

14<sup>th</sup> International Scientific Conference "Business and Management 2024" May 16–17, 2024, Vilnius, Lithuania

# NEW TRENDS IN CONTEMPORARY ECONOMICS, BUSINESS AND MANAGEMENT

ISSN 2029-4441 / eISSN 2029-929X eISBN 978-609-476-363-2 Article Number: bm.2024.1255 https://doi.org/10.3846/bm.2024.1255

V. NEW PERSPECTIVES ON MANAGEMENT AND RESILIENCE OF BUSINESS ORGANISATIONS

https://vilniustech.lt/bm

# PECULIARITIES OF SERVICE DELIVERY IN THE CONTEXT OF CHANGES CAUSED BY THE EXTERNAL ENVIRONMENT

Ilona SKAČKAUSKIENĖ<sup>®</sup><sup>1</sup>, Virginija LEONAVIČIŪTĖ<sup>®</sup><sup>2\*</sup>, Sigita BYTAUTĖ<sup>®</sup><sup>3</sup>

<sup>1,2</sup>Department of Management, Faculty of Business Management,
 Vilnius Gediminas Technical University, Saulėtekio al. 11, LT-10223 Vilnius, Lithuania
 <sup>3</sup>Commercial real estate consulting company "Real game", Kruopų str. 7, LT-01140 Vilnius, Lithuania

Received 22 February 2024; accepted 2 April 2024

**Abstract.** This research analyzes the integration of change management within service delivery, focusing on the service sector's adaptability to external environmental changes. Employing a comparative and critical analysis of scientific literature and the synthesis of obtained results, the research aims to identify service characteristics' chronological evolution, examine service delivery peculiarities, and develop a change management-based service delivery system. Findings indicate the service sector's resilience and the necessity for organizations to proactively recognize change in external environment, emphasizing the importance of early detection and adaptation to environmental shifts for uninterrupted service delivery.

Keywords: Service delivery, adaptability, service characteristics, change management steps, organizational environment.

JEL Classification: L80, M19, O30.

# 1. Introduction

In both developed and developing countries, the service industry represents the fastest expanding segment of the economy (Garza Burgos et al., 2022). Within the European Union, the service sector contributes approximately 65% to the Gross Domestic Product [GDP], showing an increase in added value of 6.02 percentage points since 1991 (The World Bank, 2023). Although the rate of growth is modest, it is consistent, highlighting the significance of the service sector as a vital component of the European Union's economy. According to Eurostat (2023), services encompass a diverse array of sectors such as transportation and storage, accommodation and food services, information and communication, real estate, professional, scientific and technical activities, as well as administrative and support services. In 2020, the pandemic and its restrictions led to a significant decline in EU service delivery, with services dropping nearly 17% and transport services, especially air transport, declining by 19% and 78%, respectively, from February to April (Eurostat, 2023).

Post the initial pandemic shock, service sectors largely rebounded, with most reaching or surpassing

pre-pandemic levels by the summer or fall of 2021. As of December 2022, the EU's service sector volume, as indicated by Eurostat's Index of Services Production (ISP), exhibited a near 11% increase from its level in February 2020. It should be noted that service delivery growth continues, with EU member states witnessing a 5.4% increase and the euro zone a 5.6% rise by March 2023 compared to the same month in 2022. This recovery demonstrates the strong adaptability of the service sector to fluctuating and uncertain external conditions. The adaptability of the service sector is crucial, given its heightened sensitivity to the ever-evolving external environment. It is noteworthy that such, i.e., resilient organisations treat disruption and ongoing stress as an opportunity (Barnett & Pratt, 2000) to consistently manage small discrepancies as they occur, which improves the organisation's ability to adapt (Kantabutra & Ketprapakorn, 2021). While service organizations are recognized for their adaptability to change, the multitude of challenges presented by an uncertain external environment, such as pandemics, mass migration, cyberattacks, and the rise of artificial intelligence, makes change management and the ability to respond effectively a particularly pertinent issue for service organizations.

<sup>\*</sup> Corresponding author. E-mail: virginija.leonaviciute@vilniustech.lt

The aim of this study is to determine the integration of change management decisions within the service delivery system, by delving into the scientific literature to uncover the essential aspects of service delivery in organizational contexts.

To achieve the research aim, tasks include:

- To identify the theoretical chronological evolution of service characteristics by analyzing scientific literature;
- 2. Examining the peculiarities of service delivery processes' various stages and identifying their main similarities and differences;
- 3. Developing a service delivery system model in the context of change management, based on the identified features of service delivery.

The research methodology involved a comparative and critical analysis of the scientific literature, coupled with a synthesis of the findings obtained.

# 2. Service characteristics: a theoretical approach

Hill (1999) describes services as a change in one economic unit's state due to another's activity, emphasizing the supplier-customer relationship. Rust ir Huang (2014) view service as a direct value co-creation between supplier and customer. Vestertė (2022) characterizes services as an interactive process within a delivery system, aimed at creating value for all parties. Also, service concept is often defined as a detailed plan addressing customer needs and organizational strategic goals, highlighting services' association with intangible activities or benefits exchanged between parties (Victorino et al., 2005).

Moreover, services are associated with intangible activities or benefits that one party can offer and provide to another

In the fields of service management, marketing, and delivery, the distinctive characteristics of services significantly influence customer experiences and perceptions. Scientific literature often contrasts services with goods, highlighting four primary attributes: intangibility, heterogeneity, inseparability, and perishability, collectively known as the IHIP framework, as outlined in Table 1. These characteristics are pivotal in understanding how services differ fundamentally from tangible products and the potential implications for service delivery strategies.

The literature expands on the multifaceted nature of service characteristics, highlighting their conceptual variations (van der Burg et al., 2019). It points out that characteristics differ across developed and developing economies, influenced by cultural and economic factors (Malhotra et al., 2005), which highlights the importance of tailoring service delivery to diverse markets. A chronological review of service characteristics suggests that services are dynamic and adapt to changing customer needs and external conditions. Through critical analysis, additional distinct attributes of services have been identified, further detailing their complex nature (Figure 1):

- 1. Service innovation and customer orientation;
- 2. Customer involvement and service quality;
- 3. Customization.

Service characteristics, when strategically enhanced, can spur innovation in the sector and support evolving customer demands (Droege et al., 2009). Emphasizing customer orientation helps align new services with

Table 1. Main characteristics of the services

Service characteristic	Description of the characteristic	Authors
Intangibility	* Services embody both processes and the outcomes of actions, existing without a physical form.  * They are intangible, meaning their psychological tangibility is absent (customers cannot predetermine the outcome before the service is purchased).	A. Mishra & Anning-Dorson (2022); Bhanja & Saxena (2022); Wirtz et al. (2020); Yilmaz (2019); DeMoranville (2015); Blut et al. (2014); Kumar et al. (2014); Roy & Sivakumar (2014); Biege et al. (2013); Xin et al. (2013); Dohmen et al. (2012); Moeller (2010); Mott (2010); Wild (2010); Spring & Araujo (2009); Ojanen et al. (2009); Alam (2006); Balin & Giard (2006); Nijssen et al. (2006); Lovelock & Gummesson (2004); Jong & Vermeulen (2003); Ellis & Mosher (1993).
Heterogeneity	* Services exhibit uniqueness and can vary significantly across providers.  * Service outcomes demonstrate high variability due to differing customers' needs, leading to potentially diverse results.  * The quality of services can be inconsistent, as it cannot be verified prior to consumption.  * Due to the "human factor," services often lack a standardized outcome.	
Inseparability	* Services are inherently linked to their providers, making separation impossible.  * The process of delivering and consuming services occurs simultaneously, necessitating direct interaction between the provider and the customer.	
Perishability	* Services are perishable and cannot be stored, resold, or returned for later use.  * Delivery of services cannot occur in advance; suppliers must be prepared to provide services when needed.  * The service process exists only at the moment of its execution.  * Services offer value to customers only when they are available and cannot be stockpiled for future use.	

Source: Compiled by the authors.

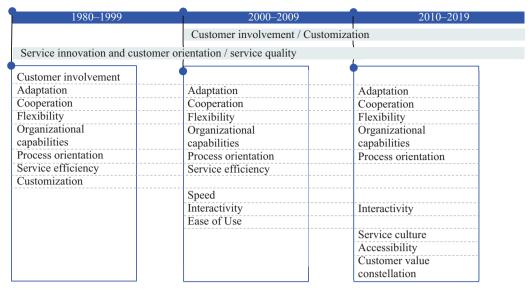


Figure 1. Dynamics of service characteristics in chronological order. Source: Compiled by the authors

customer needs and preferences. Customization and customer involvement not only foster trust but also augment value creation, impacting satisfaction and loyalty. Raddats et al. (2019) highlights the significance of innovation and customer-centric service delivery for success, urging organizations to continuously refine services in response to market shifts. Recognizing and leveraging service traits in management practices is crucial for adapting to customer and environmental changes, thereby elevating customer satisfaction and business outcomes. It can be said that, to adapt to the changing needs of customers and the factors of the external environment, it is important to take into account the unique characteristics of services when making the necessary change management decisions.

# 3. Methodology

The theoretical section is an integrated part of the overall research methodology – upon its completion the primary characteristics of service delivery within organizations were identified, which answers RQ1 of the research. A thorough academic literature review was conducted, utilizing the Scopus database. This involved

an initial critical analysis of data from various studies, followed by a comparative analysis to highlight similarities and differences, and led to a summarized synthesis of the insights gained. Based on these synthesized results, the study presents recommendations for future research (Figure 2).

To achieve the research aim, three questions were formulated: RQ1 examines the primary and additional characteristics of services; RQ2 explores the key stages of service delivery; RQ3 investigates service delivery traits in response to external environment changes. Critical and comparative analyzes of literature were employed to address these queries, synthesizing findings from the obtained results.

The research consists of three main stages:

- 1. The initial stage involves a critical analysis of 72 scholarly articles, chosen based on citation indices and keywords, to chronologically map out service characteristics
- 2. The second stage employs comparative literature analysis to uncover similarities and differences in service delivery processes.
- 3. The final stage uses synthesis to integrate findings into a proposed service delivery system within the

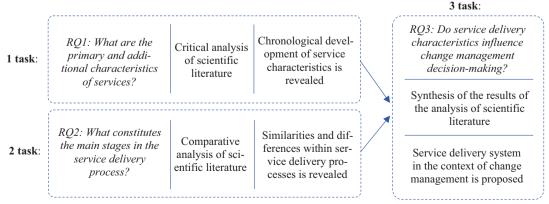


Figure 2. Research methodology. Source: Compiled by the authors

context of change management, thereby addressing the research aim comprehensively.

# 4. Service delivery system amidst changes in the external environment

The development and implementation of services involve dynamic solutions to enhance service processes (Edvardsson & Olsson, 1996). The delivery of services varies by industry and may encompass pre-sales, reliability, speed, technical support, and responsiveness to customer inquiries (Majava & Isoherranen, 2019). Activities within these processes often engage people, technology, and resources, aiming for repeatability and efficiency. Effective service delivery requires companies to evaluate influencing factors and make informed decisions prior to service delivery (Sala et al., 2019), necessitating a thorough analysis of the service process and its stages.

Researchers note the critical role of the service delivery process but point out the research gap in understanding the impact of its stages on customer experiences (Gupta et al., 2020). It's crucial to analyze how each stage affects customers to identify potential interruptions or enhancements. Key aspects of service delivery process include the logical flow, sequence, transmission mechanisms, initiation signals, and control information that guide the delivery outcome (Vestertė, 2022), indicating the need for a comprehensive examination of the service delivery journey. Quality assessments and satisfaction judgments by customers can differ across the service process - in some circumstances, the time before and after the process execution is more important to the extent that failure to maintain professionalism at these stages can significantly degrade the overall evaluation of the service experience (Gupta et al., 2020; Voorhees et al., 2017). Also, when helping the customer choose the right service, it is extremely important to assess his readiness and, if necessary, to provide appropriate measures adapted to the relevant circumstances. Furthermore, environmental and personal factors influence service selection, emphasizing the importance of understanding

the decision-making context (Scherer, 2019). Various authors outline distinct stages of service delivery, which vary based on the service type (Figure 3). The initial phase is marked by pre-service activities, including the gathering of initial information, assessing the needs of the customer, and preparing tools and resources necessary for service delivery. This phase emphasizes understanding the customer's requirements and setting the stage for effective service execution. The process execution encompasses stages like selection, agreement, solution identification, authorization, transformation, delivery and consumption of services, and the service implementation and fulfillment. While the initial and execution stages are generally agreed upon, the conclusion of the process varies among authors: some view it as ending with the delivery and consumption, while others consider a more comprehensive conclusion that includes post-service activities and follow-up management.

To enhance service access and integrated delivery, specific key design decisions are crucial at various stages: entry, need and opportunity assessment, and support network development (Fluit et al., 2019). However, the performance of service delivery is influenced not only by these design decisions but also by the unpredictability of the external environment (Richert & Dudek, 2023; Oberle, 2023). Hagel et al. (2015) identify five critical external factors — enabling technologies, customer mindset, platforms, economics, and public policy — that can significantly alter a business model's viability, create new technological or operational opportunities, improve upon existing goods or services, and change market or regulatory landscapes. Organizations, therefore, develop service delivery systems that consider such contingencies (Smith et al., 2019), which represent unpredictable and uncontrollable external elements, to proactively ensure the continuity of essential processes.

Organizations often fail to detect shifts in the external environment early, a significant issue being the late realization of losing market leadership (Hagel et al., 2015). A further challenge is the entry of new market players with innovative approaches, gradually displacing established

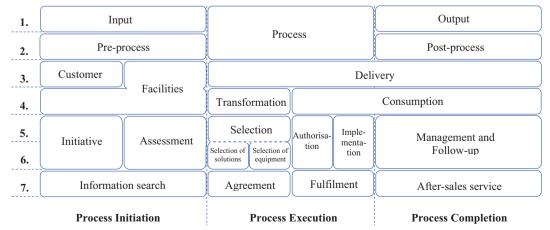


Figure 3. Variety of stages of service delivery process. *Sources*: compiled by the authors according to:1. Mishra (2000), 2. Alix et al. (2014), 3. Auer et al. (2008), 4. Moeller (2010), 5. Desideri et al. (2016), 6. Scherer (2019), 7. Xu et al. (2017)

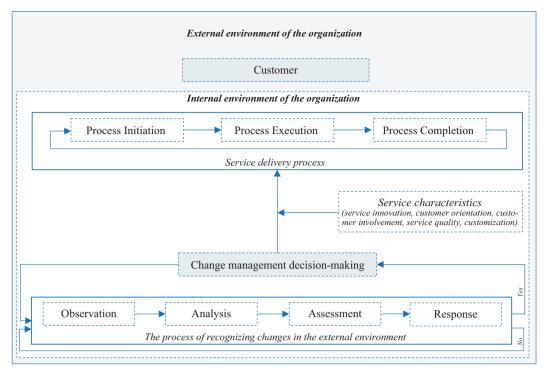


Figure 4. Service delivery system in the context of change management. Sources: Compiled by the authors

entities. This slow displacement process can lead to a deceptive sense of security among existing market participants, underestimating the urgency for adaptation (Hagel et al., 2015). Proactive organizations aim to detect shifts in the external environment early to adapt and seize opportunities instead of waiting until changes are obvious and negatively affect operations. Recognizing changes involves a series of steps, which guide organizations through the process of external environmental shifts to stay competitive and innovative (Boatman, 2023; Miller, 2020; Pilelienė et al., 2021):

- Observation maintaining continuous vigilance over its external environment, diligently observing shifts and emerging trends that may have implications for its operations;
- 2. Analysis analyzing the data gathered through observation, discerning patterns and identifying shifts that could potentially influence its operational landscape;
- Assessment evaluating the impact of these identified changes on operations, deciding on whether to make adjustments to adapt to these shifts or to capitalize on beneficial opportunities;
- 4. Response taking proactive measures to adapt to changing circumstances or leverage newfound opportunities, which may involve altering its strategies, services, or necessary processes.

Considering the unique characteristics of the services and the peculiarities of the service delivery process, a service delivery system within the context of change management can be outlined (refer to Figure

4). Introduced system integrates change management decision making into service delivery process, providing a structured approach for organizations to systematically observe, analyze, assess, and respond to changes in the external environment. This system could serve as a tool for businesses to maintain competitiveness in a rapidly changing environment.

Change is an inescapable reality; organizations are forced to continually adapt, viewing it as an integral aspect of their existence (Jalagat, 2016). This dynamic strengthens the need for ongoing theoretical and empirical research aimed at evaluating circumstances and offering essential change management solutions.

## 5. Conclusions

The dynamic nature of the service characteristics indicates the importance of aligning services with customer preferences and external environment factors. Recognizing these characteristics is valuable for developing innovative and efficient tools that support customer needs, enhancing their overall experience. To maximize value for all stakeholders involved in the service delivery process, it is noteworthy to consider the service's inherent characteristics when making change management decisions.

There is a general consensus in the literature on the structure and progression of the initial stages of the service delivery process, highlighting a unified approach to service delivery. However, there is a divergence of opinions when it comes to the concluding phase of service delivery, which highlights the complexity of this area and the potential for diverse interpretations. In the final phase of the service delivery process, redirecting the customer back to the initial stage serves to maintain the continuity of service delivery within a complex organizational setting.

To ensure uninterrupted service delivery, service organizations must prioritize early detection of changes in their ever-evolving external environment. Systematically observing, analyzing, assesing and responding within the scope of service delivery are essential components for making timely change management decisions in response to unexpected critical shifts prompted by external factors.

The presence of unpredictable elements in the external environment forces service organizations to incorporate unplanned operational changes to attain their organizational objectives. Given this context, it would be pertinent for future research to determine change management models suitability for the change management of organizations under various conditions of environmental uncertainty.

## Disclosure statement

The author has no competing or conflict of interest in the publication of this research.

#### References

Alam, I. (2006). Removing the fuzziness from the fuzzy frontend of service innovations through customer interactions. *Industrial Marketing Management*, 35(4), 468–480.

https://doi.org/10.1016/j.indmarman.2005.04.004

Alix, T., Zacharewicz, G., Vallespir, B., Zacharewicz, G., Zacharewicz, G., & Vallespir, B. (2014). Service systems modelling and simulation: the SERGENT distributed approach. *Proceedings of the I-ESA Conferences*, 7, 357–367.

https://doi.org/10.1007/978-3-319-04948-9\_30

Auer, L., Strauss, C., Kryvinska, N., & Zinterhof, P. (2008). SOA as an effective tool for the flexible management of increased service heterogeneity in converged enterprise networks. *Proceedings – CISIS 2008: 2nd International Conference on Complex, Intelligent and Software Intensive Systems*, 535–539. https://doi.org/10.1109/CISIS.2008.9

Balin, S., & Giard, V. (2006). A process oriented approach to the service concepts. *Proceedings – ICSSSM'06: 2006 International Conference on Service Systems and Service Management*, 1, 785–790. https://doi.org/10.1109/ICSSSM.2006.320562

Barnett, C. K., & Pratt, M. G. (2000). From threat-rigidity to flexibility: Toward a learning model of autogenic crisis in organizations. *Journal of Organizational Change Management*, 13(1), 74–88. https://doi.org/10.1108/09534810010310258

Bhanja, N., & Saxena, G. (2022). Revisiting the Past to Understand the Current Debates on Service-Dominant Logic. Services Marketing Quarterly, 43(2), 240–255.

https://doi.org/10.1080/15332969.2021.1992230

Biege, S., Lay, G., Zanker, C., & Schmall, T. (2013). Challenges of measuring service productivity in innovative, knowledge-intensive business services. *The Service Industries Journal*, 33(3–4), 378–391.

https://doi.org/10.1080/02642069.2013.747514

Blut, M., Beatty, S. E., Evanschitzky, H., & Brock, C. (2014). The Impact of Service Characteristics on the Switching Costs—Customer Loyalty Link. *Journal of Retailing*, 90(2), 275–290. https://doi.org/10.1016/j.jretai.2014.04.003

Boatman, A. (2023). *The Five Stages of Organizational Development (Explained Clearly) – AIHR*. https://www.aihr.com/blog/stages-of-organizational-development/

DeMoranville, C. W. (2015). The Effects of Service Attributes on Perceived Risk Components: A Structural Model. Developments in Marketing Science: Proceedings of the Academy of Marketing Science, 390.

https://doi.org/10.1007/978-3-319-13162-7\_106

Desideri, L., Stefanelli, B., Bitelli, C., Roentgen, U., Gelderblom, G. J., & de Witte, L. (2016). Satisfaction of users with assistive technology service delivery: An exploratory analysis of experiences of parents of children with physical and multiple disabilities. *Developmental Neurorehabilitation*, 19(4), 255–266.

https://doi.org/10.3109/17518423.2014.988303

Dohmen, P., Kryvinska, N., & Strauss, C. (2012). "S-D Logic" Business Model – Backward and Contemporary Perspectives. *Lecture Notes in Business Information Processing*, 103 LNBIP, 140–154.

https://doi.org/10.1007/978-3-642-28227-0\_11

Droege, H., Hildebrand, D., & Heras Forcada, M. A. (2009). Innovation in services: Present findings, and future pathways. *Journal of Service Management*, 20(2), 131–155.

https://doi.org/10.1108/09564230910952744

Edvardsson, B., & Olsson, J. (1996). Key concepts for new service development. *Service Industries Journal*, *16*(2), 140–164. https://doi.org/10.1080/02642069600000019

Ellis, B., & Mosher, J. S. (1993). Six ps for four characteristics:a complete positioning strategy for the professional services firm-CPAs. *Journal of Professional Services Marketing*, *9*(1), 129–145. https://doi.org/10.1300/J090v09n01\_11

Eurostat. (2023). Services production (volume) index overview – Statistics Explained. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Services\_production\_(volume)\_index\_overview#Overview:\_Services\_production\_since\_2015

Fluit, M., Reindersma, T. S., Broekhuis, H., & Bortolotti, T. (2019). Organising preventive care and support networks: a need for citizen-centred service delivery. *European Journal of Public Health*, 29(Supplement\_4).

https://doi.org/10.1093/eurpub/ckz187.209

Garza Burgos, R., Johnson, J. P., & Loughry, M. L. L. (2022). Does organizational learning differ in manufacturing and service firms? Evidence from Mexico. *Journal of Knowledge Management*, 26(7), 1649–1675.

https://doi.org/10.1108/JKM-04-2021-0301

Gupta, P., Sachan, A., & Kumar, R. (2020). Different stages of the e-service delivery system process: belief-attitude-intention framework. *International Journal of Retail and Distribution Management*, 48(7), 687–706.

https://doi.org/10.1108/IJRDM-01-2019-0014

Hagel, J., Brown, J. S., Wooll, M., & De-Maar, A. (2015). Patterns of disruption – Anticipating disruptive strategies in a world of unicorns, black swans and exponentials. *Deloitte University Press*, 1–26.

Hill, P. (1999). Tangibles, intangibles and services: a new taxonomy for the classification of output. *Canadian Journal of Economics*, 32(2), 426. https://doi.org/10.2307/136430

- Jalagat, R. C. (2016). The Impact of Change and Change Management in Achieving Corporate Goals and Objectives: Organizational Perspective. *International Journal of Science and Research (IJSR)*, 5(11), 1233–1239.
- Jong, J. P. J., & Vermeulen, P. A. M. (2003). Organizing successful new service development: a literature review. *Management Decision*, 41(9), 844–858.

# https://doi.org/10.1108/00251740310491706

Kantabutra, S., & Ketprapakorn, N. (2021). Toward an Organizational Theory of Resilience: An Interim Struggle. *Sustainability 2021, Vol. 13, Page 13137, 13*(23), 13137.

#### https://doi.org/10.3390/su132313137

- Kumar, V., Umashankar, N., & Choi, J. W. B. (2014). CRM metrics and strategies to enhance performance in service industries. *Handbook of Service Marketing Research*, 135–165. https://doi.org/10.4337/9780857938855.00015
- Lovelock, C., & Gummesson, E. (2004). Whither Services Marketing? In Search of a New Paradigm and Fresh Perspectives. *Journal of Service Research*, 7(1), 20–41.

## https://doi.org/10.1177/1094670504266131

Majava, J., & Isoherranen, V. (2019). Business model evolution of customer care services. *Journal of Industrial Engineering and Management*, 12(1), 1–12.

#### https://doi.org/10.3926/jiem.2725

- Malhotra, N. K., Ulgado, F. M., Wu, L., Agarwal, J., & Shainesh, G. (2005). Dimensions of service quality in developed and developing economies: multi-country cross-cultural comparisons. *International Marketing Review*, 22(3), 256–278. https://doi.org/10.1108/02651330510602204
- iller, K. (2020). 5 Critical Steps in the Change Management Process | HBS Online. https://online.hbs.edu/blog/post/changemanagement-process
- Mishra, A., & Anning-Dorson, T. (2022). Dynamic customeroriented relational capabilities: how do they impact internationalizing firm performance? *Journal of Service Theory and Practice*, 32(6), 843–871.

# https://doi.org/10.1108/JSTP-10-2021-0202

Mishra, D. P. (2000). Interdisciplinary contributions in retail service delivery: Review and future directions. *Journal of Retailing and Consumer Services*, 7(2), 101–118.

# https://doi.org/10.1016/S0969-6989(99)00008-9

- Moeller, S. (2010). Characteristics of services a new approach uncovers their value. *Journal of Services Marketing*, 24(5), 359–368. https://doi.org/10.1108/08876041011060468
- Mott, M. R. (2010). Applying the Methods of Systems Engineering to Services Engineering. *Introduction to Service Engineering*, 159–175.

# https://doi.org/10.1002/9780470569627.ch8

Nijssen, E. J., Hillebrand, B., Vermeulen, P. A. M., & Kemp, R. G. M. (2006). Exploring product and service innovation similarities and differences. *International Journal* of Research in Marketing, 23(3), 241–251.

# https://doi.org/10.1016/j.ijresmar.2006.02.001

Oberle, L. J. (2023). How to build responsive service processes in German banks: the role of process documentation and the myth of automation. *Business Process Management Journal*, 29(2), 578–596.

# https://doi.org/10.1108/BPMJ-11-2022-0573

Ojanen, V., Xin, Y., & Chai, K. H. (2009). Innovation management in technology-related knowledge-intensive business services. *International Journal of Entrepreneurship and In-*

- novation Management, 10(2), 162–177. https://doi.org/10.1504/IJEIM.2009.025180
- Pilelienė, L., Grigaliūnaitė, V., & Bakanauskas, A.-P. (2021). Statinė reklama: teorija ir praktika: mokslo monografija. Statinė Reklama: Teorija ir Praktika: Mokslo Monografija. https://doi.org/10.7220/9786094674716
- Raddats, C., Kowalkowski, C., Benedettini, O., Burton, J., & Gebauer, H. (2019). Servitization: A contemporary thematic review of four major research streams. *Industrial Marketing Management*, 83, 207–223.

#### https://doi.org/10.1016/j.indmarman.2019.03.015

Richert, M., & Dudek, M. (2023). Risk Mapping: Ranking and Analysis of Selected, Key Risk in Supply Chains. *Journal of Risk and Financial Management*, 16(2), 71.

#### https://doi.org/10.3390/jrfm16020071

- Roy, S., & Sivakumar, K. (2014). Which controls are better for service outsourcing? Integrating service-dominant logic and service characteristics. *AMS Review*, 4(3–4), 45–62. https://link.springer.com/article/10.1007/s13162-014-0060-6
- Rust, R. T., & Huang, M.-H. (2014). The Service Revolution and the Transformation of Marketing Science. *Marketing Science*, 33(2), 206–221. https://doi.org/10.1287/mksc.2013.0836
- Smith, J. S., Jayaram, J., Ponsignon, F., & Wolter, J. S. (2019). Service recovery system antecedents: a contingency theory investigation. *Journal of Service Management*, 30(2), 276– 300. https://doi.org/10.1108/JOSM-01-2018-0026
- Sala, R., Pezzotta, G., Pirola, F., & Huang, G. Q. (2019). Service Delivery Process improvement using Decision Support Systems in two manufacturing companies. *Procedia CIRP*, 83, 248–253. https://doi.org/10.1016/j.procir.2019.03.130
- Scherer, M. (2019). Overview of the assistive technology service delivery process: An international perspective. *Assistive Technology Service Delivery*, 89–101.

## https://doi.org/10.1016/B978-0-12-812979-1.00006-0

- Spring, M., & Araujo, L. (2009). Service, services and products: Rethinking operations strategy. *International Journal of Operations and Production Management*, 29(5), 444–467. https://doi.org/10.1108/01443570910953586
- The World Bank. (2023). Services, value added (% of GDP) European Union | Data. https://data.worldbank.org/indicator/NV.SRV.TOTL.ZS?end=2021&locations=EU&start=199 1&view=chart
- van der Burg, R. J., Ahaus, K., Wortmann, H., & Huitema, G. B. (2019). Investigating the on-demand service characteristics: an empirical study. *Journal of Service Management*, 30(6), 739–765. https://doi.org/10.1108/JOSM-01-2019-0025
- Vestertė, J. (2022). Paslaugų moduliarizavimo sprendimų parama [Vilniaus Gedimino technikos universitetas].

#### http://dspace.vgtu.lt/handle/1/4317

Victorino, L., Verma, R., Plaschka, G., & Dev, C. (2005). Service innovation and customer choices in the hospitality industry. *Managing Service Quality*, 15(6), 555–576.

## https://doi.org/10.1108/09604520510634023

Voorhees, C. M., Fombelle, P. W., Gregoire, Y., Bone, S., Gustafsson, A., Sousa, R., & Walkowiak, T. (2017). Service encounters, experiences and the customer journey: Defining the field and a call to expand our lens. *Journal of Business Research*, 79, 269–280.

## https://doi.org/10.1016/j.jbusres.2017.04.014

Wild, P. J. (2010). A systemic framework for supporting crossdisciplinary efforts in services research. CIRP Journal of Manufacturing Science and Technology, 3(2), 116–127. https://doi.org/10.1016/j.cirpj.2010.08.002

Wirtz, J., Holmqvist, J., & Fritze, M. P. (2020). Luxury services. *Journal of Service Management*, 31(4), 665–691. https://doi.org/10.1108/JOSM-11-2019-0342

Xin, Y., Chai, K.-H., Ojanen, V., & Brombacher, A. (2013). The moderating effects of service solution characteristics on competitive advantage. *The Service Industries Journal*, 33(15–16), 1633–1658.

https://doi.org/10.1080/02642069.2011.638918

Xu, X., Munson, C. L., & Zeng, S. (2017). The impact of e-service offerings on the demand of online customers. *International Journal of Production Economics*, 184, 231–244. https://doi.org/10.1016/j.ijpe.2016.11.012

Yilmaz, I. (2019). Service quality and marketing. *The Routledge Handbook of Destination Marketing*, 92–99.

https://doi.org/10.4324/9781315101163-9