

1. Introduction to the special issue on managing service innovation and quality: a service ecosystem perspective

1.1 Introduction

This special issue of *The TQM Journal* is devoted to advancing scientific knowledge in the field of service ecosystems by analyzing their key features and how they function.

A total of ten manuscripts that have passed a double-blinded review process are presented in this issue. Before I describe the articles, in the next section I will explain the reason for publishing a special issue on this topic.

2. Why a service ecosystem perspective in management studies?

Management studies have recently adapted the “ecosystem” idea from biology (Vargo and Lusch, 2004). The term “ecosystem” encompasses the living and non-living components which populate a natural community.

The ecosystem metaphor in management allows us to understand economies as natural communities populated by different categories of entity which are the actors of service exchanges and integrate resources to pursue value co-creation (Wieland *et al.*, 2012). The so-called “service ecosystem” includes the agents who are variously involved in the design and delivery of services and who actively participate in the value co-creation process (Lusch *et al.*, 2016). Drawing on Lusch and Vargo (2014, p. 161), the service ecosystem can be defined as a “relatively self-contained, self-adjusting system of resource-integrating actors connected by shared institutional logics and mutual value creation through service exchange.”

It comprises entities acting in a domain-playing specific roles (e.g. providers and consumers of specific offerings), service exchanges which enable collaboration and co-creation, and the infrastructures for service engineering, delivery and governance (Ruokolainen and Kutvonen, 2012).

A number of scholars argued that the time is ripe to discuss service ecosystems in a variety of business contexts (Letaifa and Reynoso, 2015). In fact, Banoun *et al.* (2016) have recently discussed the evolution of service ecosystems, identifying the most suitable domains in which the topic can be addressed. Embracing a different perspective, Deng *et al.* (2016) explored the value structure of service ecosystems. So the design and structure of service ecosystems have attracted the attention of many scholars and practitioners and seems to intrigue all (service) economies. Nevertheless, because it is such a theoretical concept there is still little known about the principal traits, performances and dynamics of service ecosystems. In fact, studies on service ecosystems together with the service-dominant (S-D) logic research advanced the knowledge on this specific issue; however, different traits still call for further investigation and refinement (Barile *et al.*, 2016). This is surprising because this perspective has been embraced to investigate different service environments including: healthcare, tourism, and sport (Koskela-Huotari *et al.*, 2016; Vargo *et al.*, 2015; Frow *et al.*, 2016; Ciasullo *et al.*, 2016). Consequently, rather than focusing on institutional and structural issues, the papers in this special issue aim to advance the understanding of the implementation and the functioning of service ecosystems. With this in mind this intriguing topic has addressed the following main but not-exhaustive questions:

- How can functioning service ecosystems be modeled?
- Can the performance of service ecosystems be evaluated in a multi-dimensional way?



- How can a service ecosystem improve the quality and the success of the service exchange?
- What is the role of service ecosystems in fostering individual and collective sustainability?
- Can total quality management be reconceptualized according to the service ecosystems perspective?
- What is the role of information and communications technologies (ICTs) in enabling service ecosystems' functioning?
- How do co-creation practices affect the strength of ecosystem's relationships?

3. Contents of the special issue

This special issue attempts to advance knowledge in the field of service ecosystems by better analyzing their key features and the way actors interact to co-create value according to their institutional arrangements. The original call for papers invited new research initiatives on this topic, including the social, economic, and technology perspectives on services and value creation.

I hope that this issue of *The TQM Journal* will contribute to the understanding of a service-centered perspective and systemic approach and how they can foster the viability and the sustainability of current complex ecosystems.

The articles in this issue represent interesting advances in a challenging research area, covering a stimulating diversity in research settings and methodologies.

Díaz-Méndez *et al.* (2017) embracing the service ecosystem perspective investigated the effect of student evaluation surveys on value co-creation processes occurring in higher education (HE). The authors introduced the fascinating metaphor of “service ecosystem pollution” criticizing the current literature on student evaluation based on quantitative surveys; arguing that they sub-optimize both teaching and learning thereby “polluting” the HE ecosystem. Major implications of this study emphasize how important it is for HE institutions to embrace a service ecosystem approach in order to promote and preserve the value co-creation processes which occur due to the interactions among the HE actors.

Polese *et al.* (2017) in their paper defined the ecosystem perspective according to the viable system approach (VSA) paradigm, analyzing the features of actors/systems in emerging ecosystem. The authors debated the topic of *Centro Commerciale Naturale*, defining it as an innovative business aggregation based on a cooperative and adaptive logic with respect to the changing context conditions, able to allow and foster interaction among several actors for critical resource sharing. The paper offers interesting theoretical and management insights offering a set of features useful for identifying the emergence of ecosystems in an economic sector.

Holmqvist and Diaz Ruiz (2017) debated the recent management literature aimed at investigating how firms strive to shape their business environment and level the playing field in their favor. The authors highlighted that business scholars use competing concepts such as markets, business networks, and service ecosystems. The authors addressed a possible problem in that these concepts overlap to a considerable extent. Their review of the extant literature offered a better understanding of the above-mentioned three competing concepts, emphasizing both overlaps and differences. The paper offered some challenging theoretical implications, reviewing and better understanding the somewhat competing and complimentary concepts of markets, business networks and service ecosystems, in which the authors further addressed service ecosystems research.

Barile *et al.* (2017) explored a tourism environment embracing the service ecosystem perspective with the aim of better understanding its underlying mechanisms. A literature review on service ecosystems supported the authors in critically analyzing the roles of technology and institutions in shaping a tourism service ecosystem. The findings showed that institutions can shape the usage of technology which, in turn, can enable and imply the emergence of new institutions, continually adjusting the tourism service ecosystem. The critical literature review and the case study analysis offered a deeper understanding of value co-creation processes and engagement appropriate for tourism destinations, highlighting the role of institutions and technology in assisting actors in integrating resources and exchanging services.

Drawing on a real-world experience as an illustrative example, Baccarani and Cassia (2017) developed a conceptual framework to evaluate the performance of service ecosystems, taking the customer as the focal actor. The study pointed out that the well-being of the customer should be evaluated by considering the outcomes of the interlocking service ecosystems he/she simultaneously participates in. In particular, analyzing interlocked service ecosystems, the authors demonstrated that high levels of well-being within each single ecosystem may not necessarily denote high levels of well-being for the focal actor. Therefore, the paper advances the extant knowledge on the evaluation of the performance of service ecosystems by considering the complex relationships between the ecosystem and the customer's well-being.

Palumbo *et al.* (2017) proposed a fully fledged ecosystem interpretation of the functioning of a healthcare system. The authors identified the different actors who populate the micro, meso, macro, and mega levels of a health service ecosystem identifying several bridges which link the ecosystem levels. The paper approaches the health ecosystem by adopting two interesting metaphors which depict actors as the bones of the ecosystem and inter-actor links and inter-level bridges as the muscles which allow the ecosystem to function. Their findings show that the ecosystem view is able to capture the complexity and the dynamism that characterize the healthcare service system.

Simone *et al.* (2017) approached peer production (P2P) as an ecosystem for value co-creation and in this way they fostered a better understanding of this emergent model of production. Embracing the economics of organization perspective, the paper focuses on the P2P approach for value co-creation which provides outputs open to continuous improvement due to distributed technologies, cognitive slack and the search for quality. Moreover, the authors pointed out the efficient dimension of P2P and developed an original framework for the net benefit analysis of economies and (hidden) diseconomies related to the P2P value co-creation. The proposed analytical framework shed light on the need to deepen the concept of value co-creation in terms of net benefits which include the costs of relationships and coordination and control, and to not merely consider its positive benefits.

Embracing the service ecosystem perspective, Longo and Giaccone (2017) offered a re-interpretation of innovation hubs. Their study combined S-D logic and agency theory in order to reveal strategies to avoid opportunistic behavior and foster value co-creation adopted in IBM innovation hub. The paper offered a theoretical overview on the integration between the latest theoretical developments in service science and the "classical" agency theory that fosters the achievement of innovative insights for both service and management research. Exploring the regulating mechanisms underlying value co-creation processes, the paper provided managers with suggestions on the most adequate policies for coordinating actor's interactions and promoting innovation in A2A contexts.

Hysa *et al.* (2017) analyzed the effect of loyalty programs on service quality in the Albanian healthcare industry. Investigating trust as a mediating dimension using a quantitative approach, the study offers a better understanding of the effect of customer loyalty on trust and service quality. The findings showed that loyalty programs have a

positive effect on healthcare service quality and that the use of loyalty cards can foster the strength of association between loyalty programs and healthcare service quality. The results of the analysis also demonstrated that loyalty programs work better in private than in public hospitals.

Conti (2017) debated the limits of the traditional management and organizational theories when applied to large and complex organizations. The author argued that to better explore the above-mentioned issue conversion to systems thinking is necessary. Some interesting insights arose from this study; thus, it offers interesting suggestions about the way to manage as well as advise large, complex organizations and about the research on the viability of, and conditions for, merging systems thinking and quality thinking.

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