

Value Co-Creation in the IT Service Ecosystem

Maryam Heidari, Geraldine Torrisi and Sebastian Binnewies

School of Information and Communication Technology, Griffith University, Brisbane, Queensland, Australia

Keywords: IT Value Creation, Service-Dominant Logic, Service Well-Being, Information Systems.

Abstract: Despite extensive efforts to demonstrate the capabilities of the IT service to create value, existing frameworks only partially address the complex nature of IT value creation. Most research in the IT service area focuses on individual and micro-level interactions and practices and overlooks the importance of a holistic and systematic view of understanding value co-creation. This research addresses this gap by exploring IT service value co-creation from a “service ecosystem” perspective, considering value co-creation, co-destruction and service well-being. This research-in-progress paper presents the preliminary literature review and elaborates on the study design and research setting. In the future, we will conduct an interpretive case study with a grounded theory approach to investigate how value can be co-created in a multi-level IT service ecosystem that has barely been explored.

1 INTRODUCTION

IT service is “using information technology as a means of enabling value co-creation by facilitating outcomes that customers want to achieve, without the customer having to manage specific costs and risks” (Basham, 2019). IT services are the lifeblood of modern organisations, helping to integrate people and technologies with business processes to achieve organisational goals. If effective, IT services reduce costs, boost innovation, facilitate digital transformation, and ensure that a business can survive and thrive. Buffeted by unpredictable economic and social forces, organisations are under intense pressure to deliver IT services effectively and efficiently to support their strategic objectives. (Galup et al., 2007, Cusick, 2020).

Value and value creation is central to contemporary IT service and thus pivotal to organisational success. How value and its creation is understood is important to organisations in that it guides how organisations approach and manage their IT services to maximise value. Unfortunately, value and its creation processes are complicated and, despite efforts, remain poorly understood. Value and value creation are organisations' most problematic dimensions of IT service (Cusick, 2020). Thus, empirical research is needed to help further unravel the complexities of IT service value and provide a basis for informing organisational approaches to IT

services management (Lempinen and Rajala, 2014). Thus, the work-in-progress described in the present paper aims to develop an understanding of value creation in IT services that is more holistic than existing attempts and better captures the complexities of value and value creation in IT services.

The necessity of taking a more holistic approach to value in IT services is the fundamental premise of the present research. In traditional perspectives of value analysis, tangible outputs and discrete transactions were the focal points, and value was incorporated into a product and delivered to a customer by a provider. Despite the importance of such micro perspectives on value creation, there is a strong need for adapting a broader context, such as a service ecosystem in which individuals are nested, interrelated, and interdependent (Gummesson, 2008). According to (Vargo et al., 2008), the unbalanced and one-directional view of value creation limits understanding of the actual value creation process driven by the integration and exchange of resources among multiple actors. In the broader area of service systems, researchers point out to need for more understanding of the collective and systematic aspects of value creation that could better explain the complexity and dynamism of service interactions and service delivery (Vargo et al., 2017). IT service comprises various actors such as IT users, IT service practitioners, IT decision-makers, business partners and external entities such as vendors and consultant

agencies. Among these actors, there are different levels of interactions and relationships. Hence, the focus only on the individual level analysis, such as dyadic user-service provider exchange, in explaining the value creation phenomenon is narrow. Therefore, a holistic perspective of IT service is needed to explain the interplay between and across layers of actors and their relationships (Lempinen and Rajala, 2014).

A holistic view is essential for understanding how an entire ecosystem performs and supports embedded actors in creating value. So, the theoretical foundation adopted in the reported study is that of a “service ecosystem”. The service ecosystem approach is rooted in Service-Dominant logic (S-D logic). The evolution of S-D logic underlines the importance of the “service ecosystem” approach as the main unit of analysis for the theoretical explanations (Vargo and Lusch, 2017, Akaka and Vargo, 2015). The service ecosystem consists of three levels of aggregation: micro, meso and macro. These levels embed in each other, and dynamic interactions between actors shape the ecosystem and co-create value for the whole organisation (Vargo et al., 2008). This aligns with the idea that as enterprises grow in size and complexity, the emphasis shifts from a primary focus on the micro level to a focus on the meso and the macro levels (Vargo and Lusch, 2019).

Extant discussions of service ecosystems identify the need to understand the nature of interactions and how value co-creates (Vargo et al., 2008) and co-destructs (Plé, 2017) within layers of the service ecosystem (Dam et al., 2020) and how these interactions contribute to the “well-being” of the whole ecosystem. Well-being as an important indicator of “system betterment” (Leo et al., 2019) and “shared value creation” (Frow et al., 2019) of services is a significant area of investigation for understanding complex systems status. Researchers call for more investigation of this phenomenon (Ostrom et al., 2015), especially from more holistic and systematic perspectives (Leo et al., 2019, Frow et al., 2019).

Since a preliminary literature review revealed a dearth of holistic frameworks or theories illustrating how value can be co-created in the context of IT service ecosystems and considering the explanatory nature (Gregor, 2006) of this research, a grounded theory approach was selected as a relevant methodology (Birks and Mills, 2015). The study revolves around the question: How can value co-creation be understood in a multi-level IT service ecosystem? We chose a large educational sector as the case study as understanding the dimensions of

value creation in this sector is critical from both theory and practice.

The present study contributes to the theory as follows. The research is focused on value co-creation in the context of IT service and explores the influence of value co-creation and value co-destruction (negative side of value co-creation) on service well-being and vice versa in the IT service context that is barely investigated. It also offers an ecosystem approach for understanding the dynamics of multiple actors’ interactions at the micro level of individual and dyadic interactions, the meso level of IT teams and IT department and the macro level of the focal firm and external entities that provide a holistic perspective to value co-creation in IT service.

This research-in-progress paper demonstrates the research position with the preliminary literature review. Then, we discuss the methods and research setting for the subsequent phase of our investigation.

2 UNDERSTANDING THE RESEARCH POSITION

2.1 Preliminary Literature Review

2.1.1 Service Ecosystem

Service ecosystem as one central theoretical orientation of S-D logic attracts scholars’ attention due to its potential to capture the dynamic and multidimensional structure of changing world. The network view in S-D logic is not simply a static connection of resources, people, and products but has a dynamic structure of service provision and service exchange (Barile et al., 2016) and implies a phenomenological, or experiential, view of value within tiers of actors who interact and co-create value (Vargo, 2011). A service ecosystem is defined as a ‘relatively self-contained, self-adjusting system of resource-integrating actors connected by shared institutional arrangements and mutual value creation through service exchange (Vargo and Lusch, 2016). The service ecosystem’s structure is multi-level, meaning higher-level structures emerge from lower-level interactions (Vargo, 2019). In other words, to better understanding of how value is cocreated, researchers should investigate value or determination at and from multiple levels, as well as the relationships among those levels (Chandler and Vargo, 2011). At the micro level of the service ecosystem, buyers-sellers and firms-customer interactions as service encounters (Akaka and Vargo,

2015) are central. At the meso level, the focus of analysis lifts to the triads and interactions within the focal firm. At the highest level, the macro level, the focus is on the market, society, and community. Further research is needed to understand value co-creation interactions and outcomes in service ecosystems (Akaka et al., 2012, Edvardsson et al., 2012) at various levels of aggregation (micro, meso, and macro) (Chandler and Vargo, 2011).

2.1.2 Value Co-Creation and IT Service

The Value concept emerged from economics and was analysed through cost and benefit evaluation in a dyadic (two-way) context (Porter, 1985) as “firm-derived value”. Furthermore, most prior research has viewed IT value from the perspective of a single actor like a customer (Dam et al., 2020) or a business department (Afflerbach, 2015, Buchwald et al., 2014, Kohli et al., 2008) or a single firm with the mindset that IT investment in a single entity creates value for that entity of the organisation. More recently, decisions made by multiple actors with a focus on shared resources led to the concept of value co-creation (Gobel et al., 2016, Mandrella et al., 2016, Winkler and Wulf, 2019). Most researchers agree that the next generation of IT value research should change the mindset from a one-directional and unbalanced focus on customer and business value analysis to a focus on the co-creation of value through IT (Mandrella et al., 2016). Also, the nature and process of value creation remain poorly understood (Payne et al., 2008, Vargo et al., 2017) - especially concerning the interactions between actors, levels and outcomes in service systems (Beirão et al., 2017).

In the IT service domain, scholars have called for a more holistic understanding of IT value, e.g. (Wiengarten et al., 2013, Lempinen and Rajala, 2014). Gobel et al. (2016) analysis of service and value as represented in popular ITSM frameworks and standards: ITIL, CMMI, COBIT and ISO/IEC 20000 showed that a traditional view of value as something delivered by service providers to customers persists, and the view of the customer as an active creator, rather than a passive recipient of value is overlooked. S-D logic emphasises that value is perceived and determined by the beneficiary (e.g., the customer) and service providers and customers are regarded as resource integrators collaborating to reach a shared goal more compatible with the modern perspective of service. Furthermore, the ecosystem of value creation embodies various levels of actors. Popular frameworks such as ITIL mainly target the micro group consisting of individuals and their

actions (Cronholm et al., 2020). Scholars highlight the need for further research to refine the frameworks to consider all stakeholders (Wilkin et al., 2013) and call for more evidence-based research to enhance IT value creation from the perspective of the service ecosystem (Cronholm et al., 2020, Vargo and Lusch, 2017). Such research could also contribute to providing a deeper understanding of desired conditions and success factors of IT-based value co-creation (Mandrella et al., 2016). It is from this background that the present research emerges.

2.1.3 Value Co-Destruction and IT Service

Value co-creation may be the main purpose of service ecosystems, but their actors could have various aims within or across the ecosystem levels. Because of that, value co-creation may sometimes lead to the co-destruction of value (Plé and Chumpitaz Cáceres, 2010), and value outcomes can vary between value co-creation and co-destruction. Co-destruction is defined as ‘an interaction process between service systems that result in a decline in at least one of the system’s wellbeing. It could happen because of many reasons, such as failed interaction process or failed resource integration that leads to a decline in wellbeing. This means that when collaborating parties fail to integrate the resources, the interaction process between the parties can fail (Plé and Chumpitaz Cáceres, 2010). Thus, value co-destruction is closely connected to value co-creation (Vargo et al., 2008).

Many questions emerge regarding the co-created or co-destroyed value and the well-being outcomes for the actors or the ecosystem across different levels. Recent research calls for more studies on value co-destruction (Mustak and Plé, 2020) to identify the antecedents and outcomes of value co-destruction (Saha et al., 2021) for the ecosystem. Plé (2017) study indicates that value co-creation and co-destruction are two sides of the same coin, and they co-exist, so both aspects should be considered when assessing value perception. Previous value co-creation research mainly focus on positive value co-creation, with a few studies on conflictual value co-creation (Laamanen and Skälén, 2015) or value co-destruction (Dam et al., 2020).

2.1.4 Service Ecosystem Well-Being

Creating positive changes for individuals and societies has emerged as a new research priority in recent years (Ostrom et al., 2015). Therefore, well-being has become the primary outcome and variable of interest in a growing number of service research studies (Tang et al., 2016).

Adopting the holistic view of service ecosystems facilitates an understanding of well-being as a characteristic of the system rather than only of the individual actors. Service system well-being (Leo et al., 2019, Laud et al., 2022) shows “the aggregate perception of actor assessments of the system in terms of the fulfilment of their collective, and by implication, the satisfaction of their individual needs”. Thus, the system-based conceptualisation represents how collective well-being emerges in a service system. Leo et al. (2019) introduced various domains of well-being among service stakeholders that emerge at different levels of the service system. They claimed that over time, these levels have bidirectional influences on each other and contribute to sustainable overall service system well-being (Leo et al., 2019).

The service ecosystem perspective focuses on contextual value as an increase in the viability or well-being of a system (Vargo et al., 2008). Thus, well-being, the same as value, can be both experiential and contextual, meaning that value and well-being could be considered differently from different viewpoints at different levels and contexts (Vargo et al., 2017). This interpretation implies that well-being has a dynamic nature and can be changed depending on the change in the well-being of an individual or social system over time (Akaka et al., 2015). Hence, significant challenges exist in identifying the characteristics of service ecosystem well-being. Because considering multiple determinants, goals, and levels and defining and exploring well-being within them is a complex issue (Bache et al., 2016).

While some scholars believe that well-being is an end state that enables the whole system to collaborate (Mazzara, 2014), others suggest that ecosystem well-being is not an end state and an optimal situation for the ecosystem. Instead, it has multiple goals across different ecosystem layers (Leo et al., 2019). Based on S-D logic, Frow et al. (2019) propose the conceptualization of service ecosystem well-being as a holistic and dynamic state that is resulting in shared value co-creation”. Researchers call for more study to better understand aspects of well-being in service ecosystems (Dam et al., 2020).

2.2 Position of the Study

In ecosystem perspective, value can be defined as an improvement in system well-being (Vargo et al., 2008), and the service well-being can result in shared value co-creation (Frow et al., 2019). Adversely, researches show that well-being emerges as the

primary outcome of the value creation process (Anderson and Ostrom, 2015). So, we conclude that there is an iterative process between value co-creation and the well-being of the service ecosystem. On the other hand, Identifying and eliminating value destruction factors in such a positive process is necessary because destructing factors negatively affect the well-being of the ecosystem (Plé, 2017).

In addition, understanding value requires an understanding of the cocreation process at each ecosystem level (Chandler and Vargo, 2011). Such an account requires the consideration of value co-creation interactions and outcomes at various levels of aggregation (micro, meso, and macro) (Strokosch and Osborne, 2020). In IT services, value co-creation happens across and within layers of people, processes, and interactions. This dynamic and continuous IT service improvement process occurs within and across layers of the IT service ecosystem. Figure 1 depicts a holistic picture of the research position, with the potential relationships between tiers of the IT service ecosystem. This is the basis for further empirical investigation of the phenomena of value co-creation.

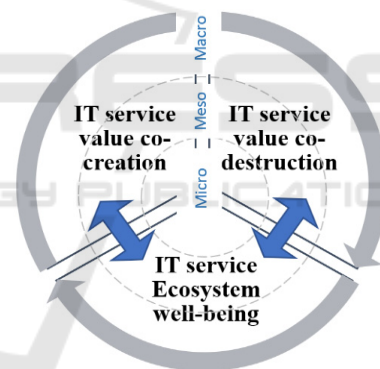


Figure 1: Position of current study.

IT value scholars call for more practical and evidence-based research to justify and enhance the value creation involving IT processes based on the modern perspective of the service ecosystem (Cronholm et al., 2020, Cronholm et al., 2017, Vargo and Lusch, 2017). From this background, current research emerges.

3 PROPOSED METHODOLOGY

The study adopted a qualitative approach based on Grounded Theory (Charmaz, 2006, Gioia et al., 2013) to gain an in-depth understanding of value co-creation in the IT service ecosystem from a multilevel

perspective. Since the main focus of grounded theory research is to propose theories that are strongly connected to the field data (Urquhart and Fernández, 2016), and the explanatory generation of theory is a desired outcome (Birks and Mills, 2015) of current research.

To enable the study of value co-creation at the different ecosystem levels, an interpretive case study approach was used to define the units of analysis (Walsham, 1995). Following this approach, a case study with embedded units of analysis was used. We employ an inductive form of reasoning by drawing conclusions based on observations. Following the grounded theory perspective, the researcher draw upon ideas from the literature and other sources to formulate the elements of the theory. This is important since the literature will be consulted in the final stages of the study (Glasser and Strauss, 1967)

3.1 Research Setting, Data Collection

It is important to examine service ecosystems in a specific context (Voss et al., 2016). For our study, we chose a higher education context as the creation of value and improving well-being are key success factors for these types of organizations. Within the selected institution taking advantage of technologies for purposes of efficiency and ensuring that technologies are 'fit for purpose' are critical strategic priorities. According to the strategy plan 2020-2025 of the case study institution, the university made a major investment of around 350 million dollars in digital infrastructure, including 20 million dollars in educational technologies such as virtual learning and digital research infrastructure to support major functions of learning and teaching, research, and engagement.

The research is set in the IT department (~ 320 workers) within a large Australian educational institution (~50,000 enrolments). The IT department has a complex structure with various internal and external stakeholders with seven main IT domains. IT foundations, IT learning and teaching, IT research, IT service centre, IT operations and IT value management. Each IT domain comprises different levels of IT directors, IT managers, IT supervisors and IT engineers who are dealing with various users and customers. As such, this empirical ground is suitable for the purpose of our study as it not only comprising of dyadic interactions between ecosystem actors on an actor-to-actor level but also represents a network of interactions and exchanges in higher levels of teamwork, within a broader IT department, with business actors and external environment of the

organization. This aligns with the fact that as enterprises grow in size and complexity, the emphasis shifts from focusing on the micro level to the meso and the macro levels (Vargo and Lusch, 2019).

The educational institution represented the case study (macro level) with an embedded IT department (meso level), which in turn has embedded individual users and IT actors (students, researchers, academics, and staff) (micro level). Figure 2 shows the case study actor2actor ecosystem. IT service in this context creates and delivers ICT and related practices and processes to facilitate learning, teaching and research for users and customers of the institution (strategy plan 2020-2025).

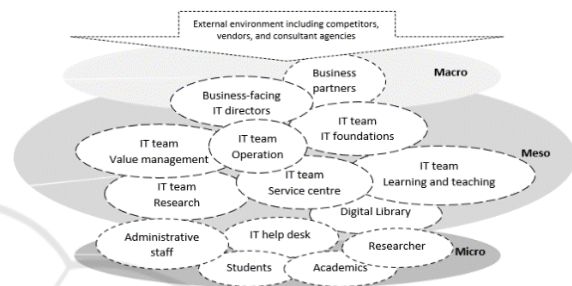


Figure 2: IT service ecosystem of the current study (actor2actor map).

The analysis of the IT service ecosystem uses the Chandler and Vargo (2011) three-level model of context. The respondents' perceptions of value creation when using IT services to interact with customers and users are represented at the micro level. The respondents' perceptions of the IT service regarding management and supervisory levels are represented at the meso level. Respondents' perception when considering IT services in dealing with business and IT direction is shown at the macro level. Additionally, the interactions between the levels and within them define and facilitate the ecosystem's constant emergence. Table 1 provides details on level definitions and their interpretations.

We completed the ethical approval process for conducting open-ended interviews and focus groups. We will randomly send the request for participation to potential candidates via email. Following the snowball sampling approach, we discover stakeholders involved in the IT service process as we go through interviews and focus groups and gradually learn about the ecosystem. With a loose study design, we begin data collection with IT directors, managers, and supervisors in the study's first phase. In the next step, we will run focus groups with users to capture their viewpoints on the phenomenon.

Table 1: IT service ecosystem levels of current research.

	Definition (Chandler and Vargo, 2011)	Definition in the IT service context	Actors and exchange in this study
Micro	Service exchange among actors as dyads	IT user-service provider dyadic exchange	Direct service Exchange between IT frontliners such as help desk serving students, staff, and researchers
Meso	Service exchange among dyads as triads	Indirect service exchange through IT teams, including engineers, supervisors, managers	Indirect Exchange between IT teams, engineers, supervisors, and managers
Macro	Service exchange among triads as ecosystems	Indirect exchange through IT directors, business partners, and external entities	The indirect exchange between IT team directors and business partners such as CFO and external consultants

4 CONCLUSION

In the widening space of increasingly connected technologies, people, and entities, it is critically important for IT value researchers to expand their scope to more holistic directions to be compatible with a dynamic and complex world. Studies show a significant gap in addressing the holistic, multi-level nature of value co-creation in IT service ecosystems. The current research guided by the main question of “How can value co-creation be understood in a multi-level IT service ecosystem?” The study aims to develop a framework for value co-creation in the IT service ecosystem. Such framework will contribute to both S-D logic and IT service value research domains by applying a multi-level perspective to the IT value co-creation process from the “service ecosystem” perspective and considering value co-destruction and well-being of the IT service ecosystem that is barely considered and investigated.

Our conceptualization changes the way we think about the value co-creation concept as a dyadic exchange between user and service provider to a holistic and multi-level phenomenon. This novel approach is especially significant for understanding the complex context of IT service that has critical priority in the strategic goals of organizations. The disaggregation of the ecosystem levels enables the investigation of value creation factors within and

across levels. This is in line with previous research stating that the understanding of service ecosystems requires a multilevel perspective, considering an interplay between micro, meso, and macro levels of the ecosystem (Chandler and Vargo, 2011). In the IT service ecosystem, interconnected levels influence and form each other as multiple actors (individuals, IT teams, IT department, business actors and external entities) engage in dynamic, interdependent interactions shaping and improving the ecosystem value creation. It could also be argued that this research will use data from only one educational institution. This focus enables an in-depth analysis of value creation which is a contextual phenomenon (Vargo et al., 2017). Studying and comparing other diverse settings may provide new insights into how the nature of the sector influence value creation at different levels. Given that value and well-being can vary over time, a longitudinal study of value creation dynamics may provide further insights.

REFERENCES

Afflerbach, P. 2015. The Business Value of IT in Light of Prospect Theory: A New Explanation for IT Paradoxes. *Business & Information Systems Engineering*, 57, 299-310.

Akaka, M. A. & Vargo, S. L. 2015. Extending the context of service: from encounters to ecosystems. *The Journal of services marketing*, 29, 453-462.

Akaka, M. A., Vargo, S. L. & Lusch, R. F. 2012. An exploration of networks in value cocreation: A service-ecosystems view. *Special issue—Toward a better understanding of the role of value in markets and marketing*. Emerald Group Publishing Limited.

Akaka, M. A., Vargo, S. L. & Schau, H. J. 2015. The context of experience. *Journal of service management*, 26, 206-223.

Anderson, L. & Ostrom, A. L. 2015. Transformative service research: advancing our knowledge about service and well-being. SAGE Publications Sage CA: Los Angeles, CA.

Bache, I., Reardon, L. & Anand, P. 2016. Wellbeing as a wicked problem: Navigating the arguments for the role of government. *Journal of Happiness Studies*, 17, 893-912.

Barile, S., Lusch, R., Reynoso, J., Saviano, M. & Spohrer, J. 2016. Systems, networks, and ecosystems in service research. *Journal of service management*, 27, 652-674.

Basham, M. 2019. Itil Foundation: Itil 4 Edition. In: Axelos Global Best Practice, T. T. S. O. O. W. L. (ed.). Norwich, UK.

Beirão, G., Patrício, L. & Fisk, R. P. 2017. Value cocreation in service ecosystems: Investigating health care at the micro, meso, and macro levels. *Journal of Service Management*.

- Birks, M. & Mills, J. 2015. *Grounded theory: A practical guide*, Sage.
- Buchwald, A., Urbach, N. & Ahlemann, F. 2014. Business value through controlled IT: Toward an integrated model of IT governance success and its impact. *Journal of Information Technology*, 29, 128-147.
- Chandler, J. D. & Vargo, S. L. 2011. Contextualization and value-in-context: How context frames exchange. *Marketing Theory*, 11, 35-49.
- Charmaz, K. 2006. *Constructing grounded theory: A practical guide through qualitative analysis*, sage.
- Cronholm, S., Göbel, H. & Åkesson, M. 2020. ITIL Compliance with Service-Dominant Logic. *E-service journal*, 11, 74-100.
- Cronholm, S., Karu, K., Göbel, H., Hearsun, P. & Hero, P. IT Service Management: The Alignment of ITIL® Practitioner Guidance with Service-Dominant Logic. The 28th Australasian Conference on Information Systems, Hobart Australia, December 4-6, 2017, 2017.
- Cusick, J. J. 2020. Business Value of ITSM. Requirement or Mirage?
- Dam, N. A. K., Le Dinh, T. & Menvielle, W. Customer Co-creation through the Lens of Service-dominant Logic: A literature Review. AMCIS, 2020.
- Edvardsson, B., Skålén, P. & Tronvoll, B. 2012. Service systems as a foundation for resource integration and value co-creation. *Special Issue—Toward a better understanding of the role of value in markets and marketing*. Emerald Group Publishing Limited.
- Frow, P., Mccoll-Kennedy, J. R., Payne, A. & Govind, R. 2019. Service ecosystem well-being: conceptualization and implications for theory and practice. *European Journal of Marketing*.
- Galup, S., Quan, J. J., Dattero, R. & Conger, S. Information technology service management: an emerging area for academic research and pedagogical development. Proceedings of the 2007 ACM SIGMIS CPR conference on Computer personnel research: The global information technology workforce, 2007. 46-52.
- Gioia, D. A., Corley, K. G. & Hamilton, A. L. 2013. Seeking qualitative rigor in inductive research: Notes on the Gioia methodology. *Organizational research methods*, 16, 15-31.
- Glasser, B. & Strauss, A. 1967. *The Discovery of Grounded Theory: Strategies for Qualitative Research*, (Reprinted 2006). *New Brunswick (USA): Aldine Transaction*.
- Gobel, H., Cronholm, S. & Hjalmarsson, A. 2016. Inscribing Service into IT Service Management.
- Gregor, S. 2006. The nature of theory in information systems. *MIS quarterly*, 611-642.
- Gummesson, E. 2008. Extending the service-dominant logic: from customer centrality to balanced centrality. *Journal of the Academy of Marketing science*, 36, 15-17.
- Kohli, R., Grover, V., Clemson University, U. S. A., College Of, W. & Mary, U. S. A. 2008. Business Value of IT: An Essay on Expanding Research Directions to Keep up with the Times. *Journal of the Association for Information Systems*, 9, 23-39.
- Laamanen, M. & Skålén, P. 2015. Collective–conflictual value co-creation: A strategic action field approach. *Marketing Theory*, 15, 381-400.
- Laud, G., Chou, C. Y. & Leo, W. W. C. 2022. Service system well-being: scale development and validation. *Journal of Service Management*, ahead-of-print.
- Lempinen, H. & Rajala, R. 2014. Exploring multi-actor value creation in IT service processes. *Journal of Information Technology*, 29, 170-185.
- Leo, W. W. C., Laud, G. & Chou, C. Y. 2019. Service system well-being: conceptualising a holistic concept. *Journal of Service Management*.
- Mandrella, M., Zander, S. & Kolbe, L. M. IT-based value co-creation: A literature review and directions for future research. 2016 49th Hawaii International Conference on System Sciences (HICSS), 2016. IEEE, 287-296.
- Mazzara, D. 2014. Future of health & Wellbeing-Key trends and business opportunities. *Accenture (April 10th). Trento*.
- Mustak, M. & Plé, L. 2020. A critical analysis of service ecosystems research: rethinking its premises to move forward. *Journal of Services Marketing*.
- Ostrom, A. L., Parasuraman, A., Bowen, D. E., Patricio, L. & Voss, C. A. 2015. Service Research Priorities in a Rapidly Changing Context. *Journal of service research : JSR*, 18, 127-159.
- Payne, A. F., Storbacka, K. & Frow, P. 2008. Managing the co-creation of value. *Journal of the academy of marketing science*, 36, 83-96.
- Plé, L. 2017. Why do we need research on value co-destruction? *Journal of Creating Value*, 3, 162-169.
- Plé, L. & Chumpitaz Cáceres, R. 2010. Not always co-creation: introducing interactional co-destruction of value in service-dominant logic. *The Journal of services marketing*, 24, 430-437.
- Porter, M. E. 1985. *Competitive advantage: creating and sustaining superior performance*, London;New York;, Free Press.
- Saha, V., Goyal, P. & Jebarajakirthy, C. 2021. Value co-creation: a review of literature and future research agenda. *Journal of Business & Industrial Marketing*.
- Strokosch, K. & Osborne, S. P. 2020. Co-experience, co-production and co-governance: an ecosystem approach to the analysis of value creation. *Policy & Politics*, 48, 425-442.
- Tang, C., Guo, L. & Gopinath, M. 2016. A social-cognitive model of consumer well-being: A longitudinal exploration of the role of the service organization. *Journal of Service Research*, 19, 307-321.
- Urquhart, C. & Fernández, W. 2016. Using grounded theory method in information systems: The researcher as blank slate and other myths. *Enacting Research Methods in Information Systems: Volume 1*. Springer.
- Vargo, S. L. 2011. From Micro to Macro: Stakeholders and Institutions. *Journal of macromarketing*, 31, 125-128.
- Vargo, S. L. 2019. service dominant logic: backward and forward. In: Stephen L. Vargo, R. F. L. (ed.) *The SAGE handbook of service dominant logic*

- Vargo, S. L., Akaka, M. A. & Vaughan, C. M. 2017. Conceptualizing Value: A Service-ecosystem View. *Journal of Creating Value*, 3, 117-124.
- Vargo, S. L. & Lusch, R. F. 2016. Institutions and axioms: an extension and update of service-dominant logic. *Journal of the Academy of marketing Science*, 44, 5-23.
- Vargo, S. L. & Lusch, R. F. 2017. Service-dominant logic 2025. *International journal of research in marketing*, 34, 46-67.
- Vargo, S. L. & Lusch, R. F. 2019. *The SAGE handbook of service-dominant logic*, Sage.
- Vargo, S. L., Maglio, P. P. & Akaka, M. A. 2008. On value and value co-creation: A service systems and service logic perspective. *European management journal*, 26, 145-152.
- Voss, C., Perks, H., Sousa, R., Witell, L. & Wunderlich, N. V. 2016. Reflections on context in service research. *Journal of Service Management*, 27, 30-36.
- Walsham, G. 1995. Interpretive case studies in IS research: nature and method. *European Journal of information systems*, 4, 74-81.
- Wiengarten, F., Humphreys, P., Cao, G. & Mchugh, M. 2013. Exploring the Important Role of Organizational Factors in IT Business Value: Taking a Contingency Perspective on the Resource-Based View. *International journal of management reviews : IJMR*, 15, 30-46.
- Wilkin, C., Campbell, J., Moore, S. & Van Grembergen, W. 2013. Co-Creating Value from IT in a Contracted Public Sector Service Environment: Perspectives on COBIT and Val IT. *The Journal of information systems*, 27, 283-306.
- Winkler, T. J. & Wulf, J. 2019. Effectiveness of IT Service Management Capability: Value Co-Creation and Value Facilitation Mechanisms. *Journal of management information systems*, 36, 639-675.