurate customer. Nevertheless, prior studies on IS capabilities have focused on either one specific type of technology or operationalised it as a highly aggregated concept. Moreover, although conceptual frameworks have been identified to show customer integration is valuable in service provision, there is much to learn about the practices of integrating customer resources. In this research, IS capabilities have been broken down into three dimensions based on the framework of Wade and Hulland: IT for supply chain activities (ITSCA), flexible IT infrastructure (ITINF), and IT operations shared knowledge (ITOSK); and focus on their impact on operational performance of firms in services. With this background, this paper addresses the following questions: -How do IS capabilities affect the integration of customer connection and service quality? -What is the relationship between environmental dynamism and the relationship of customer connection and service quality? A survey of 156 service establishments was conducted, and the data analysed to determine the role of customer connection in mediating the effects of IS capabilities on firms' service quality. Confirmatory factor analysis was used to check convergent validity. There is a good model fit for the structural model. Moderating effect of environmental dynamism on the relationship of customer connection and service quality is analysed. Results show that ITSCA, ITINF, and ITOSK have a positive influence on the degree of the integration of customer connection. In addition, customer connection positively related to service quality; this relationship is further emphasised when firms work in a dynamic environment. This research takes a step towards quelling concerns about the business value of IS, contributing to the development and validation of the measurement of IS capabilities in the service operations context. Additionally, it adds to the emerging body of literature linking customer connection to the operational performance of service firms. Managers of service firms should consider the strength of the mediating role of customer connection when investing in IT-related technologies and policies. Particularly, service firms developing IS capabilities should simultaneously implement processes that encourage supply chain integration.

**Keywords :** customer connection, environmental dynamism, information systems capabilities, service quality, service supply chain

**Conference Title :** ICITOM 2020 : International Conference on Information Technology and Operations Management
**Conference Location :** Tokyo, Japan
**Conference Dates :** June 11-12, 2020