Preface

Service innovation is about more than the technical or mechanical processes that drive the creation of new ways of fulfilling the demands and needs of society as a whole. It incorporates that elusive element that Carl Jung refers to, where "The creation of something new is not accomplished by the intellect, but by the play instinct arising from inner necessity. The creative mind plays with the object it loves".[1] This, in a succinct manner, encompasses the kernel at work in service innovation—that it is driven by the implicit process to improve, create, and utilize both tactile and intangible processes, services, and products. Aligned with the instinct, passion, and drive to improve what we as human beings come across, service innovation is an inherent part of life. To this end the collection of chapters here explore this in all its dimensions.

With services creating most of the wealth and employment in most emergent and advanced economies, fostering and managing service innovation exhibits unique challenges. This is particularly true if productivity improvement in services is to keep up with the long-lasting productivity improvement in manufacturing. These challenges pose new and interesting phenomena and call for new perspectives to be brought into focus. Service innovation is not limited to the service innovative process itself, but also involves our subtle responses and unspoken practices that accommodate, facilitate, and accelerate it. This multitude of perspectives and meanings shaping service innovation is what this Handbook explores in greater depth. *The Handbook of Service Innovation* takes the reader into deeper terrain to create insights into how we can explore some of these intricate aspects that define different forms of innovation, from the prosaic and beyond. Inexorably, this entails examining the specific nature of service innovation in order to unravel its complexities. By covering a breadth of topics, the Handbook provides an overview of how to build skills and capabilities to better design innovative services. An important facet of this process includes the

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[1] Hillman J (1997) The myth of analysis. Northwestern University Press, Evanston, IL, p. 48.

challenges faced by management related to the new ways in which service innovation is undertaken, including its international dimensions.

The Handbook brings together the latest academic research and management practice on innovation in services, with contributions from leading researchers, practitioners, and thought leaders in the field, who provide in depth and practical insights into designing and managing innovation in services. This is achieved through cutting-edge research contributions, practical examples and implementations, and select cases. The Handbook takes the reader into alternative and varied views of innovation, while introducing recent and emerging technological developments, both in private and public service settings.

The Handbook is organized into seven parts that draw together the critical themes, or backbone, of service innovation. These parts cover a range of topics, both emergent and traditional. Our aim is to highlight core issues in service innovation as well as explore the novel approaches, integration, and understanding within specific contextual frameworks. In doing so, the Handbook provides a pragmatic approach to understanding service innovation on many different levels.

The Handbook starts with the theme *Innovation Definitions, Governance Structure, and Literature* in Part I. Before one can effectively and efficiently design and manage service innovations, it is paramount to first get an understanding of different types of innovation and degree of innovativeness.

In "Innovation: A Critical Assessment of the Concept and Scope of Literature" Baunsgaard and Clegg put forward the argument that service innovation is not taken up in the literature in a consistent manner, and inherent issues with defining innovation results in noncumulative and noncomparable studies that affect how innovation is researched. This is a critical concept in understanding the disparate nature of service innovation studies, and the Handbook takes the reader on a journey to align themes and concepts around the topic through the subsequent chapters.

In "Service Innovation: A Review of the Literature", Randhawa and Scerri outline a literature review that takes a significant step into integrating some of the streams of service innovation, showing its multidisciplinary aspects. In "Open Service Innovation: Literature Review and Directions for Future Research", Alexiev et al. explore how prospective research can encompass antecedents at the alliance-, alliance portfolio-, and alliance-network levels to enhance our understanding of service innovation. They call for an integrative model to propel future research, and provide a basis for developing such a model.

The Handbook then turns to co-creation and its relationship to service innovation in "Towards an Understanding of Open Innovation in Services: Beyond the Firm and Towards Relational Co-creation", with Edwards et al. comparing existing open innovation frameworks, and proposing a co-creation approach to open service innovation.

Highlighting the complexities inherent in service innovation, Janssen et al. discuss a multidimensional approach in "Exploring a Multidimensional Approach to Service Innovation". By using survey-data from over 300 firms, the authors operationalize a multidimensional conceptualization of service innovation.

In "Innovation, Service Types, and Performance in Knowledge Intensive Business Services", Campagnolo and Cabigiosu explore Knowledge-Intensive Business Services (KIBS), and argue that not only innovation and customization are complementary in KIBS, but also that replication via standard and modular services determines a KIBS firm's performance. This chapter completes Part I by gathering the strands around the literature and structures providing a firm foundation for the key themes to be explored in the Handbook.

The second theme the Handbook explores relates to *Skills and Capability Building in Service Innovation,* discussed in Part II.

Roth develops a conceptual framework that helps firms to evolve crucial competences for a systematic service innovation process in "On the Way to a Systematic Service Innovation Competency Framework". The service-dominant logic and the competence-based perspective are used as theoretical foundations for this competency-based framework.

"Service Innovation Capabilities for Idea Assessment: An Appraisal of Established and Novel Approaches" provides an overview of the concept of idea assessment in services research. Here, Feldman and Kohler explore a case study of a German financial service provider, and introduce the concepts of serious games and crowdfunding as approaches to tease out issues of assessing service ideas.

Hasu et al. cover the topic of integration of user-based and employee-driven perspectives in innovation in "Employees and Users as Resource Integrators in Service Innovation: A Learning Framework". The authors suggest a new integrated approach by analyzing the user–employee interaction in innovation, both theoretically and in two empirical cases.

In "Foresight and Service Design Boosting Dynamic Capabilities in Service Innovation", Ojasalo et al. take up the concept of futures thinking and design thinking, and how these facilitate service innovation from the dynamic capabilities point-of-view. This chapter provides a valuable conceptual framework for service innovation that is grounded on concepts of foresight and service design.

The Handbook then returns to the topic of KIBS in "Employment and Skill Configurations in KIBS Sectors: A Longitudinal Analysis", where Consoli et al. explore the topic from an alternative angle. This chapter offers a review of scholarly perspectives on the growth trajectory of KIBS, and elaborates on an empirical analysis to explore in detail commonalities and differences across a diverse group of sectors.

In "Dynamic Capabilities for Service Innovation in Service Systems" Agarwal and Selen explore the significance of the tangible and intangible aspects of service innovation. They demonstrate the relevance of the more implicit motivators of innovation to do with social and human capital, the more elusive aspects that play a dominant role in productivity.

The third major theme encompasses *Technological Developments in Service Innovation,* and is covered in Part III.

Nayar opens this part with a dynamic paper on the role of the emergent technology Web 3.0, or Semantic Web, in service innovation in "Role of Web 3.0 in Service Innovation". The semantic characteristic of Web 3.0, coupled in particular

with the ability to harness explosive amounts of data available today, make emerging Web 3.0 a key enabler for service innovation on a scale not seen before.

In "Service-Oriented Architecture as a Driver of Dynamic Capabilities for Achieving Organizational Agility", Luthria and Rabhi examine the conduits through which Service-Oriented Architectures (SOAs) may exert influence on dynamic capabilities within firms, and then empirically investigate this relationship in the context of organizations.

The topic of healthcare is critical in economies that deal with more efficient ways of administrating and providing services in this sector. Jung and Padman explore innovative, disruptive models of health care delivery in "Disruptive Digital Innovation in Healthcare Delivery: The Case for Patient Portals and Online Clinical Consultations". This framework provides a large departure from previous ways of understanding the health system, and hints at a massively improved system through patient engagement.

In the concluding chapter for this part, "Technology-Driven Service Innovation in the Banking Industry", Bajada and Trayler present an overview of the banking industry and examine the landscape of service innovation as shaped through the arrival of new technologies and deregulation of the Australian banking sector in the 1980s. The authors outline a number of changes in the industry that fuelled remarkable transformation in the way consumers and businesses approach banking through innovative services.

The Handbook goes into a fourth major theme with a focus on *Designing Service Innovation,* covered in Part IV.

In "Systemic Development of Service Innovation", Hautamäki and Oksanen explore the intrinsic characteristics of services and service systems, and present a systemic approach to produce service innovations.This chapter also provides insights into design thinking and its implications to service development and radical service innovation.

Ceschin demonstrates how Product-Service System (PSS) innovations represent a promising approach to sustainability in "The Role of Socio-Technical Experiments in Introducing Sustainable Product-Service System Innovations". Building on insights from transition studies and through an action research project, the chapter investigates the role of design in sustainable radical service innovations.

Roos provides an overview of relevant literature on servitization in "Servitization as Innovation in Manufacturing—A Review of the Literature", exploring its dynamic nature. More and more servitization is becoming an essential part of strategy for manufacturing firms. The literature shows that the transformation process into a servitized manufacturing firm is a multifaceted, complex, but fertile terrain.

In "The Architecture of Service Innovation", Moustafellos discusses the field of service design through an architectural approach, where the reader is taken through architectural lessons from the classic Greeks and Romans, demonstrating how service design of classic infrastructures provide useful criteria for approaching and assessing services today.

In "Innovation or Resuscitation? A Review of Design Integration Programs in Australia", Cys and Andrew explore how design-integration programs have been established and supported by governments of nations around the world. This chapter reviews four government-supported programs in Australia, aiming to integrate design capabilities to stimulate business innovation and contribute to economic growth.

Chew in his "Service Innovation Through an Integrative Design Framework" outlines how at its core customer-centric service innovation in an increasingly digital world, is simultaneously technology-enabled, human-centered, and process-oriented. Chew argues that service innovation requires a cross-disciplinary, holistic, and end-to-end approach to New Service Design and Development (NSD).

The emerging concept of circular economy and its relevance to service innovation is a topic covered by Roos and Agarwal in "Services Innovation in a Circular Economy". An in depth literature review highlights the significance of the circular economy which shows how revisiting this concept first developed in the 1960s could assist in addressing complex global challenges. This chapter provides a new focus to service innovation as it necessitates the development of an appropriate business model framework for firms engaging in service innovation and delivery within a circular economy framework.

The fifth theme of the Handbook draws together papers on *Management Issues in Service Innovation,* discussed in Part V.

In "Illuminating the Service Provider's Strategic Mandate on Realizing Apt Quality and Value Through Service Innovation", Menor highlights how the pursuit and achievement of success in service innovation constitutes a critical strategic imperative for many organizations. The author takes the reader through empirical findings, obtained through field-based examination of innovative initiatives of North American symphony orchestras.

Holmlid et al. explore the intricate mechanism of co-creative practices that can be used for the purpose of service innovation in "Co-creative Practices in Service Innovation". The authors highlight the open-ended exploration practices familiar to designers, in which the practice of identifying problems goes hand in hand with creating solutions. The basis for exploration in this chapter is the engagement of people in reflective and creative dialogs, and to situate activities in order to set frames for reflection.

In "Managing Online User Co-creation in Service Innovation", Bengtsson and Ryzhkova present a framework of capabilities and related management practices to the effective management of different types of online service innovation tools. In "Practices for Involving Organizational Customers in Service Innovation", Korhonen and Kaarela apply previous research into Service-Dominant (S-D) logic and open innovation in order to study the practices for involving organizational customers in service innovation. The authors look at empirical research, based on case studies on six globally operating technology companies known for their innovativeness and service-oriented business with their organizational customers.

The Handbook turns to the international arena in its sixth theme, with a unique set of papers focussing on the *International Dimensions of Service Innovation,* covered in Part VI.

In "Services Offshoring: Location Choice and Subnational Regional Advantages in China", Tan and Chen examine the patterns of distribution of offshoring activities and determinants of the location selection at the city level. The chapter describes an empirical study that confirmed that the location of offshoring of services firms in China is highly influenced by location-specific factors, in particular the presence of a large educated workforce in the city.

"Innovative Strategies in Servicing International Markets from Ireland" explores the innovative evolution of Ireland's internationally traded services sector in the context of the increased significance of servicing international markets by foreign companies in Ireland. Grimes and Collins highlight in this chapter how innovative tax policies, together with innovative managerial practices such as transfer pricing, have enabled multinational subsidiaries in Ireland to evolve their operation more globally, as well as remain profitable in a relatively high-cost location.

In "Leveraging Value Across Borders—Do 'Market Place Interactions' Trump 'Market Space Transactions'?: Evidence from Australian Firms in Industrial Markets", Jack describes an exploratory case study of four Australian firms, operating in industrial markets, to assess the use of service innovative technologies in the delivery of supplementary services to international clients.

Since the outbreak of the Global Financial Crisis (GFC), businesses and governments in developed economies are more focused on sustainable affordability. In "Frugal Services Innovation—Lessons from the Emerging Markets and an Adoption Framework for First-World Corporations and Governments", Sivaprakasam and Srinivasan provide a framework based on lessons in frugal innovations derived from emerging market experiences. Such lessons from emerging countries are important to foster a continuous and sustainable innovation approach, and also help businesses and governments in developed economies stay relevant to their stakeholders.

In the concluding theme, the Handbook focusses on *Service Innovation in the Government Sector,* discussed in Part VII.

Jappinen addresses the management of the service innovation process in the public sector in "How to Manage a Service Innovation Process in the Public Sector: From Co-Design to Co-Production". This chapter explores how the local government sector can use change management to better benefit from user-driven innovation in public sector renewal. Empirical data were drawn from the Finnish Customer-oriented Service Network Project in Helsinki, referred to as the Lauttasaari Project, which is discussed in detail in terms of change management, decision making, and innovation management.

In "Innovating Universities: Technocratic Reform and Beyond", Reiger et al. critically examine innovations and 'reforms' in university service provision and their management, focusing on Australia as illustrative of broader global trends associated with the integration of higher education into the international market economy. The authors suggest that dominant approaches to university 'reform' risk

to diminish the creativity and critical investigation skills required for these institutions to advance service innovation and emerging forms of society, beyond popular beliefs of becoming a 'knowledge-based' and 'service-oriented' economy.

In "Business Model Approach to Public Service Innovation" Katsigiannis et al. present a dynamic approach for the public sector to incorporate a new 'business model'. This chapter creates dialog around the challenges facing public sector decision makers, and allows for a better understanding in how to manage public service innovations.

"Exposing an Economic Development Policy Clash: Predictability and Control Versus Creativity and Innovation" concludes the Handbook, where Andrew explores the tangle of academic discourse, policy rhetoric, and government programs aimed to support innovation through a case study of South Australia's strategic plan, and the agencies charged with fostering and supporting innovation in the state.

As discussed above, the Handbook draws from a large tract of information and knowledge on service innovation, and targets many audiences because of its comprehensive coverage of the subject area. Managers, public sector officials, and practitioners may benefit from the many practical examples and case studies, as well as management frameworks based on a well-covered theoretical background, reinforced by empirical results from industry and public sectors.

Researchers and academics may refer to the vast literature exposed on the topic of service innovation, as well as the discussion of numerous areas for further investigation as future research topics. Finally, students can use this Handbook to familiarize themselves about the nature, complexities, and opportunities of well-designed innovations in services, in both private industry and public sector settings.

In an era where technological advances propel the facilitation of improvements and fast absorption of not only the service, but also our inherent beliefs around what service signifies, this Handbook serves as a guide. After all, service in itself encompasses the complexities of the human psyche and its placement in vaster societal backdrops.

In the end of the Handbook, the *Epilog* provides a current status of the latest thinking in service innovation, and sets out a blue print for understanding service innovation to a more attuned level. We wish you a productive journey in your reading through the various themes covered in this text.

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