

Commentary: future directions of the service discipline

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Abstract

Purpose – The purpose of this paper is to suggest some ways that service scholars can shape the future of the service discipline by building knowledge that is useful to businesses, individuals, communities, institutions, society and the bio-environment.

Design/methodology/approach – This paper explicitly considers how global trends are likely to influence future research challenges in the service discipline. Then, service research priorities are identified by drawing upon the principles of responsible research in business and management (RRBM) (www.rrbm.net).

Findings – The paper identifies and analyzes many future service challenges arising from socioeconomic, demographic, technology and service systems, environmental and social changes. These changes are categorized as favorable and unfavorable in their effect on the well-being of people, organizations, society and the environment.

Research limitations/implications – This paper advocates more study of sustainability in service ecosystems, automation and the nature of service work, inclusion, equality and well-being of service workers; service in subsistence markets and the societal implications of new technology and big data.

Practical implications – The paper provides guidance for service marketers regarding research questions that are important to society and will need to be addressed by the year 2050. It translates the principles of RRBM into useful approaches to service marketing challenges that can be followed by all service researchers.

Social implications – This paper discusses important societal issues such as individual and societal needs for privacy, security and transparency; the ethical sourcing and treatment of service workers and the impact of service actions on environmental outcomes.

Originality/value – The conceptual framework integrates knowledge about service research in a new way, with insights for future service researchers, managers and public policymakers.

Keywords Sustainability, Quality of life, Globalization, Service design, Service systems, Technology and service

Paper type Conceptual paper

Introduction

Change is the law of life. And those who look only to the past or present are certain to miss the future. –John F. Kennedy^[1]

I have been asked to offer some reflections on the future of the service discipline. I believe that the service discipline has the potential to directly influence the generation and adoption of new ideas that can create a better world (Brown *et al.*, 2005). In the spirit of Kennedy's observation that "change is the law of life," this article begins by considering how the world is likely to change – and future challenges facing society. This societal problem-driven perspective highlights the large gap between societal needs and scholarly knowledge about service. I urge service researchers to engage in "responsible research" – that is, research that is useful to society and is credible (rrbm.network). Based on principles of responsible research (RR), this article identifies opportunities and approaches to research that can advance the science and practice of service – and, in doing so, improve individual and societal well-being.

Global trends

Let us begin by considering some of the ways that the world will change in the next 25–50 years, focusing on changes that are relevant to the service discipline. Table I describes global trends in five areas, namely, socioeconomic, demographic, technology and service systems, environmental and social changes. These changes are roughly categorized as favorable (+) and unfavorable (–) in their effect on the well-being of people, organizations, society and the environment. Favorable global trends include rising standards of living, slowing population growth, technological developments that have increased the capabilities of service organizations, new efforts to mitigate the effects of pollution and climate change and the expansion in organizations' goals to encompass multiple stakeholder groups.

At the same time, unfavorable global trends include the erosion of labor and human rights, an aging population with greater health needs and (potentially) higher health costs, an increase in service system crises, negative effects of climate change on people, organizations and ecosystems and detrimental changes in the nature of service work. Service research should help guide actors in a service

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Table I Selected favorable and unfavorable global trends

Socioeconomic	<p>+ Global supply chains contribute to economic growth, job creation, poverty reduction, entrepreneurship and help workers' participation in the global economy. Over the past 25 years, more than a billion people have lifted themselves out of extreme poverty. They seek better jobs, shelter, health, education and other services (Orbeck, 2018)</p> <p>– Despite the drastic decline in the global poverty rate, about 836 million people live at or below \$1.25 per day. This situation is unlikely to change in the next 25 years (World Bank, 2018). Global supply chain deficiencies have contributed to undermining labor and human rights, including child labor, forced labor and a lack of decent work for a living wage (The United Nations Global Compact, 2018)</p>
Demographic	<p>+ Fertility and mortality rates have declined to lead to unprecedented aging of the world's population (U.S. Bureau of Labor Statistics, 2015). Population growth will slow dramatically and the projected increases will be concentrated in nine countries – including five African countries. International migration an important determinant of population growth and change in some regions (United Nations, 2019). Most people will not have children until later in life; they will live in a large city; they will not own a car (Cohen, 2014)</p> <p>– “Will population aging be accompanied by a longer period of good health, a sustained sense of well-being and extended periods of social engagement and productivity or will it be associated with more illness, disability and dependency? . . . Are these futures inevitable or can we act to establish a physical and social infrastructure that might foster better health and well-being in older age?” (National Institute on Aging, 2011)</p>
Technology and service systems	<p>+ Technological developments are increasing the capabilities of service organizations and systems (Breidbach et al., 2018). Organizations are infusing innovative digital technologies within services such as robotics, mobile and location-based services, virtual reality and blockchain technology, AI, process automation and machine-to-machine interactions through the IoT (Bolton et al., 2018; Grewal et al., 2017). Thus, customers' expectations regarding the service experience and their behavior are changing</p> <p>– There have been global crises in financial service systems (e.g. in 2008), health systems (e.g. SARS epidemic), transportation systems (e.g. Boeing 737 MAX 8) and border management systems (e.g. movement of refugees) and cyberattacks on service systems (e.g. Amazon in 2019)</p>
Environmental	<p>+ Although nonrenewable resources continue to be depleted, renewable energy costs have fallen. Beyond recycling, many regions are banning single-use plastic items. There are efforts to mitigate pollution and climate change. Researchers are paying increased attention to climate change and energy usage issues (Kube et al., 2018)</p> <p>– The past five years are now almost certain to be the five warmest years on record, accompanied by record-level atmospheric concentrations of greenhouse gases. Extreme heat conditions are taking an increasing toll on human health. Climate variability and extreme weather events are among the key drivers of rising global hunger and internal displacements of people (World Meteorological Association, 2019). Climate change is likely to damage the banking system (Ewing, 2020), as well as business operations and profitability (Plumer, 2019)</p>
Social	<p>+ The business roundtable's <i>new Statement on the Purpose of a Corporation</i> commits 181 chief executive officers to lead their companies for the benefit of all stakeholders – customers, employees, suppliers, communities and shareholders – rather than focusing solely on shareholders. The general population reports high levels of distrust in institutions but college-educated, high-income respondents tend to trust their employers (Edelman, 2019)</p> <p>– In recent decades, automation has displaced labor rather than increasing productivity (Autor and Salomon, 2018). Automation has reduced the demand for labor and depressed workers' wages. Moreover, the nature of work has changed for most people – and not for the better (Irwin, 2020; Orbeck, 2018; Porter, 2019; Schwartz and Corkery, 2018)</p>

Notes: The UN Global Compact is the world's largest corporate sustainability initiative, spanning businesses in over 160 countries; this extract is from the opening sentences of a report co-sponsored by the US Department of Human Services and the World Health Organization

ecosystem toward strategies that are efficient, effective and beneficial from an individual, organizational and societal perspective. Yet, the gap between social needs and scholarly knowledge concerning service is vast; much more remains to be done. Many service phenomena are under-researched, including the (dis)functionality of service systems, sustainability in service ecosystems, changes in the nature of service work and new patterns in demand and supply of service. For example, as I write this article, health service systems are struggling with the outbreak of the Wuhan coronavirus, disaster and refugee relief services are overwhelmed, students around the world are striking to demand action to prevent climate change, automation is changing the workplace and protesters in Africa, Asia, Europe, Latin America and the Middle East are demanding higher wages, rights and respect (Schwab, 2020).

Service research priorities

The gap between societal needs and scholarly knowledge is not because of a lack of research progress by the service discipline. With the sustained growth of service in economies around the world, there has been a corresponding growth and evolution in the worldwide study of service (Fisk et al., 1993; Bitner and Brown, 2006). Service research has developed and deepened its theoretical foundations (Grönroos, 2011; Grönroos and Ravald, 2011; Grönroos and Voima, 2013; Lusch and Vargo, 2014; Vargo and Lusch, 2004, 2014) and generated robust empirical findings (Black et al., 2014; Blut et al., 2016; De Matos et al., 2007; Van Vaerenbergh et al., 2014). In addition, the service community has deliberately embraced a transdisciplinary approach to the study of service and a diverse array of methodologies. Moreover, leading service scholars

have worked to identify important service research priorities. There have been articles identifying service research priorities published in service journals at regular intervals (Kunz and Hogreve, 2011; Ostrom *et al.*, 2010). For example, Ostrom *et al.* (2015, p. 148) recently identified transformative service – aimed at creating uplifting changes and improvements in the well-being of individuals (both consumers and employees), communities and ecosystems – and the measurement and optimization of service performance as important priorities for advancing the service discipline (Table II).

Nevertheless, in today’s global marketplace, many important service phenomena are under-studied, including sustainability in service ecosystems, automation and the nature of service work, inclusion, equality and well-being of service workers; service in subsistence markets and the societal implications of new technology with its accompanying deluge of data. Why—given so much progress in service research – is there a gap between societal needs and service knowledge? The service community is not alone in facing this question. Academic thought leaders, university presidents, deans, professional societies, accrediting associations, funding agencies and the public have become increasingly concerned that business research has failed to fulfill its potential to offer solutions to real-world challenges (AACSB, 2012). For example, academics in the management discipline have come to realize that problem-driven work that uses mechanism-based theorizing where the ecosystem is the appropriate unit of analysis, is the most appropriate research approach under conditions of major economic change (Davis and Marquis, 2005) (Table III).

Responsible research

In response to this knowledge gap, I believe that service scholars should adopt responsible research in business and management (RRBM) principles (Community for Responsible Research in Business and Management, 2017). RRBM is a virtual organization dedicated to encouraging business research that builds knowledge to help make the world a better place

(rrbm.network) The concept of RR originated in the philosophy of science; it advocates that science should be socially responsible and credible (Tsui, 2016). This article builds upon RR principles to suggest some ways that service scholars can play an important role in building knowledge, that is useful to businesses, individuals, society and the bio-environment.

This article will focus on three RR principles because they can jointly guide service research toward the generation of knowledge, that is useful to society. They are:

- 1 the development of knowledge that benefits society;
- 2 the involvement of multiple stakeholders in the scientific process; and
- 3 making an impact on stakeholders.

The remaining four principles are fairly straightforward and well-understood (if not always followed) by the service community. They are:

- 1 the need for both basic and applied contributions;
- 2 plurality and multi-disciplinary collaboration;
- 3 sound methodology; and
- 4 broad dissemination of knowledge.

I will apply the first three RR principles to suggest some improvements in how we conduct service research and to identify new research priorities for the service discipline. Service research has a “head start” in embracing these principles because transformative service research (TSR) has focused on improvements in the well-being of individuals, communities and ecosystems (Anderson *et al.*, 2013). However, TSR has been defined as occurring at the intersection of transformative consumer research and service research. In contrast, service research has always emphasized plurality and multi-disciplinary collaboration (Principle 6), so that it is necessary to apply these praiseworthy goals beyond consumer research to all the disciplines that study service. Moreover, RR looks beyond well-being outcomes to consider a broader set of service outcomes.

Table II Service research priorities today

Article	Service research priorities identified by Ostrom <i>et al.</i> (2010)	Service research priorities identified by Ostrom <i>et al.</i> (2015)
Priorities	Fostering service infusion and growth Improving well-being through transformative service Creating and maintaining a service culture Stimulating service innovation Enhancing service design Optimizing service networks and value chains Effectively branding and selling services Enhancing the service experience through cocreation Measuring and optimizing the value of service, and Leveraging technology to advance service	Stimulating service innovation Facilitating servitization, service infusion and solutions Understanding organization and employee issues relevant to successful service Developing service networks and systems Leveraging service design Using big data to advance service Understanding value creation Enhancing the service experience Improving well-being through transformative service Measuring and optimizing service performance and impact Understanding service in a global context, and Leveraging technology to advance service
Respondents	Academics in a variety of disciplines around the world, business executives who lead organizations ranging from small startups to global 1,000 companies	In Phase 1, 200 academics and practitioners were contacted by 19 service centers and networks located around the world. In Phase 2, more than 330 service researchers from 37 countries and representing 17 disciplines, completed a survey

Table III RRBM principles

Principle 1	Service to society: development of knowledge that benefits business and the broader society, locally and globally, for the ultimate purpose of creating a better world
Principle 2	Stakeholder involvement: research that engages different stakeholders in the research process, without compromising the independence of inquiry
Principle 3	Impact on stakeholders: research that has an impact on diverse stakeholders, especially research that contributes to better business and a better world
Principle 4	Valuing both basic and applied contributions: contributions in both the theoretical domain to create fundamental knowledge and in applied domains to address pressing and current issues
Principle 5	Valuing plurality and multidisciplinary collaboration: diversity in research themes, methods, forms of scholarship, types of inquiry and interdisciplinary collaboration to reflect the plurality and complexity of business and societal problems
Principle 6	Sound methodology: research that implements sound scientific methods and processes in both quantitative and qualitative or both theoretical and empirical domains
Principle 7	Broad dissemination: diverse forms of knowledge dissemination that collectively advance basic knowledge and practice

Source: <https://rrbm.network/executive-briefing/eb-principles/> (accessed 30 January 2020)

Table IV uses the seven RR principles to describe how our service research priorities have expanded from yesterday to today and how they are likely to evolve to meet tomorrow's societal needs. The remainder of this article will expand on these ideas.

Responsible research requires a new approach to service research design

RR principles do not identify or prioritize specific research topics beyond creating a better world – rather, they offer a comprehensive vision for how business research should be designed, executed and applied. Many service researchers are likely to welcome this vision as a natural progression in the evolution of the service discipline. Often, it will be relatively straightforward to build these new ideas into our ongoing research programs. This section identifies some refinements to the research process that all of us might adopt.

Implications of Principle 1

Developing knowledge that benefits organizations and broader society to create a better world. RR highlights how service research can help people envision future scenarios and analyze the opportunities and challenges facing individuals, organizations and society. Sustainable consumption and production are one of the key goals promulgated by the 2002 *World Summit on Sustainable Development* in Johannesburg (United Nations Environment Program, 2018). Service research can generate knowledge that develops sustainable business models for service organizations, encourages consumers to behave in social and environmentally beneficial ways and helps all stakeholders in the service sector manage social and environmental impacts (United Nations Environment Program, 2018). As Table IV indicates, the service community has made some progress in this area.

First, each researcher can begin his/her study of a particular research problem with a broader consideration of how all actors within the focal service network co-create socially useful and environmentally sustainable outcomes. For example, suppose a researcher intends to study how customer-firm relationships evolve over time, with an emphasis on customer engagement in social media. Before focusing (narrowly) on this topic, the

researcher might start by considering the entire service network. How are employees, suppliers and technology partners involved in the evolution of the customer-service firm relationship and employee engagement? Does their involvement take place in the digital, physical and/or social realms? What are the parameters of the social context? For example, are there public policy, societal or environmental ramifications? Whether a service researcher comes from consumer behavior, quantitative modeling or strategy perspective, these questions may lead to new ideas about how to design a study. For example, how do employees foster customer-firm engagement? How do these customer-employee interactions influence the well-being of individuals and society? Are the goals of the service firm, technology partner, customers and employees aligned over time? Are they favorable to the environment? These notions are likely to help the service researcher refine his/her research questions and improve his/her research design – no matter what aspect of this topic he/she is studying.

Second, as the previous example illustrated, the development of knowledge that benefits people, business and the broader society, locally and globally, requires careful consideration of the entire service ecosystem. The importance of a systemic perspective is highlighted by recent world events as follows: the global financial crisis of 2008, the global health emergency over the coronavirus outbreak of 2020, the European refugee crisis that began in 2015, the increasing rate of hydro-meteorological disasters with their domino effects on many aspects of society and cyber-attacks that breached service organizations and compromised people's information (e.g. Equifax, Target, Marriott and Sony). Thus, rather than focusing (solely) on short-run benefits to individual stakeholders, there is a need for scholarly knowledge to help design *flexible* and *robust* service networks that also produce favorable outcomes for all participants and their communities. The increasing complexity of service systems requires a broad, as well as deep, understanding of service phenomena and how they are linked to system-wide service outcomes. There are many opportunities for fruitful research on how to create "better" service systems by service researchers specialized in strategy and/or quantitative analysis.

Table IV Research priorities of yesterday, today and tomorrow

Principle	Yesterday	Today	Tomorrow
Service to society (1)	<p>Research generally aims to develop knowledge that benefits business or customers, occasionally employees</p> <p>Focus on outcomes relevant to one stakeholder group – either organizations, customers or employees – with less attention to outcomes for other actors</p> <p>Some interest in service design</p>	<p>Research generally aims to develop knowledge that benefits actors in a value network</p> <p>Emphasis on complex value generation within service networks, with recognition of complex systems (e.g. finance, health and refugee services)</p> <p>The emergence of work on some societal outcomes: sustainability, transparency, privacy and automation (Inman and Nikolova, 2017)</p>	<p><i>Principle 1: Development of knowledge that benefits organizations and broader society to create a better world</i></p> <p>Broader consideration of how actors within networks co-create environmentally sustainable and socially useful outcomes</p> <p>An emphasis on flexible and robust value networks to produce favorable outcomes for all participants and communities (online and neighborhoods)</p> <p>Inclusion of multiple sources of data to obtain a more complete understanding of societal outcomes</p>
Stakeholder involvement (2)	<p>Perceptions elicited, usually without other forms of involvement or participation</p> <p><i>Customer involvement:</i> customer reports preferences, perceived service quality and satisfaction</p> <p><i>Employee involvement:</i> some dyadic research of employee-customer interactions (e.g. role theory), but employees are usually considered passive (internal marketing)</p> <p><i>Organizational involvement:</i> firm or managerial perspective on service characteristics (vs goods), servicescape, service operations (especially efficiency), profitability, relationship marketing and large firms have in-house research capabilities</p>	<p>New capabilities to elicit perceptions and observe behavior, but usually without participation by actors at multiple stages of the scientific process</p> <p><i>Customer involvement:</i> customer reports perceptions of service encounters, recovery; customer behavior observed via social, digital and interactive services (Bolton and Saxena-lyer, 2009)</p> <p><i>Employee involvement:</i> employees report the identification, trust, engagement and commitment; whereas employee productivity is observed</p> <p><i>Organizational involvement:</i> organizations adopt a value co-creation perspective, but there is still an emphasis on (solely) their outcomes: customer retention, relationship and experience management. Organizations (or their suppliers) conduct surveys, field experiments and statistical analyses of digital data</p>	<p><i>Principle 2: Incorporating stakeholders into the various stages of the scientific process</i></p> <p>Involvement of customers, employees and organizations at the design stage (rather than simply the execution stage) to identify relevant forms of participation. For example, the design of a study of service automation might involve consultations with service workers, as well as customers and managers</p> <p>Involvement of actors who have been under-represented in prior work: technology partners, governments and non-governmental organizations, trade unions and other employee associations, neighborhoods and communities</p> <p>Identifying opportunities to deliver service benefits to under-served groups</p>
Impact on stakeholders (3)	<p><i>Customer metrics:</i> service quality, value and customer retention</p> <p><i>Employee metrics:</i> turnover, job satisfaction and productivity</p> <p><i>Organizational metrics:</i> TQM tools, customer defection/loyalty, waiting and queues (self-service), sales and profits</p>	<p><i>Customer metrics:</i> customer participation, engagement and other behavioral measures are increasingly available and transformational service research emerges</p> <p><i>Employee metrics:</i> employee perceptions, engagement, identification and satisfaction</p> <p><i>Organizational metrics:</i> internal marketing metrics, organizational frontlines research emerges, technology infusion and marketing analytics</p>	<p><i>Principle 3: Research that has an impact on diverse stakeholders, especially contributing to better business and a better world</i></p> <p>Measures of the impact of the actions of service organizations on multiple stakeholders – beyond customers, employees and businesses – including society and the bio-environment</p> <p>Assessments of the impact of service on societal outcomes such as transparency, trust and privacy in value networks and across society</p> <p>Inclusion and equality for all participants</p> <p>external effects on communities and bio environments</p> <p>Development of new metrics relevant to more broad-based scientific inquiry</p>
Basic and applied contributions (4)	<p>Basic and applied contributions by both scholars and managers (e.g. Shostack and Juran)</p>	<p>Shift to primarily scholarly contributions, increasing emphasis on theory</p>	<p><i>Principle 4: Contributions to create fundamental knowledge to address pressing and current issues</i></p> <p>Active dissemination of contributions beyond scholars to stakeholder groups</p> <p>Work with stakeholder groups to apply scholarly</p>

(continued)

Table IV

Principle	Yesterday	Today	Tomorrow
Plurality and multi-disciplinary collaboration (5)	Disciplines include management, human resources, psychology and quality management (engineering) Collaboration via centers (Nordic school, Arizona State University)	The emergence of transdisciplinary “service science” and contributions by disciplines that have not previously studied services such as computing scientists and information systems An emphasis on technology and service innovation	insights to improve individual and societal well-being <i>Principle 5: Diversity in research themes, methods, forms of scholarship, types of inquiry and interdisciplinary collaboration that capture the complexity of business and societal problems</i> Tackling more complex research questions that are pertinent to real-world problems Increased need for multi-disciplinary teams that can jointly consider the digital, social and physical environment (Bolton et al., 2018), including the bio-environment
Sound methodology (6)	<i>Principle 6: Research that implements sound scientific methods and processes in both quantitative and qualitative or both theoretical and empirical domains</i>		
		Collection of diverse forms of data Use of multiple scientific methods Study of multiple stakeholder groups	
Broad dissemination (7)	Initially business journals and later scholarly journals Dissemination through intermediary groups such as centers for service research located at universities, marketing science institute, presentations to business organizations, executives	Increased tendency to rely on scholarly journals, especially journals dedicated to service topics, for dissemination	<i>Principle 7: Diverse forms of knowledge dissemination to advance practice</i> Dissemination to user groups through mechanisms other than scholarly journals, pre- and post-publication efforts such as presentations to stakeholder groups, communities, business press, digital media and other groups that could implement insights

Note: TQM = total quality management

Third, these considerations are likely to lead the researcher to collect data from multiple sources – possibly creating new metrics – to obtain a more complete understanding of ecosystem, societal and environmental outcomes. They are also likely to lead to multi-disciplinary research projects that obtain a 360-degree view of an issue – potentially blending qualitative and quantitative data, experimental and field data and behavioral and quantitative methods of analysis. In this way, each study connects with others and contributes (partially) to a gestalt understanding of a societal problem.

Implications of Principle 2

Incorporating stakeholders into the various stages of the scientific process. Service networks link customers, organizations, technology partners, suppliers, employees (including trade unions), industry organizations, communities and governmental organizations – so there are many stakeholders. RRBMs second principle emphasizes that all stakeholders should be involved in service research. In this way, service research can help stakeholders achieve better outcomes for all participants and for society, rather than simply improving service operations and business performance. This notion is rather radical: how can service researchers partner with stakeholders (while maintaining scientific rigor) as opposed to simply collect data from them? This issue is especially sensitive when we consider historical records of how vulnerable populations (e.g.

minorities, cultural groups, children and subsistence communities) have been exploited rather than served.

First, researchers should attempt to involve all stakeholders at the design stage (rather than simply the execution stage) to identify relevant forms of participation. For example, the design of a study of self-service technology might begin by interviewing service workers, technology partners, trade and industry associations and public policymakers, as well as customers and managers of the focal organization. This step is likely to involve substantial qualitative research prior to any large-scale study. Academia’s emphasis on “publish or perish” tends to devalue this stage of the research process. However, in my experience, this stage is always very valuable and ultimately produces more substantial contributions to the service discipline (despite its under-representation in the finished article)!

Second, this principle suggests that service researchers should re-focus their attention on stakeholders who have been under-represented in prior work (Breibach et al., 2018), namely, technology partners, governments and non-governmental organizations, service workers, trade unions and other employee associations, neighborhoods and communities (in the next section, I will say more about the need to study service workers and their work.) In particular, there is a pressing need to build scholarly knowledge that guides organizations in delivering service benefits to under-served populations and under-served geographical areas. For example, the financial service sector has

used micro-finance strategies to co-create value in subsistence markets. There are many such opportunities in other service sectors such as refugee services.

Implications of Principle 3

Impacting diverse stakeholders and especially contributing to a better world. The key feature of this principle is its emphasis on achieving *impact*. Unfortunately, service researchers lack sufficient measures of how the actions of service organizations influence different stakeholder groups, beyond longstanding measures of service productivity, customer satisfaction and so forth. The development of new metrics relevant to more broad-based scientific inquiry is (consequently) an important research problem facing the service discipline. Moreover, measures of impact must be diverse. For example, the impact of service on societal outcomes might include measures of:

- transparency, trust and privacy in service networks and across society;
- inclusion and equality for all participants; and
- outcomes for communities, society and the bio environment.

The preceding discussion emphasizes that the service community must rethink its approach to research design and execution. It is likely to require changes to doctoral programs and self-improvement efforts by all service academics (including myself). With this acknowledgment, it is useful to briefly discuss whether certain service *topics* are also understudied and should be prioritized.

New research priorities: service to society

Today, social and environmental impacts are receiving heightened attention from managers as organizations have realized that they are unprepared for how climate change will negatively influence business performance – both financial returns and risk – within the next five years (Plumer, 2019; Ewing, 2020). The United Nations (UN) International Panel of Climate Change has begun to identify potential adaptation and mitigation options (www.ipcc.ch/), but much more work remains to be done. Consumer preferences are likely to shift toward “green” companies such as Cisco, Henkel and L’Oreal (Newsweek Green Ranking 2017 available at www.newsweek.com/green-rankings-2017-18). Equally importantly, we can expect that *all* actors in service ecosystems will be increasingly focused on sustainability efforts in the future. Hence, the principle of service to society suggests three important and under-researched service research topics that are highly relevant to society: sustainable service practices, transparent and ethical sourcing (especially of labor) and improved demand generation and fulfillment strategies for services. Scholarly research on these topics is likely to be welcomed by managers and public policymakers, as well as ordinary people.

Sustainable service practices. The most direct way for service organizations to adopt sustainable service practices is to adopt renewable and efficient energy across its value network. Some leading service organizations have already undertaken concrete actions toward sustainable service practices. Microsoft’s global operations have been 100 per cent carbon neutral since 2012; it charges a carbon fee to all business groups (proportionate to their carbon footprint) and invests the fees collected in its

carbon reduction initiatives (George, 2019). The challenges are greater in some industries such as the growing transportation service sector than others. For example, United Parcel Service’s has an ambitious goal is to reduce absolute greenhouse gas emissions 12 percent across their global ground operations by 2025 (<https://sustainability.ups.com/sustainability-strategy/environmental-responsibility>).

Manufacturers and their supply chains can achieve zero waste by using fewer materials and/or ensuring that materials are 100 per cent recyclable. However, achieving zero waste is more complex for service organizations, despite the apparent intangibility of service. When the value is co-created by service organizations, there will frequently be waste that must be eliminated throughout the value network. For example, AT&T, a telecommunication service provider, is working on multiple fronts to achieve zero waste (https://about.att.com/story/att_commits_to_minimize_waste.html). It has worked with local communities on new initiatives, expanded its renewable energy program, committed to minimizing waste at its facilities and is currently funding scholarly work on climate resiliency.

Transparent and ethical sourcing

Service workers are integral to service production and consumption. Today, the nature of customer and service worker participation is rapidly changing across many service sectors (Bolton and Saxena-Iyer, 2009). The primary reason is that technology – such as advanced logistics capabilities, artificial intelligence and other forms of automation – are changing the nature of work and the composition of the workforce in different service sectors (Autor and Salomon, 2018; Orbeck, 2018). Around the world, people have rioted to protest robots in factories, the replacement of taxi drivers with ride-hailing apps and the way automation is making jobs harder, faster and subject to more scrutiny. Huang and Rust (2018) have described how technology progressively replaces service tasks – mechanical, analytical, intuitive and empathetic – and lays out the way firms should decide between humans and machines for accomplishing those tasks. However, given this trend, transparent and ethical sourcing of labor will become an especially pressing issue for the service discipline.

Ethical sourcing ensures that all inputs – including labor – are sourced in a responsible and sustainable way; it requires taking into account environmental and social impacts *and* ensuring that the everyone involved in service production is safe and treated fairly. Violations in human and labor rights are (sadly) very common around the world. However, approaches to achieving transparent and ethical sourcing for services are emerging (O’Brien, 2018). One approach is third party verification. For example, Starbucks purchases coffee at fair prices and uses third-party verification to ensure each step of coffee planting, harvesting, processing and purchasing is carried out ethically. This effort is especially commendable given that Starbucks sources coffee from over 170,000 farmers. Another approach, used by companies such as Hennes & Mauritz in 1974, is to share suppliers’ names and addresses publicly so they can be scrutinized. These companies have demonstrated that it is possible to be profitable and set the industry standards for transparency and ethical sourcing. However, such initiatives are relatively new, service research is needed to better understand the best ways to inform consumers

and service organizations about ethical sources – especially sources of labor in the value network – and equip all stakeholders to make decisions that satisfy ethical sourcing and other goals.

Service demand generation and fulfillment strategies

Technology adoption in service networks is typically intended to help customers, employees and organizations produce or consume service more efficiently, effectively (e.g. through scale and customization) and in a timely fashion (Bolton, 2019a). Matching demand and supply can be especially challenging for service because of simultaneity in production and consumption and perishability of some services. Customers typically seek convenience (e.g. online ordering and expedited shipping), whereas service organizations seek to generate demand and/or achieve cost savings (e.g. anticipatory, same or next day shipping by Amazon). In both instances, decisions by individual actors in the service network can be incompatible with a broader, long-run perspective – and with societal goals. Instant gratification can be costly for society! New strategies – including more complex service models and system analysis – are needed to help service actors align customer, employee, network partner, organizational and societal goals.

In sum, service scholars have an important role to play in identifying strategies that align customer's goals and service organizations' business performance goals with social and sustainability goals. There is a need for service scholars to broaden the service outcomes they study and (especially) consider the fair treatment of service workers. Scholarly knowledge is needed to guide service networks toward strategies that are efficient and profitable from an organizational and network partner perspective, desirable from a consumer and employee perspective and sustainable from a societal perspective. For example, United Parcel Service uses an optimized global logistics network that meets customer needs and helps it reduce inefficiency and environmental impacts such as greenhouse gases (<https://sustainability.ups.com/progress-report/>). This effort is impressive and praiseworthy, but – like other logistics firms – United Parcel Service finds it difficult to hire and retain employees. Thus, we can imagine a future in which logistics optimization procedures consider the effects of scheduling on its employees, as well as customer and organizational goals. Managing a broader set of outcomes requires a broader set of metrics, as we discussed earlier.

New research priorities: stakeholder involvement

Service research priorities usually focus on a specific stakeholder group such as improving healthcare for women and children. However, RR principles state that all stakeholder groups must be considered – so there is a danger in focusing too narrowly on a single group and potentially overlooking important contextual factors. With this acknowledgment, it is useful to briefly consider some of the stakeholder groups that are important to service, thus identifying key research priorities for the future.

Customers

Service organizations have new opportunities to co-create value with customers, leveraging innovations such as wearable

technology, smart home technology and other services enabled by the internet of things (IoT). These efforts often require the service provider to tie together customers' physical, digital, mobile, social and organization-targeted activities. As an illustration, the *New York Times* recently reported that a new facial recognition application, clearview AI, allows someone to “take a picture of a person, upload it and get to see public photos of that person, along with links to where those photos appeared” (Hill, 2020). This new software offers potential commercial opportunities and benefits for law enforcement. For example, an organization might identify a customer, link to his/her publicly available information and information in the internal record and provide customized service – all without his/her knowledge or permission. Or this technology could be used to monitor and manage service workers. This anecdote is just one illustration of how the introduction of innovative technology into complex service ecosystems has multiple outcomes that are not well-understood. There are many implications for consumer privacy, trust and organizational transparency. Service research can help identify new concepts, tools and models to inform, guide and encourage consumers, service organizations and other stakeholders to align their goals and make choices that are beneficial to all, as well as sustainable in the long run. Research is also needed to (ultimately) better design service that jointly meets the needs of customers, employees, network partners, organizations and society.

Employees and network partners

Service work is rapidly changing. In many countries, retail, mining and manufacturing jobs have declined, whereas service jobs – in the hospitality, building, education and health service sectors – have grown rapidly (Irwin, 2020). Coinciding with these trends, the quality of service work, associated compensation and benefits and the health and well-being of service workers have deteriorated (Schwartz and Corkery, 2018). These negative outcomes for employees have been exacerbated by a major shift from traditional services to digital services – including increased automation (World Economic Forum, 2017). Surprisingly, organizations have not necessarily seen desired improvements in service productivity (Focus Economics, 2020; Porter, 2019). Many companies are searching for a “sweet spot” where investments in people and technology are optimized to provide better outcomes for all participants.

The United Nations Global Compact (2018) to address living wage issues was first adopted in 2005. Today, there are more than 12,000 signatory companies in over 160 countries (www.unglobalcompact.org/participation/tiers). However, progress in this area has been slow. Society needs the guidance of service scholars to investigate ways to reconcile consumers' and service organizations' goals with the well-being of employees. Service organizations are increasingly partnering with technology companies that provide automated voice response, AI-enabled support services, location-based services, cross-selling and upselling capabilities. However, technology is typically used to improve service productivity or generate consumer demand. For example, Dell is exploring new approaches to managing interactions among employees, customers and technology such as using virtual experts and robots in customer service. Much less is known about how

these changes influence customers, employees, society and the bio-environment, so this area is ripe for research.

Given the complexity of modern service systems, Bolton *et al.* (2018) argue that there is a critical need for knowledge about how digital, physical and social resources can be combined to create beneficial outcomes for service organizations, their employees and customers. They identify four research priorities. First, service research should build models to create and leverage connectivity across digital, physical and social realms within many service organizations – as well as across actors in service ecosystems – to produce globally optimal (rather than locally optimal) service outcomes. Second, it can provide guidance on how to manage legitimate access to sensitive or personally identifiable information in the co-creation of value. Third, service models can analyze the trade-offs involved in the substitution of digital and social resources for physical resources. Fourth, service researchers should examine the implications of the blurring of participant roles in service consumption and delivery such as in collaborative consumption models (Benoit *et al.*, 2017). Bolton *et al.* (2018) identify many research priorities that involve jointly studying digital, physical and social realms. These observations suggest that service scholars should investigate how actors in the service ecosystem can reconfigure their practices and norms to provide better outcomes for all stakeholders.

Governments and society

Research can guide public policymakers and managers in service organizations. In particular, service research can clarify the most effective role for government to play in improving societal well-being through housing, food security, health, education and environmental services. For example, in both developing and developed countries, there are many geographic areas where the number of health service workers is insufficient to achieve public policy health goals. Similarly, only 33 per cent of adults worldwide are financially literate (Klapper *et al.*, 2016), meaning that the vast majority of adults cannot effectively manage their finances. These challenges are intertwined with social and environmental issues that are unique to specific geographic areas. Service researchers can develop systemic solutions customized to the nature of the service sector and the social/environmental context.

New research priorities: impact on stakeholders

RRBM's third principle emphasizes that the ultimate goal of the research is to produce knowledge that has an impact and contributes to a better world. The notion of pursuing "better world" goals may seem radical, but it is being adopted by many businesses. For example, the Business Roundtable (2019) new *Statement on the Purpose of a Corporation* was signed by 181 Chief Executive Officers who committed to lead their companies for the benefit of all stakeholders – customers, employees, suppliers, communities and shareholders. Both nonprofit and for-profit service organizations will require a broader set of metrics than capture the impact of service decisions on service organizations, individuals, society and the bio-environment. Hence, there is a need to consider service outcomes that go beyond traditional metrics that focus on productivity, employee/customer satisfaction and profitability. Moreover, there is a need to assess

the impact of service decisions on all people, not just current or potential customers. Service scientists who specialize in quantitative methods could provide useful knowledge to guide the development of new metrics.

First, a key insight from the third principle is that service scholars should study the impact of service actions on a much broader set of outcomes, relevant to actors in service organization ecosystems, local and global communities. In doing so, the service discipline can provide knowledge that links actions to outcomes in many service settings. Thus, a key research priority in today's information age is the measurement and management of organizational transparency, consumer privacy and trust. Research is needed to guide organizations in ensuring (only) legitimate access to sensitive or personally identifiable information – yet allowing sufficient information sharing across service networks to allow actors to align their activities and co-create value for stakeholders.

Second, a key research priority is the development of a service culture and working environment that seeks inclusion and equality for all stakeholders. This priority includes authentic ways of respecting and valuing differences in ethnicity, gender, age, national origin, disability, sexual orientation, education and religion in service organizations. Some service organizations such as IKEA, have undertaken initiatives in this area. However, most organizations seek useful ways to foster inclusion and diversity in customers, employees and other partners.

Third, more work is needed in creating viable markets for service in underprivileged communities. For example, certain service categories have successfully operated in under-served communities (e.g. certain retail shops and collaborative consumption models). Scholars can also help service providers find new service models and ways to communicate their value propositions to better serve individuals and their communities (Bolton, 2019b). Unfortunately, the service discipline knows little about how new, fast-growing service sectors – local farmer's markets, resale shops and the sharing economy – have affected business, individuals, communities and other societal outcomes. More broadly, quantitative research could help identify new approaches and identify how new service formats can create greater prosperity, locally and globally.

The future is a function of our choices

If you are reading this article, then you will help to shape the future of the service discipline. You can choose to prioritize studying problems that produce useful knowledge that benefits society. You can begin today to broaden and deepen your work using some of the approaches described in this article. Moreover, in your professional life, you will have opportunities to review and evaluate other scholars' work. You can begin today to look for ways to improve, recognize and reward findings that are useful to society. As an educator, there is also much you can do to disseminate service knowledge as broadly as possible to different audiences and through diverse media. The service community has always been a supportive one. Let's begin today to share best practices that advance the service discipline and lead to a better world for everyone:

There are many futures out there. The future is not a "single state," but a scenario of possibilities. There is a struggle between opposing visions of the future. It is not too late to choose, which one we shall get. The future is a function of our choices and creations. –Leonard I. Sweet (1999, p. 55).

Note

- 1 According to the JFK Presidential Library, John F. Kennedy made these remarks during an address in the assembly hall at Paulskirche in Frankfurt on June 25, 1963.

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