GUEST EDITORIAL PREFACE

Special Issue on Service Science: **Lean Outsourcing Analytics**

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In response to the growing importance placed on understanding service complexities, the field of 'Service Science' has emerged to guide the effective design, implementation, and management of service systems. However, although Service Science calls for more theoretical focus on understanding complex service systems, few efforts have surfaced which apply a new theoretical lens on understanding the underlying trajectories of organizational capability dynamics within a service system. Lean outsourcing has become a very important topic across modern management which focuses on exchanging service capabilities between parties. It is largely concerned with the contracting out of an internal business operation or process to a third party organization. However, managers are often faced with decisions on sourcing new service capabilities which offers higher value and efficiencies than staffing it internally. Therefore, it is crucial that managers have some analytical insights on how newfound capabilities impact on organizational performance. The concept of lean outsourcing analytics is described here as the creation of value through the efficient use of resources by contracting out a business process to a third-party and assessing its impact on the

service system by identifying patterns using data analysis techniques. Thus, much of the focus is often on the relationships which support and sustain a service network.

The main objective of this Special Section is to advance our understanding on Service Science through the exploration of different models, methods, processes, and principles in modelling lean outsourcing practices. This special issue places emphasis on building analytics in lean outsourcing environments. Across service networks, there is a growing need to examine the relationship between dynamic capabilities and organizational performance with emphasis on understanding the value co-creation process between trading parties. This Special Section showcases developing literature in the area of Service Science and Lean Outsourcing Analytics. There are a number of different aspects of outsourcing analytics demonstrated in this Special Section ranging from analytics outsourcing, cloud computing and financial services.

The first article by Handanhal Ravinder, Ram Misra, and Haiyan Su examines issues associated with intellectual property prior to engaging in analytics outsourcing whereby a company exposes their data on internal

processes. Their study adopts an alternative approach on analytics and introduces a mathematical model to assess risk between the vendor-client interactions. The second article by Noel Carroll also offers an interesting discussion on the need to examine the outsourcing relationship and explains that trust plays an influential enabling or inhibiting role in outsourcing. The article focuses on cloud computing and discusses the need to incorporate new methods to model the dynamics of trust. The article develops, presents, and justifies the Cloud Services Trust Model to explain the dynamics of trust. The author demonstrates the need to focus on the relational structure in service value co-creation. This is demonstrated. using social network analysis (SNA) to model the trust relationships of a cloud brokerage environment. Finally, Rainer Alt, Clemens Eckert and Thomas Puschmann examine the value creation interaction between service entities with particular focus on dynamic configuration of resources and structures. They discuss how service design must be aligned with service ecologies by bridging service science and network management initiatives. The article presents a multi-dimensional framework to describe organizational aspects of network management. The design-orientated framework resulted from their interviews with managers from financial service providers.

It is my hope as a guest editor that this Special Section will stimulate further discussion and additional research in this area in Service Science and future research will include a wider range of empirical studies. It is my intent to focus on expanding the interdisciplinary view of Service Science with particular focus on introducing new approaches, stimulating debate, and bridging developments which examine the value creation relationship within service eco-systems. I believe that this Special Section offers a step towards this and offers an insight on the various perspectives on lean outsourcing analytics.

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