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GRADUATE SCHOOL
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Dissertation

Creating and Capturing Value Through Service Innovation and Service Productivity

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This publication-based dissertation covers research on service innovation and service productivity over eight chapters. The first and second chapter provide an introduction into service innovation and service productivity as key elements of a firm's ability to gain competitive advantages. The third chapter is a systematic literature review that structures research published on service productivity relying on 190 articles. The research offers a new conceptualization of service productivity by emphasizing it as an open and customer-inclusive process that transcends the service producer–customer divide. The fourth chapter is a meta-analysis which analyzes the factors influencing service productivity by relying on 77 articles, 81 independent samples, with a cumulative sample size of 30,238 participants. The study explicates that productivity measurements should equally account for service quality and cost aspects to either reconcile the conflicts or leverage synergies between the two and thus determine the service productivity effect more accurately. The fifth chapter is a quantitative empirical paper (N=554) that explains how individual political behavior affects new service development at the customer interface. The study shows that political behavior has a positive impact on extra-role behavior, thereby allowing to gain deeper insights into customers' needs, indicating that political behavior is not an exclusively dysfunctional phenomenon. The sixth chapter is a multiple case study (based on 27 cases) that investigates how service innovation's core concepts must be designed to be reinforcing and mutually supportive with the firm's service productivity strategy. The study shows that firms are more likely to gain competitive advantages if they link multiple innovation configurations that achieve fit with the firms' productivity strategy. The seventh chapter is a mixed empirical study that combines qualitative interview data (42 semi-structured interviews) with quantitative questionnaire data (n =125) to shed light on the underlying mechanisms that enhance innovation implementation effectiveness. The study's results emphasize that achieving high and consistent use of innovations requires organizations to focus on organizational members and their individual characteristics, rather than on organizational design. The eighth chapter summarizes the contributions of this dissertation as well as its limitations and potential directions for further research.



Creating and Capturing Value Through Service Innovation and Service Productivity

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Table of contents

List of tables	II
Table of figures	III
List of abbreviations	IV
1. Introduction	1
2. Summary of research papers	4
2.1 First article	5
2.2 Second article	6
2.3 Third article	7
2.4 Fourth article	8
2.5 Fifth article	9
2.6 References	12
3. Service productivity: a systematic review of a dispersed research area.....	14
4. Measuring and managing service productivity: a meta-analysis.....	15
5. Political Behavior in Service Innovation: Empirical Examinations of Social Relationships...	16
6. Combining strategies of high service productivity with successful service innovation	18
7. Effective innovation implementation: A mixed method study	19
8. Contributions, limitations, and future research	20
8.1 Contributions to research and practice	20
8.2 Limitations	22
8.3 Future research	24
8.4 References	26

List of tables

Table 1 List of articles..... 10
Table 2 Method, individual contribution, and key findings 11

Table of figures

Figure 1 Overview of the publication-based dissertation..... 5

List of abbreviations

ABS	Association of business schools
AMA	American marketing association
DOI	Digital online identifier
e.g.	Exempli gratia (for example)
EJM	European journal of marketing
et al.	Et alii
IJIM	International journal of innovation management
ISPIM	International society for professional innovation management
MRQ	Management review quarterly
OECD	Organization for economic co-operation and development
p. / pp.	Page / pages
RMSC	Review of managerial science
SIJ	Service industries journal
SJR	SCImago journal rank
SMS	Strategic management society
VHB	Verband der Hochschullehrer der Betriebswirtschaft

1. Introduction

Service innovation (Gustafsson et al., 2020) and service productivity (Anderson et al., 1997; Grönroos & Ojasalo, 2004; Rust & Huang, 2012) have received increased scholarly attention as key determinants of economic growth (Aspara et al., 2018). The prevalence of transformational developments in service innovation (Hofmeister et al., 2022; Witell et al., 2016), tied with the growing focus on service productivity to effectively transform input resources into value for customers, has created relevant and important research avenues for scholars (Hofmeister et al., 2022; Schneider et al., 2022). The goal of the present publication-based dissertation is to contribute to these new research avenues by analyzing existing theoretical and practical approaches on service productivity and service innovation.

In many developed economies, standards of living rise, and citizens have a greater demand for services such as healthcare or education. This leads to the growth of the personal service sector (Barrett et al., 2015). Moreover, the proliferation of technologies and the rise of (global) interorganizational networks generate more complexity between firms, triggering demand for professional and business services to advance and reallocate service operations to remain competitive (Barrett et al., 2015). Fundamental to these intersecting trends is the rapid development of new technology. Thus, the automatization of service processes using service robots (Wirtz et al., 2018) or artificial intelligence (Huang & Rust, 2021) becomes increasingly important to further enhance the competitiveness of service business models.

With the expanded role of information technology and the emergence of service-dominant logic (Lusch & Nambisan, 2015; Vargo & Lusch, 2008), service innovation—the first central topic of this dissertation—has developed into an overarching concept. Furthermore, with the rise of service ecosystems, the way corporations view service innovation has undergone radical shifts. Prominent service firms increasingly offer very broad service portfolios that interact with a large variety of players, ranging from high-tech companies, start-ups, and regulators to newly emerging technology firms. In fact, service

firms today have taken a more holistic innovation approach, beginning to perceive themselves as the central mechanism linking different ecosystem actors. The emergence of these service ecosystems is mainly driven by a combination of fundamentally changing customer behaviors and expectations and rapid technological advancements. Moreover, firms try to position themselves at the forefront of these new market opportunities by orchestrating ecosystems (e.g., via digital services or new business models) or creating platforms themselves to connect to existing or new customers. Essentially, service innovation has transformed from a process-based logic to a more systemic logic (Helkkula et al., 2018) focusing on value cocreation that transcends the provider-customer divide. Grounded in service-dominant logic (Vargo & Lusch, 2004), service innovation has therefore linked up to traditional open innovation research (Chesbrough et al., 2014), showing that it has transcended organizational boundaries in the digital age. The first ambition for this dissertation is to capture the important elements of this evolved nature of service innovation, which has undergone radical transformations in the past decades. Furthermore, this dissertation aims to address the academic conversation at the intersection between service innovation and service productivity to respond to recent calls by researchers (e.g., Feng et al., 2021; Gustafsson et al., 2020) to provide more guidance on how to link service innovation to financial performance.

While service innovation's scholarly prominence continues to rise due to the rapid growth of technology-driven service innovations (Gustafsson et al., 2020), the concept of service productivity has recently received similar attention as researchers try to develop a deeper understanding of how to capture value in the service economy. However, with the growth of the service economy and the decline of the manufacturing industry, new challenges arise. Most resources have been transferred from highly productive manufacturing sectors to less productive service sectors. Thus, even though technological advancements progress and services become more pivotal to economic growth, service productivity (Baumol & Bowen, 1966; Brynjolfsson, 1993) continues to decline in many developed countries (OECD, 2021),

warranting new research to address these puzzlingly low service productivity levels (Andreassen, 2021).

In fact, service sector productivity may lag behind the manufacturing sector—a phenomenon also called Baumol’s cost disease (Baumol & Bowen, 1966)—because the productivity of retail services may not be the purpose of service delivery. Today, however, it may also be true that a measurement problem related to service productivity in a digitalized service economy explains the low service productivity levels because records of direct customer–provider transactions are often unavailable, as observed in the case of free digital services. Essentially, the question of how to measure and manage service productivity—especially as services become more complex because they have been developed in digital platform ecosystems (Brynjolfsson et al., 2019)—offers scope for new and important service productivity research. Answering the essential questions of how to measure and manage service productivity is the second ambition of this dissertation.

2. Summary of research papers

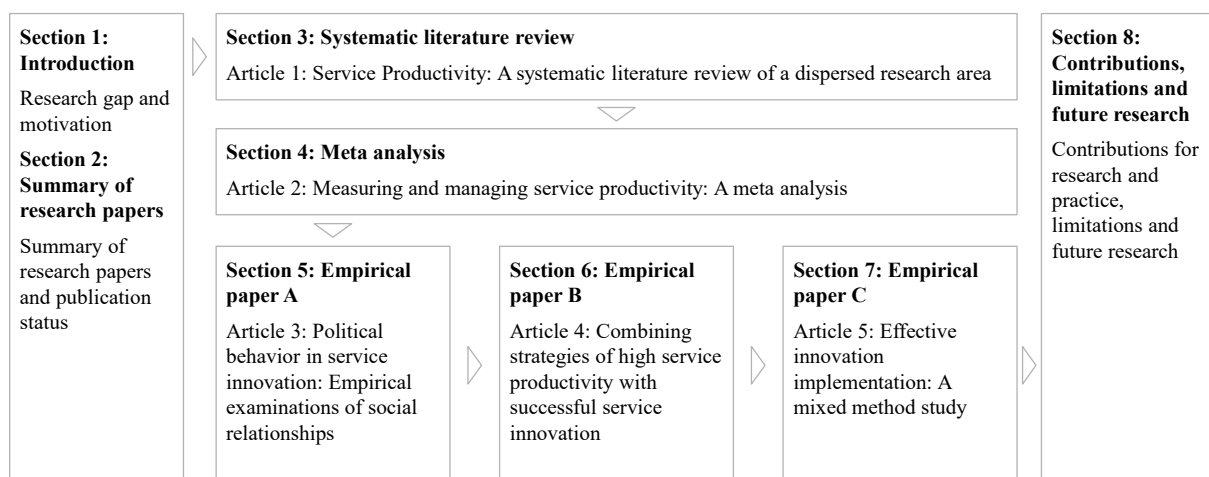
This dissertation, summarized in Figure 1, seeks to promote research and practice in the service productivity and service innovation fields by applying different theoretical viewpoints and methodologies. While much progress has been made to advance open-ended theories of service productivity and service innovation, recent theorizing has gone beyond the traditional one-sided industrial perspectives focusing only on firms' productivity and innovativeness. Thus, incorporating the value of consumers' input during service coproduction and that of consumer-generated data input in their service provision has become critical for policymakers and scholars to see and measure value creation and capture through new lenses given the importance of productivity and innovativeness in today's economy. Consequently, this dissertation looks past the traditional innovation and productivity theories to focus on how service firms convert service input resources into customer-valued service outputs.

The aim of the first and second articles of this dissertation is to bring together and synthesize the dispersed research from the services, marketing, and management disciplines to allow the service productivity research stream to move forward with a common understanding and greater clarity. Accordingly, the first article is a structured literature review providing a broadened conceptualization of service productivity focusing on macroeconomic, mesoeconomic, and microeconomic viewpoints. The second article is a meta-analysis building on the findings of the first article to formulate hypotheses regarding the moderators of different service productivity determinant relationships.

While the first and second articles primarily concentrate on service productivity, the third article centers on service innovation. It consists of a quantitative empirical study of service innovation at the frontline. The fourth article is a qualitative empirical study theorizing the relationship between service innovation and service productivity based on one-year field research in the financial services market. Finally, the fifth article is a mixed

empirical study that builds on the multiple cases addressed in the fourth article and further analyzes the findings from quantitative empirical perspectives. In the next paragraphs, a summary of the articles comprising this dissertation (see Table 1 and Table 2) is provided, including their history, their current publication status, and the conferences at which they were presented.

Figure 1 Overview of the publication-based dissertation



2.1 First article

The first article is a systematic literature review titled “Service productivity: a systematic review of a dispersed research area” co-authored with Dominik K. Kanbach and Jens Hogeve, which has been published in *Management Review Quarterly (MRQ)*. *MRQ*’s SJR ranking is Q1, and it is rated C in the VHB-JOURQUAL 3. To improve the article before submission, I incorporated feedback provided by reputable scholars during a dissertation development workshop of the Strategic Management Society in April 2021.

This paper systematically identifies and analyzes 190 publications focusing on service productivity to connect previously dispersed empirical and conceptual studies in a framework as the next step in theory development. By clustering existing service productivity research, the findings show that the service productivity literature has grown remarkably over the last two decades, and existing research has gathered substantial knowledge within the field.

However, despite the topic's practical relevance and scholarly prominence, past research has primarily adopted isolated perspectives, generating disjointed empirical findings. By reviewing key insights from the existing literature, the article shows that service productivity research primarily adopts a one-sided industrial perspective that concentrates on firm productivity. Although valuable, these studies most often leave out consumers' time and effort as well as the value of consumer-generated data input during coproduction, overlooking the actor-to-actor perspective that transcends the producer-customer divide. Grounded in a service-dominant logic, the present research offers a broader conceptualization of service productivity by emphasizing its nature as a collaborative process that provides policymakers, researchers, and practitioners with valuable guidance for developing measures that generate positive effects in a service economy lacking productivity.

2.2 Second article

The second article is a meta-analysis titled "Measuring and managing service productivity: a meta-analysis" co-authored with Dominik K. Kanbach and Jens Høgreve, which has been published in *Review of Managerial Science (RMS)*. The *RMS*'s impact factor is 5.435, its SJR ranking is Q1, and it is rated B in the VHB-JOURQUAL 3. Additionally, I received feedback on the paper during the 2022 SERVSIG Doctoral Consortium of the American Marketing Association (AMA) preceding the Frontiers in Service conference at Babson College.

The meta-analysis is the article with the most complex methodological approach in this dissertation. It seeks to identify the factors influencing service productivity by integrating empirical findings from previous research. A comprehensive framework is tested, consisting of a variety of input, process, and exogenous output variables and four moderators. Given the importance of service productivity in today's economy, the contribution of the meta-analysis is to clarify the inconclusiveness of empirical findings in the literature, further synthesize previous work, and reveal under-represented areas to identify avenues for further research. To

do so, the article formulates hypotheses regarding the moderators of different service productivity-determinant relationships and meta-analyzes 77 articles relying on 81 independent samples, with a cumulative sample size of 30,238 participants, to test predictions. Our research shows that productivity measures that equally consider quality and cost effects determine service productivity more accurately, making them a more suitable basis for strategic decision-making. The article's results also challenge the notion of service productivity, extending it beyond a function of internal efficiency and external effectiveness and emphasizing that options for improving service productivity vary with the types of services offered. Thus, our findings provide a viable model for explaining the main determinants of service productivity and potential moderating variables, offering valuable insights for practitioners and promising future research directions.

2.3 Third article

The third article is a quantitative empirical study titled "Political behavior in service innovation: empirical examinations of social relationships" co-authored with Dominik K. Kanbach and Timo J. J. Brunner, which is under review by *European Journal of Marketing (EJM)*. *EJM*'s impact factor is 4.647, its SJR ranking is Q1, and it is rated C in the VHB-JOURQUAL 3. To enhance the article before submission, I presented the research at the 17th International Research Symposium on Service Excellence in Management (QUIS17) in 2022, and the corresponding conference paper was published in the proceedings of the symposium.

The purpose of the study is to conceptualize and measure the constructs and interrelationships of a formative measurement model that explains how individual political behavior affects new service development (NSD) at the customer interface. The article applies structural equation modeling to assess the measurement validity and reliability of generally accepted constructs and test the relationships between these constructs using survey data (N = 554). Drawing on interdependence theory, the study shows that political behavior positively impacts the employee-brand relationship, which helps to stimulate employees to engage in

unscripted behaviors that benefit the customer. Furthermore, the study shows that political behavior has a positive impact on employees' and customers' expected extra-role innovative service performance, allowing them to gain deeper insights into customers' needs. Essentially, the study demonstrates that individual political behavior is not necessarily an exclusively dysfunctional phenomenon and, therefore, challenges the accepted wisdom that political behavior is solely a form of inefficient conflict. In sum, the third article advocates equal consideration of political behaviors' negative and positive aspects: scholars and practitioners alike should see the functional and dysfunctional effects of political behavior on service innovation as two sides of the same coin. The present studies' empirical results allow us to shed light on the functional side in particular.

2.4 Fourth article

The fourth article is a qualitative empirical study titled "Combining strategies for high service productivity with successful service innovation" co-authored with Malte Schneider, Dominik K. Kanbach, and Sascha Kraus, which was published in the *Service Industries Journal (SIJ)*, 2022, vol. 42, issue 11–12, pages 948–971. The *SIJ*'s impact factor is 9.405, its CiteScore (Scopus) is 10.8, its SJR ranking is Q1, and it is rated C in the VHB-JOURQUAL 3. To improve the article before submission, I presented the research at the Strategic Management Society's 41st annual conference in 2021 in Toronto (online due to the COVID-19 pandemic) as well as the 30th Frontiers in Service conference in 2022 at Babson College in Boston.

The purpose of the fourth article is to explain how firms combine strategies for high service productivity with successful service innovation by adopting a multiple case study research approach. The results of a one-year field study in the financial services market show that firms are more likely to gain a competitive advantage if they link multiple innovation configurations that fit with the firms' productivity strategy. The article identifies 27 cases of firms that facilitate productivity either through cost emphasis, revenue emphasis, or dual emphasis. Our data, which is based on 42 in-depth interviews and public documents, also

suggests that two sets of service innovation configurations—new service development and service design—are linked together in relationships with service productivity. Moreover, by taking a service systems perspective, the article specifies the interdependencies between service productivity and service innovation and provides a holistic assessment of innovation practices for achieving high productivity in competitive markets. Essentially, the article theorizes how organizations can simultaneously pursue courses of action along different and often conflicting service innovation and productivity dimensions.

2.5 Fifth article

The fifth article is a mixed empirical study titled “Effective innovation implementation: A mixed method study” co-authored with Malte Schneider and Dominik K. Kanbach, which was published in the *International Journal of Innovation Management (IJIM)* in 2022. The *IJIM*'s impact factor is 2.33, its SJR ranking is Q2, and it is rated B in the VHB-JOURQUAL 3.

Furthermore, a preliminary version of the article was accepted for presentation at the International Society for Professional Innovation Management (ISPIM) Conference in 2021 before submission to *IJIM*.

The purpose of the fifth article is to identify how organizations can improve the effectiveness of innovations by specifying the effects of innovation implementation antecedents and capabilities. By applying a mixed-method approach, using data from 42 semi-structured interviews and 125 questionnaire participants, the article develops a new framework for understanding the mechanisms that underlie and enhance effective innovation implementation. The results emphasize that achieving a high and consistent use of innovations requires organizations to focus on organizational members and their individual characteristics rather than organizational design. Additionally, implementation leadership serves as a central mediator to explain the framework's relationships. Furthermore, a middle management-driven approach that combines implementation leadership and dialogue facilitates the effective implementation of innovation.

Table 1 List of articles

Article	Title	Publication status
1.	Service productivity: systematic review of a dispersed research area	<ul style="list-style-type: none"> ▪ Published in Management Review Quarterly (SJR Q1, VHB C) (double-blind peer reviewed) https://doi.org/10.1007/s11301-023-00333-9 ▪ Presented at the dissertation development workshop of the Strategic Management Society in April 2021 (peer reviewed)
2.	Measuring and managing service productivity: a meta-analysis	<ul style="list-style-type: none"> ▪ Published in Review of Managerial Science (SJR Q1, VHB B) (double-blind peer reviewed) https://doi.org/10.1007/s11846-023-00620-5 ▪ Presented in the 2022 SERVSIG Doctoral Consortium of the American Marketing Association (AMA) at Babson College, Boston, Massachusetts in June 2022 (peer reviewed)
3.	Political behavior in service innovation: empirical examinations of social relationships	<ul style="list-style-type: none"> ▪ Under review in the European Journal of Marketing (SJR Q1, VHB C) (double-blind peer reviewed) ▪ Conference paper published in the proceedings of the QUIS17 International Research Symposium on Service Excellence in Management https://quis17vlc.blogs.upv.es/proceedings-download/ ▪ Presented at the 17th international research symposium on service excellence in management (QUIS17) at Polytechnic University of Valencia in January 2022 (single-blind peer reviewed)
4.	Combining strategies for high service productivity with successful service innovation	<ul style="list-style-type: none"> ▪ Published in the Service Industries Journal, 2022, Vol. 42, issue 11-12, 948-971 (SJR Q1, VHB C, ABS 2) (double-blind peer reviewed) https://doi.org/10.1080/02642069.2022.2098952 ▪ Presented at the 30th Frontiers in Service conference at Babson College, Boston, Massachusetts in June 2022 (single-blind peer reviewed) ▪ Presented at the Strategic Management Society (SMS) 41st Annual Conference in Toronto in September 2021 (double-blind peer reviewed)
5.	Effective innovation implementation: A mixed method study	<ul style="list-style-type: none"> ▪ Published in the International Journal of Innovation Management, 2022, Vol. 26, No. 6, 2250042 (SJR Q2, VHB B) (double-blind peer reviewed) https://doi.org/10.1142/S1363919622500426 ▪ Accepted for presentation at the International Society for Professional Innovation Management (ISPIM) Conference in Valencia in December 2021 (single-blind peer reviewed)

Table 2 Method, individual contribution, and key findings

Article	Method	Contribution	Key Findings
1.	Systematic literature review structuring and analyzing research on service productivity based on 190 published articles	By systematically reviewing the extant literature, the research offers a broader conceptualization of service productivity emphasizing service productivity as a collaborative process with customers as co-creators of value	The existing service productivity research most often leaves out consumers' time and effort during co-creation/production and thus ignores an important actor-to-actor perspective that transcends the producer-customer divide
2.	Meta-analysis of the factors influencing service productivity based on 77 articles and 81 independent samples, with a cumulative sample size of 30,238 participants	By assessing the theory of optimal service productivity in different contexts, the research refines established theoretical measurement assumptions and develops novel ones for different internal and external service marketing perspectives	Productivity measures that equally consider quality and cost effects determine service productivity more accurately, making them a more suitable basis for strategic decision-making
3.	Quantitative empirical study (N = 554) to conceptualize and measure the constructs and interrelationships of a formative measurement model that explains how individual political behavior affects new service development at the customer interface	By describing the theoretical importance of political behavior in new service development and empirically linking both concepts, the research offers an evolved perspective for the equal consideration of political behaviors' hedonically negative and positive aspects	Political behavior has a positive impact on extra-role behavior, providing deeper insights into customers' needs and indicating that political behavior is not an exclusively dysfunctional phenomenon
4.	Multiple case study (based on 27 cases) investigating how the core concepts of service innovation must be designed to reinforce and reciprocally support the firm's service productivity strategy	By building on multiple cases, the research develops a new theory of how organizations can simultaneously pursue courses of action along different and often conflicting service innovation and productivity dimensions	Firms are more likely to gain a competitive advantage if they link multiple innovation configurations that fit with the firms' productivity strategy
5.	Mixed empirical study combining qualitative interview data (42 semi-structured interviews) with quantitative questionnaire data (N = 125) to shed light on the underlying mechanisms enhancing the effectiveness of innovation implementation	By applying a mixed-method grounded theory approach, the research develops a new framework incorporating contextual antecedents and implementation capabilities to show how innovations are implemented effectively	Incumbent firms reach high innovation-implementation effectiveness by pushing individual boundaries rather than organizational boundaries and relying on middle managers to drive implementation, justifying the use of a middle-up-down-management approach

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3. Service productivity: a systematic review of a dispersed research area

The full version of this research paper was left out in this publication due to copyright reasons. The research paper is published open access in the *Management Review Quarterly* (SJR Q1, VHB C) <https://doi.org/10.1007/s11301-023-00333-9>.

Authors: Johannes Hofmeister, Dominik K. Kanbach, Jens Högrevé

Abstract

The service productivity literature has grown remarkably over the last two decades and has gathered substantial knowledge. However, with the gradual acceleration of knowledge production about service productivity, the collective evidence becomes more fragmented and interdisciplinary. The purpose of this literature review is to systematically identify and analyze 190 publications focusing on service productivity to link previously dispersed studies as a next step in theory development. By clustering existing service productivity research into macroeconomic, mesoeconomic, and microeconomic dimensions, our review reveals that much progress has been made in advancing the open-ended theory of optimal service productivity. Reviewing key insights from the existing literature, we show that the majority of service productivity research adopts a one-sided industrial perspective that primarily focuses on firm productivity. Although valuable, these studies most often leave out consumers' time and effort, neglecting the value of consumer-generated input. Thus, the present research offers a new conceptualization of service productivity by emphasizing it as an open and customer-inclusive process that transcends the service producer–customer divide. Finally, we contribute a set of propositions. Within these propositions, we identify beneficial conditions and means for firms to improve service productivity. In sum, the article provides policymakers, researchers, and practitioners with valuable guidance for developing means to generate positive effects in a service economy that lacks productivity.

4. Measuring and managing service productivity: a meta-analysis

The full version of this research paper was left out in this publication due to copyright reasons. The research paper is published open access in the *Review of Managerial Science* (SJR Q1, VHB B) <https://doi.org/10.1007/s11846-023-00620-5>.

Authors: Johannes Hofmeister, Dominik K. Kanbach, Jens Högrevé

Abstract

Despite service productivity's scholarly prominence and practical relevance, past research in marketing has primarily adopted isolated perspectives from which disjointed empirical findings reign supreme. As the acquisition of knowledge about service productivity accelerates, the collective evidence becomes more interdisciplinary but also more fragmented. This study uses a meta-analysis to integrate the substantial empirical record on service productivity. We formulate hypotheses on the moderators of service productivity-determinant relationships and meta-analyze 77 articles, relying on 81 independent samples with a cumulative sample size of 30,238 participants to test our predictions. Our meta-analysis provides empirical evidence that service quality and internal efficiency must be considered jointly, not in isolation, to maximize profitability. Thus, relying on one aspect in isolation is less appropriate for measurement purposes and might not lead to positive outcomes. Service scholars and managers should care about this important finding since declining profit margins require service firms to move beyond the traditional manufacturing productivity that separates service quality from internal efficiency and consider service productivity as a profitability concept. In sum, our findings provide a viable model to explain the main service productivity determinants and moderating variables, offering valuable insights for practitioners that aim to deliver service quality that is cost-efficient as well as promising future research directions.

5. Political Behavior in Service Innovation: Empirical Examinations of Social Relationships

The research paper is under review in the *European Journal of Marketing* (SJR Q1, VHB C).

The full version of this research paper was left out in this publication due to copyright reasons. To enhance the article before submission, I presented the research at the 17th International Research Symposium on Service Excellence in Management (QUIS17) in 2022, and the corresponding conference paper is published open access in the proceedings of the symposium. <https://quis17vlc.blogs.upv.es/proceedings-download/>

Authors: Johannes Hofmeister, Dominik K. Kanbach, Timo J.J. Brunner

Abstract

Purpose: To help new service ideas gain traction, frontline employees (FLEs) often try to influence customers and co-workers, thereby making the new service development (NSD) process an inherently political activity. Even though political behavior is an important part of service innovation, there is little empirical evidence about the impact of political behavior in the NSD context. Against this backdrop, this study's purpose is to explain how individual political behavior affects NSD at the customer interface.

Design/methodology/approach: In the first step, this study applies structural equation modeling to address the effect of political behavior on employees (n = 306). In the second step, this study conducts a scenario-based written experiment to analyze the effect of political behavior on customers (n = 248).

Findings: The results show that political behavior positively impacts the employee-brand relationship as well as employee perceived, and customer expected extra-role innovative service performance which broadens current knowledge by showing that individual political behavior is not solely a form of inefficient conflict.

Research limitations/implications: Since the impact of political behavior on NSD is complex and requires careful conceptualization, future studies should examine the bipolarity of political behavior for a more comprehensive understanding of workplace effectiveness.

Practical implications: This study helps managers leverage the functional effects of political behavior while controlling for dysfunctions, especially if competitive pressures incite conflicts of interest that negatively influence innovation outcomes.

Originality: This is the first study to argue for the theoretical importance of political behavior in NSD and empirically links both concepts. Thus, we advance the NSD concept, empirically examine the effects of political behavior on NSD, and provide suggestions for further research.

Paper type: Research paper

6. Combining strategies of high service productivity with successful service innovation

The full version of this research paper was left out in this publication due to copyright reasons. The research paper is published in *The Service Industries Journal*, vol. 42 no. 11-12, pp. 948–971. (SJR Q1, VHB C) <https://doi.org/10.1080/02642069.2022.2098952>.

Authors: Johannes Hofmeister, Malte H. G. Schneider, Dominik K. Kanbach, Sascha Kraus

Abstract

Service innovation and service productivity are key elements of a firm's ability to gain competitive advantages. Although previous studies have advanced the understanding of each topic individually, few attempts have been made to bridge the gap between the two research streams. Endeavoring to explain how firms combine strategies for high service productivity with successful service innovation, we adopt a multiple-case research design. Results of a one-year field study in the financial services market show that firms are more likely to gain competitive advantages if they link multiple innovation configurations that fit with their productivity strategy. We identified 27 cases that facilitated productivity through cost emphasis, revenue emphasis, or a dual emphasis on both cost and revenue. Our data, which include 42 in-depth interviews as well as public documents, also suggest that two sets of service innovation configurations—new service development and service design—are linked together in relationships with service productivity.

7. Effective innovation implementation: A mixed method study

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Abstract

Ensuring that innovations are implemented organization-wide remains a critical business challenge for organizations. This study identifies how organizations can improve the effectiveness of innovations and specifies the effects of innovation implementation antecedents and capabilities. By applying a mixed method approach, using data from 42 semi-structured interviews and 125 questionnaire participants, we develop a new framework for understanding the mechanisms that underlie and enhance effective innovation implementation. The results emphasize that achieving high and consistent use of innovations requires organizations to focus on organizational members and their individual characteristics, rather than on organizational design. Additionally, implementation leadership serves as a central mediator to explain the framework's relationships. Furthermore, a middle management-driven approach that combines implementation leadership and dialogue facilitates effective implementation of innovation. In conclusion, our study contributes to innovation implementation research by presenting a framework to guide future research, while helping practitioners to implement innovations more effectively.

8. Contributions, limitations, and future research

8.1 Contributions to research and practice

This dissertation aims to make two central contributions. First, it proposes an integrated framework that brings together theoretical and empirical concepts explaining the nature of service productivity research. This framework, presented in the first article, draws on a systematic literature review that identifies and analyzes 190 publications considering more than twenty years of service productivity research. Furthermore, the framework is based on a meta-analysis of the factors influencing service productivity based on 77 articles and 81 independent samples, with a cumulative sample size of 30,238 participants. Specifically, the framework incorporates two inter-related elements: (1) the *macro- and mesoeconomic perspective* offers a broad conceptualization of service productivity by emphasizing its nature as a collaborative process that transcends the producer-customer divide; (2) the *microeconomic perspective* provides a viable model to explain the main determinants of service productivity and potential moderating variables at the firm level. Second, based on this framework, I conducted research emphasizing the intersection between service productivity and service innovation. Specifically, the dissertation theorizes how organizations can simultaneously pursue courses of action along different and often conflicting service innovation and productivity dimensions. In this sense, the dissertation enriches the literature by specifying the interdependencies between service productivity and service innovation and presents a holistic assessment of innovation practices for achieving high productivity in competitive markets. In combination, the contribution of this dissertation exceeds that of the individual articles. Nevertheless, the individual articles also make important individual contributions.

The first article makes three contributions. First, the systematic literature review proposes an evolved perspective on service productivity that accounts for recent academic and

practice advancements. Second, the article categorizes the literature on service productivity and links previously dispersed empirical discussions by introducing a categorization that provides a more explicit context and, thereby, creates a more cohesive foundation for further theory development. Third, the article outlines an agenda to guide and stimulate future service productivity research.

The second article, the meta-analysis, also makes important contributions based on a dataset comprised of 77 articles relying on 81 independent samples, with a cumulative sample size of 30,238 participants. First, the research helps scholars and practitioners get an overview of the field by proposing five determinants of service productivity to integrate studies that apply the same or similar terminology. Second, the article validates the measurement assumption of the theory of optimal service productivity, which states that productivity (and, therefore, financial) measures that consider cost and quality perspectives are the most suitable for measuring the service productivity effect. Third, the article tests the relevance of the theory of optimal service productivity from a service-type perspective.

With the third article, the research adds to the literature on capabilities for successful service innovation (den Hertog et al., 2010). Furthermore, the article provides added insights into the employee-brand relationship and political behavior, both important complementary social features that help service firms become more innovative and, hence, also enriches the literature focusing on social role behaviors (e.g., Schepers et al., 2011). Additionally, the research contributes to interdependence theory by offering new insights into the understudied empowering aspects of political behavior given that previous scholars have primarily researched its disempowering aspects (e.g., Elbanna and Child, 2007; Parker et al., 1995).

The fourth article also makes two central contributions. First, the framework of the multiple case study can be used for systematic scholarly inquiry into the diverse theoretical foundations of service productivity and service innovation. Second, the framework can be

useful to service firms that innovate proactively but have been less effective in introducing service innovations into the market. Thus, by abstracting the intersection of service productivity and service innovation, the article seeks to generalize the core features of each research stream to advance knowledge in a field that deserves further research.

Finally, the fifth study helps to improve our understanding of effectively implemented innovations within incumbent firms by presenting and testing a new theoretical framework. The research demonstrates that individuals' responses to and coping mechanisms vis-à-vis innovations—in contrast to innovation generation or adoption—have a greater influence than organizational characteristics on the effective implementation of innovations. Additionally, by aggregating individual and organizational factors, the research captures the interplay of previously separated factors. All these findings allow us to make important contributions to research and practice.

8.2 Limitations

Like any other academic work, this dissertation has strengths and limitations. For the systematic literature review and meta-analysis, we restricted the data to a specific selection of journals. By focusing on 22 journals in the service management, general marketing, business-to-business marketing, and innovation fields, we limited ourselves to the most important journals and associated research communities contributing to the service productivity literature. As we did not include any unpublished works in our sample (e.g., conference papers, working papers, white papers, etc.), we potentially introduced a file-drawer bias. Because published works tend to report stronger (and more significant) effect sizes than unpublished works, we potentially overestimate the relationships in our meta-analytic model. Furthermore, since service productivity is a diverse research field, our initial keyword selection could not cover the entirety of available studies even though the literature review

follows a thorough and comprehensive structural (Snyder, 2019) and methodological approach (Tranfield et al., 2003; Gioia et al., 2013).

Additionally, regarding the meta-analysis, we found similar constructs referring to the same type of service productivity measurement in previous studies. Therefore, we considered that their population effect sizes were the same, and we used the average of the observed effects to proceed with our analyses because combining multiple within-study effect sizes leads to better estimates of true effects (Moeyaert et al., 2017). Consequently, we applied a multilevel meta-analysis approach in which we accounted for the dependence between measures by attributing them the same random effect. However, averaging effect sizes within studies ignores the dependence between similar measures, which can result in underestimating standard errors (Hedges & Olkin, 2014).

The results and implications of the third study are also somewhat limited. Since the complexity of political behavior makes it challenging to capture its relevant dimensions, the use of traditional survey research can only evaluate limited areas because participant answers are affected by several social biases.

Additionally, the fourth study, a multiple case study, also entails limitations. On the one hand, no widely accepted measurement capturing the relationship between innovation and productivity exists, and causalities between the constructs and outcomes are difficult to establish due to the interviewees' subjective assessment of often controversial strategic initiatives. On the other hand, even though we identified potential factors related to high service productivity and service innovation success, the data sample is limited to make valid service industry agnostic predictions for optimal organizational and operational configurations.

Finally, the fifth study also presents limitations. Because we derive hypotheses from qualitative data, the results of the quantitative model rely on the quality and unbiasedness of

this input. The interview data consists of individual responses, which might be prone to response biases. As we use these responses to develop the items for our quantitative analysis, the results depend on their accuracy.

8.3 Future research

Although research on service productivity and service innovation has grown remarkably, some scientific gaps persist in the literature, warranting future research. Based on the findings of the meta-analysis, I presented specific research questions in Table 9 that may motivate scholars to conduct further research considering the challenges associated with service productivity measurement and optimization. Further, drawing on the systematic literature review, I identified broader research avenues to stimulate research in the field of service productivity. From a *macroeconomic* perspective, the systematic literature showed that most research focusing on service productivity aims at empirically analyzing the latter's impact at the firm level, focusing exclusively on firm productivity. However, I argue that a broader, customer-inclusive perspective is needed in which internal efficiency and external customer-perceived quality are equally considered to cover the entirety of the service productivity concept (Grönroos & Ojasalo, 2004; Parasuraman, 2002). Thus, future service productivity research should concentrate on fully estimating the value of customers' input during service coproduction. Moreover, I find that on a macroeconomic level, the rise of technology-infused services creates difficult challenges for measuring value creation in a digitalized service economy. Consequently, a unique element of service productivity in the digital era is free software of high value to customers and the value of consumer-generated data as input in the provision of services to customers (Brynjolfsson et al., 2019). Due to measurement challenges related to the advent of free digital services, I propose that future service productivity research should focus on measuring the value of digital consumer input to capture "real" value creation in the digital service economy. In other words, future research must find new ways to measure

the welfare gains of technological companies even though no transaction has taken place and no direct value is registered. From a *mesoeconomic, industry-level* perspective, the systematic literature review shows that the rise of business services impacts service economies that are built on networks of specialized service firms offering business resources as a service. Even though the service sector is very heterogeneous, the two studies reveal that analyses of individual sector productivity have not garnered much scholarly attention. Consequently, in our view, there is still space for further research to analyze, for example, how the rise of the sourcing and outsourcing of business services affects industries' and companies' service productivity (Ehret & Wirtz, 2015).

Additionally, based on the findings of the empirical studies, I identify several avenues for further research. First, crises such as the COVID-19 pandemic demonstrate that unstable dynamic business environments pose severe challenges to organizations. To stay competitive, uncovering how to implement innovations effectively (Lawson & Samson, 2001) in these conditions seems to be a promising area of research. Thus, researchers could transpose the framework of the fifth study to different contexts (e.g., unstable environments) and settings (e.g., SMEs) to evaluate whether the strengths and roles of implementation boundaries, capabilities, and middle managers (especially within organizational designs with limited hierarchical differences) change. Furthermore, although the fifth study focuses on internal users of incumbent firms, the influence of external user groups and stakeholders (e.g., customers, investors) cannot be ignored if high consistent use of innovation is to be achieved (Postema et al., 2012). Because stakeholders affect the organization (Freeman, 1984), research could investigate how the relationship of external stakeholders with an organization shapes the implementation of internal innovation.

Second, I argue that more research using empirical contexts allows for better identification of causality in the link between innovation and productivity. Fuzzy-set

qualitative comparative analyses that identify necessary conditions for the productivity emphases of the fourth and fifth studies would make a strong contribution. Furthermore, since we could not measure innovation productivity directly by using company internal data and instead relied on external data on innovation and productivity, I suggest that further research should test whether the conceptual framework developed in the fourth and fifth studies holds true using company internal data. Additionally, I argue that the evolutions of or transitions between organizational configurations when pursuing service innovation and service productivity are another interesting research area. Longitudinal studies covering this aspect could significantly help to explain evolutionary dynamics. Further research should also explore whether the various configurations should be implemented sequentially or all at once. Finally, because most of the empirical research in this dissertation refers to mature service industries where services are mainly tangible and customer coproduction is high, studies in the same context but in different service industries where intangible services (e.g., knowledge-intensive services or travel services) or low customer coproduction (e.g., logistic services or transport services) prevail constitute promising opportunities for research.

Despite its limitations and the need for future research, this dissertation contributes to a better understanding of service productivity and service innovation, two key elements of a firm's ability to gain a competitive advantage. By investigating the intersection between service productivity and service innovation, this dissertation enhances the academic and practical understanding of both research streams. To conclude, it contributes to the core features of the service productivity and service innovation research streams to advance knowledge in two fields that deserve further research.

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