

Topics for Service Management Research – A European Perspective

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The interdisciplinary and cross-functional commitment of the *Journal of Service Management Research* motivated us to define interdisciplinary topics of service research that are important both in the present and in the future. Therefore, relevant publications in this research field were examined, especially Ostrom et al. (2010, 2015), which comprehensively addressed and collated research priorities. With that in mind, issues of 48 highly ranked service-oriented management and marketing journals from 2009 to 2015 were analysed to identify research topics of the recent past. Additionally, European scientists were interviewed on their focus in the field of service research in the previous year. The results demonstrate the vast array of management-oriented service research in Europe, but also the necessity of interdisciplinary research designs in service management.

1. Introduction

In the 1990s, scholars who dealt with topics of service research still had to face a time in which the significance of service research in science was lagging behind the importance of services in modern post-industrial societies (Swartz et al. 1992). This situation has changed fundamentally. In fact, nationally and internationally, research and publishing activities in the field of service management have multiplied at all levels (monographs, readers and

journals). International conferences and conventions on service management or service marketing have gained in importance and register an increasing number of participants.

In the recent past, research on service management gained new interest, which was mainly triggered by discussions on service-dominant logic (Vargo & Lusch 2004) and was given new impetus: "This is an exciting time for service research. Throughout the world, there is a focus on service – as a vital and important area of research – like never before. From global corporations to small businesses, from local governments to the largest nations, from marketing to engineering, our need to understand service has never been greater" (Lemon 2010, p. 3). Based on this initial thesis from the editor of the *Journal of Service Research*, Ostrom et al. (2010) discussed research priorities for a "Service Science". They explicitly highlighted the "interdisciplinary and cross-functional perspectives" (Ostrom et al. 2010, p. 5) of service management research, which ranges from classical management disciplines such as marketing or human resource management to organisational psychology to engineering and computer science.

The significance of these interdisciplinary and cross-functional perspectives motivated us to found this new journal oriented to interdisciplinarity. Looking at possible research areas, the question arises of which interdisciplinary areas of service research are important both now and in the future. To answer this question, we initially searched for relevant publications on service research. In particular,



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works by Ostrom et al. (2010, 2015) had already comprehensively collated research priorities. They demonstrated that the array of topics on service research is wide. Simultaneously, we asked ourselves whether the published results from Ostrom et al. (2010, 2015) are relevant and to what extent they reflect the main topics of service research at European universities and research institutes.

With that in mind, we analysed as a first step issues of 48 high-ranked service-oriented management and marketing journals from 2009 to 2015 to identify research areas from the recent past. Additionally, European scientists were interviewed on their research focus in the field of service research of the previous year. The following results demonstrate the vast array of management-oriented service research in Europe, but also the necessity of interdisciplinary research designs in service management. And because we asked only European scientists about their future research focus, we called this article 'A European Perspective'.

2. Research from 2009 to 2015

In order to explore the current state of service research, we analysed the contributions of 48 management and marketing journals between 2009 and 2015. The chosen journals ranked from A+ to C in the journal ranking of the German Academic Association for Business Research. Of 14,650 published contributions, 12 % (1,758 contributions) related to service research. The identified contributions were then independently analysed and categorised by five experts. After a comprehensive voting process, six relevant research areas were clustered in which a considerable number of works was published in 2009–2015, as described below.

Service Operations

By far the most contributions (34 %) were published in the field of service operations. They concentrate on the design of marketing tools to achieve the economic targets of service providers. The design options refer to individual measures of personnel and employee management in particular, as well as to the design of service potential, processes and results. In addition, detailed questions were addressed regarding pricing, distribution as well as communication and brand management in the service sector. The published works were rarely of a conceptual nature; they were all investigated empirically, some even experimentally.

Service Customers

Research on service customers (15.5 %) aims to understand and predict the selection and usage behaviour of service customers. Service customers are essential for successful service providers, as they are an integral component of service provision. For this reason, many research activities address the determinants of customer satisfaction and investigate how customer loyalty can be increased in the service context. Further studies investigate customer reactions to service errors, customer emotions during and after a service encounter, as well as the complaint and recommendation behaviour of customers. Furthermore, they analyse how different characteristics of employees, such as their voice or accent, affect customers' behaviour and which role the involvement of customers plays in the service process.

Relationships in Service Industries

Numerous contributions in the area of service research made relationship marketing (20 %) a subject of discussion. These works focus on the relationship between service providers and customers. In the field of relationship marketing several areas were identified. For instance, research addressed the concept and strategic direction of relationship marketing, covering questions on appropriate strategies of relationship marketing. Further studies concentrate on the operative use of relationship marketing, involving the identification of instruments that are appropriate for customer acquisition, retention and recovery. Additionally, a number of contributions focused on theoretical approaches of relationship marketing, especially on service-dominant logic, as well as on customer experience as a target figure in relationship marketing.

Service Experience

Research on service experience, including studies on service quality, the service market and service encounters, also received a lot of attention (22.4 %). Service quality and its perception were of particular interest for research. Studies analysed the measurement of customers' perception of service quality, the impact of service quality on different success factors such as customer loyalty, satisfaction or intention, and the influence of employees' behaviour on service quality. Within the scope of the service market, the internationalisation of service providers and intercultural differences in the perception of service quality were investigated. The field of service encounters covers the interaction between customers and service employees and the design of the service environment. In particular, new developments including virtual communities and the delivery of e-services are crucial research topics.

Service Information and Controlling

Service information and controlling is a rather small research area (3.6 %). It contributes to service information first with the use of appropriate methods of market research in the service sector, and second with the investigation of market segmentation and the related features in the service sector. Works on service controlling cover in particular the question of successful control of interventions in service marketing. The focus primarily lies on effect measures; that is, the contribution of interventions on psychological, behavioural and economic targets.

Service Organisation

The number of works on the implementation of service marketing in an organisation is relatively small (3.6 %). They focus on the integration of the service concept in the organisation, and some contributions also cover the development of service-oriented structures and systems.

Our review of top journal publications highlighted the fact that during the last few years service research has been dominated by US researchers and a more disciplinary than interdisciplinary approach. The following paragraphs therefore address the question of whether this focus will continue in the future.

3. Research Topics for the Future – An Exploratory Analysis

3.1 Design, Sample and Measurement of the Exploratory Analysis

In addition to our literature review, we conducted a qualitative online survey to identify current research priorities in the field of service management in Europe. Following group discussions among the editors and interviews with three additional scholars, five main concerns and guiding questions for the online questionnaire were produced. The survey intended to collect the most relevant areas in present and future service research in Europe (questions 1, 3 and 5) as well as to collect valuable publications from the past (questions 2 and 4):

- Which research topics do you currently focus on?
- Are there any journal papers that inspired your research and these topics? Please name up to three papers!
- Are there any specific topics or themes you would like to read papers about?
- Please name up to three papers that you perceived as really fruitful and valuable in the last few months.
- Why are these papers especially fruitful and valuable for you?

The online survey was conducted in August 2016. The conduct of the survey followed the concept of theoretical sampling. The last questionnaires did not provide any fundamental new insights. In total, 117 scholars from European universities and research institutes, as well as some European researchers outside of Europe, were asked to take part in the online survey. Those 117 scholars were chosen from different databases to ensure a broad range of research. 43 scholars filled in the questionnaire. The principle of Mayring's (2015) qualitative content analysis was followed in the evaluation of answers to questions 1, 3 and 5 in the online survey.

After completion of the online survey, the results were discussed with eight service researchers who did not take part in the online survey. These qualitative interviews were recorded and content-analytically evaluated. No fundamental new insights emerged. However, the interviews revealed a variety of details that had been missing in the online survey. Finally, we discussed the topics of service research identified in our surveys in relation to their interdisciplinary nature. The results of these discussions form the focus of our paper.

3.2 Results

The analysis of the online interviews revealed nine research areas on which European scholars primarily focus:

- Service Innovation
- Service Process
- Human Resource Management in Service Industries
- Service Productivity
- Sustainability and Service
- IT-driven Services
- Networks and Cooperation in Service Industries
- Services in the Sharing Economy

The first four research areas relate to classical tasks of service management. Innovation, process and human resources management, as well as the productivity of service providers, are research areas that have been addressed by service research for many years. Others, such as sustainability, IT-driven services, networks and cooperation and the sharing economy, exceed the classical research on service management and promote new questions in service research.

These eight research areas identified will be discussed in more detail in the following paragraphs. In addition, we rated a further topic as relevant for future research on service management. 'Leadership of Frontline Employees' is added to the discussion because we think that leadership is central to the field of service management, especially for employees working in direct contact with customers.

3.2.1 Service Innovation

Within the research area of service innovation, the scholars surveyed stated the following research topics:

- Service innovation process design
- Creative processes in service organisations
- Innovation capabilities of service organisations
- Entrepreneurship in service innovation
- Service innovation management in a business-to-business (B2B) setting
- Customer-driven service innovation
- Evaluation of service innovations

In this research area, researchers ranked the following journal papers as inspiring:

Lusch, R.F. & Nambisan, S. (2015). Service Innovation: A Service-Dominant Logic Perspective. *MIS Quarterly*, 39, 155–175.

Nambisan, S. (2013). Information Technology and Product/Service Innovation: A Brief Assessment and Some Suggestions for Future Research. *Journal of the Association of Information Systems*, 14, 215–226.

Perks, H., Gruber, T. & Edvardsson, B. (2012). Co-creation in Radical Service Innovation: A Systematic Analysis of Microlevel Processes. *Journal of Product Innovation Management*, 29, 935–951.

We consider that service innovation is one of the key topics of service research in the future, as the basic mechanisms for the design of service innovations have not yet been researched sufficiently. Instead, we are under the impression that papers within the research area of 'service innovation' follow the classical paradigm of innovation research. This impression is particularly reinforced because a vital part of existing research papers is technology driven and deals with, among other things, the question of how the technical progress in information and communications technology can lead to new services (see 3.2.6).

The research topics named by the scholars surveyed, however, show that a significant focus of research relating to service innovation has to draw on the penetration of the innovation process and the design of innovation management. In particular, this can be attributed to the fact that innovation research, but also innovation practice in service industries, has not disengaged sufficiently from the classical paradigm of innovation management.

As the contradiction between goods-dominant logic and service-dominant logic propagated by Vargo and Lusch (2004) also applies to innovation management, in goods-dominant logic we distinguish, among other things, be-

tween product and process or procedure innovation. Product innovation is understood as the development of a new product that, on one hand, fulfils the progress of underlying product technology, but, on the other hand, also accommodates the changing needs of customers. Product innovations are therefore both technology and customer driven. Accordingly, in the product innovation process scientists and engineers cooperate with marketing experts. Process or procedure innovations aim to optimise procedures in organisations to ensure a permanent decrease in production costs. Production and organisational experts in particular work together for the identification and implementation of process innovations.

This paradigm of innovation research does not adjust to the requirements in service innovations, as, according to the established understanding in service research, customer benefits that are generated by services result from the combined effect of service potential, service process and service result. The customer-perceived service quality is therefore the result of – often simultaneous – evaluations of potential, process and result features by the customer. These insights were already revealed by research on service quality years ago (Donabedian 1980). Respectively, customers often perceive services as new because the service potentials and/or service processes they perceive fundamentally change without varying the actual 'product' and with it the service result. Innovation processes in service industries can therefore not refer to product or procedure innovation separately (see 3.2.2). In fact, innovation management has to be oriented to integrated potential, process and result innovations. With that, a fundamental change of paradigm is required in innovation research for services.

These reflections convey that the innovation perception of customers has crucial importance for the design of service innovations. The scholars surveyed therefore speak of 'customer-driven service innovation' as a research topic. From our perspective, it is necessary to comprehensively research the adoption and diffusion processes in order for us to comprehensively understand this customer participation, because it is questionable whether the adoption process of service innovations complies with similar driving forces to classical product innovations. In classical innovations, the adoption process is caused by endowment effects and visible consumption. However, these driving forces for the adoption of innovations are only partly applicable to the service context. How can adoption and diffusion then happen in service innovations? Only when we can answer this question comprehensively will we be able to provide suggestions to service practice for successful service innovation management.

Overall, we see a considerable interdisciplinary need for research on service innovation. The first solid steps on the

way to a new service innovation paradigm can be realised based on descriptively laid-out case study research. These case studies can show us how successful, less successful and unsuccessful service innovations develop and how – after launch – adoption and diffusion processes proceed.

3.2.2 Service Process

Within the research area of service process, the scholars surveyed stated the following research topics:

- Process optimisation in services
- Process design and evaluation
- Business process management and lean service management
- Service production and game theory
- Applying activity analysis on service production
- Customer and employee roles in service processes
- Learning and training of process-oriented thinking

In this research area, researchers ranked the following journal papers as inspiring:

Grönroos, C. & Voima, P. (2013). Critical Service Logic: Making Sense of Value Creation and Co-creation. *Journal of the Academy of Marketing Science*, 41, 133–150.

Kohlbacher, M. (2010). The Effects of Process Orientation: A Literature Review. *Business Process Management Journal*, 16, 135–152.

Li, M. & Choi, T.Y. (2009). Triads in Services Outsourcing: Bridge, Bridge Decay and Bridge Transfer. *Journal of Supply Chain Management*, 45, 27–39.

Moeller, S., Ciuchita, R., Mahr, D., Odekerken-Schröder, G. & Fassnacht, M. (2013). Uncovering Collaborative Value Creation Patterns and Establishing Corresponding Customer Roles. *Journal of Service Research*, 16, 471–487.

Overby, E. (2008). Process Virtualization Theory and the Impact of Information Technology. *Organization Science*, 19, 277–291.

Pfisterer, L. & Roth, S. (2015). Customer Usage Processes: A Conceptualization and Differentiation. *Marketing Theory*, 15, 401–422.

Tuli, K.R., Kohli, A.K. & Bharadwaj, S.G. (2007). Rethinking Customer Solutions: From Product Bundles to Relational Processes. *Journal of Marketing*, 71, 1–17.

The process dimension characterises the process of providing the service, and is an active and executive process. Both the service provider and the so-called external factor, such as the customer or client, actively take part in the creation process. The customer becomes an active consumer

and can influence the result and the quality of the result significantly (see also 3.2.1). As such, it needs to be clarified whether the service company's internal motivation as well as other internal factors of the service process and the performance of the integrated customer can be combined in an effective way.

With this in mind, we believe that research on service processes is divided into two main research directions. One track addresses process analysis and optimisation with a focus on the overall supply chain management. In addition, process and customer interaction standardisation, use of IT to manage front-office and back-office processes, as well as the service production and resource allocation process itself, are addressed in this context (see also 3.2.6). The other main track puts the individual (customer, employer) and his or her process-oriented thinking and behaviour into focus. Research has focused on how to motivate employees and customers to integrate themselves with their expertise into the process (see also 3.2.3), and how the co-creation process can be organised to best fit customers' perceived service quality and flexibility requirements (see also 3.2.5).

To optimise processes, a great deal of literature exists from research experts in operations research. Service process models and simulation help to find critical paths and related aspects of complex service processes. These analyses are very important for the risk management of service companies. Recently, new technologies like robots, automation technology, mobile application platforms, artificial intelligence and machine learning have been affecting all process- and data-based service industries (see also 3.2.6 and 3.2.7). What is interesting here is the integration of platform business models to support customer integration and delivery processes (see also 3.2.8). For example, service design platforms like entertainment services (film, TV, music) help to automate individual service products without any direct customer contact. FinTec companies offer automated process-based and optimised payment services on the desktop, mobile and in store. In logistics, lean service management options like web-tracking services make the transportation process transparent for customers while reducing direct customer interaction. In the future, customers will demand platforms that empower them to manage and analyse their data much more extensively and independently. Examples might be health-care applications, governmental services, mobility services and entertainment services.

Another important research track is the process-oriented thinking and behaviour of customers and service employees (see also 3.2.3 and 3.2.9). In this area, researchers address the question of how collaborative value creation can be organised. Platform companies like Amazon analyse every single customer interaction to improve individual

service offerings step by step. In addition, customer data is used for highly customised advertising and prize analysis purposes. In these companies service employees are data, advertising, marketing and software development experts. Almost no direct interaction process with the customer takes place. Other service companies pair up suppliers and customers to offer food delivery, apartments, housing, cleaning and other freelance services.

Despite all these developments to manage customer interaction, the customer is and still will be in the future a part of many service processes. Future research needs to be focused on the whole customer journey and the right balance between customer integration and customers' value creation, to better understand the perceived service quality and customers' motivation to support service co-creation processes. In addition, service enterprises will create intelligent, data and machine learning-based solutions to predict and respond to varying customer demands, which enable these companies to optimise their processes. With the help of algorithms, prices vary and demand is controlled dynamically (e.g. in the area of electricity supply). The qualification of service employees will be essential for service process quality. Data analytics are very important, but process know-how, experience and flexibility are also required in this highly demanding environment (see also 3.2.3).

3.2.3 Human Resource Management in Service Industries

Within the research area of human resource management in service industries, the scholars surveyed stated the following research topics:

- Employee behaviour in services
- Frontline employees and personnel in general in service industries
- Service work
- Relationship between supervisor and subordinates in service firms
- HR-related aspects of service quality and productivity

Researchers ranked the following journal papers as inspiring:

Grandey, A.A. & Gabriel, A.S. (2015). Emotional Labor at a Crossroads: Where Do We Go from Here? *Annual Review of Organizational Psychology and Organizational Behavior*, 2, 323–349.

Hui, C., Lam, S.K. & Schaubroeck, J. (2001). Can Good Citizens Lead the Way in Providing Quality Service? A Field Quasi Experiment. *Academy of Management Journal*, 44, 988–995.

Medler-Liraz, H. & Kark, R. (2012). It Takes Three to Tango: Leadership and Hostility in the Service Encounter. *The Leadership Quarterly*, 23, 81–93.

Mount, M.K., Barrick, M.R. & Stewart, G.L. (1998). Five-factor Model of Personality and Performance in Jobs Involving Interpersonal Interactions. *Human Performance*, 11, 145–165.

In human resource management (HRM), contact employees are of particular importance because their working tasks differ from those in other branches. These employees not only have to achieve the core service in the interest of the customer and the company, they also have to interact with the customer in a way that enhances his/her satisfaction with the service (see also 3.2.2). This confronts HRM with a number of tasks that are yet only insufficiently understood and thus need advanced research.

We believe that a deepened understanding of service work, especially service work with direct customer contact, is the basis for strategically oriented HRM (see also 3.2.2). Besides accomplishing the core service, the customer contact employee has to act to the customer's satisfaction. This requires employees to control and regulate their emotions in order to display certain emotions towards their counterpart. This emotional labour involves the amplification versus suppression of positive versus negative emotions according to service- and/or company-specific display rules. This area was extensively researched in the last 30 years (Grandey & Gabriel 2015), but central questions remain unanswered. In particular, the interaction between achieving core services and managing emotions depending on the kind of service is still unclear. It would be of importance to understand what type of emotion regulation, depending on different core service behaviour, is demanded by different services. Filling this gap requires deepened demand analyses, resulting in different models of work behaviour for different forms of service work.

Such models would allow the deduction of precise demands for the social as well as the core service behaviour that employees have to show in the interaction with their customers. The descriptions of these demands are the basis for establishing valid aptitude procedures for the recruitment of suitable employees. Such procedures aim at different predictors of social behaviour, especially personality traits. Our knowledge about the correlation between such traits and occupational success is very limited. Since the meta-analysis of Mount, Barrick and Stewart (1998), a systematic review of this research area has been missing. The insights of the given meta-analysis were also quite restrained, because at that time only seven studies addressing the topic were found and these studies captured only the five-factor model of personality. For future works, it would be important to cover the correlations of occupa-

tional success with the different components of social and emotional competencies in different types of service work. Provided that these studies show clear predictors of occupational success, in the next step we need to develop valid recruitment tests. The same deficiencies pertain to valid recruitment on the basis of the attitudes demanded for a customer or service orientation, respectively. We need empirical evidence showing that these attitudes predict occupational success.

Demand analyses of different types of service work are also necessary to identify training requirements – a field in which advanced research is needed too. Identifying training requirements of contact employees is a fundamental task of leadership (see also 3.2.9), which again puts high demands on service leaders. The specific nature of these demands is to date only rudimentarily understood. Otherwise leaders could be trained to fulfil this task (more) comprehensively. It is unknown which form of training is required to solve a specific deficit in social behaviour towards customers. A few previous studies focused on the problem of training in service work, especially on the impact of training on occupational success. An interesting approach is described by Hui et al. (2001), who showed that the training of colleagues who have proven to be service quality leaders has positive effects on customer satisfaction. Yet to date it is unclear whether these findings can be generalised. Also, the number of studies examining the impact of different techniques of behaviour training on occupational success is rather low.

Finally, we believe that another important research area in HRM is the examination of customer contact employees' motivation, with the specific relationship between leader and employee being motivating in particular ways. Theoretically this can be explained by the theory of leader-member-exchange (LMX), which implies that effective leadership is realised by high-quality relations between the leader and his or her employees (see also 3.2.9). Several studies confirm this assumption. For example, by studying interactions between call centre agents and their customers, Medler-Liraz and Kark (2012) showed that the quality of LMX relates negatively to a display of negative emotions by employees during their interactions with customers, and subsequently relates positively to employees' performance and customers' emotions. How these effects are mediated has still not been researched. A positive LMX might reward such behaviours as trying to establish a similar relationship to the customer, but such mediating effects need to be examined in more detail. Future research should also consider the more general question of which forms of incentives can motivate desired behaviours in customer contact employees.

3.2.4 Service Productivity

Service productivity also ranks as a key area in service management research. In the survey, scholars stated the following topics:

- Productivity ratios in service industries
- Performance measurement of service operations
- Service quality and productivity
- Customer behaviour relevant to productivity

Researchers ranked the following journal papers as inspiring:

Chatain, O. & Zemsky, P. (2007). The Horizontal Scope of the Firm: Organizational Tradeoffs vs. Buyer-Supplier Relationships. *Management Science*, 53, 550–565.

Hess, R.L., Ganesan, S. & Klein, N. M. (2003). Service Failure and Recovery: The Impact of Relationship Factors on Customer Satisfaction. *Journal of the Academy of Marketing Science*, 31, 127–145.

Grégoire, Y., Tripp, T.M. & Legoux, R. (2009). When Customer Love Turns into Lasting Hate: The Effects of Relationship Strength and Time on Customer Revenge and Avoidance. *Journal of Marketing*, 73, 18–32.

Leyer, M. & Moormann, J. (2014). How Lean Are Financial Service Companies Really? Empirical Evidence from a Large Scale Study in Germany. *International Journal of Operations & Production Management*, 34, 1366–1388.

Macdonald, E.K., Kleinaltenkamp, M. & Wilson, H.N. (2016). How Business Customers Judge Solutions: Solution Quality and Value in Use. *Journal of Marketing*, 80, 96–120.

Plewa, C., Sweeney, J.C. & Michayluk, D. (2015). Determining Value in a Complex Service Setting. *Journal of Service Theory and Practice*, 25, 568–591.

Rust, R.T. & Ming-Hui, H. (2012). Optimizing Service Productivity. *Journal of Marketing*, 76, 47–66.

Recently, authors have proposed different approaches to measure productivity in services, separating productivity into different subcategories such as customer-, operational-, strategic-, technical-, organisational-, business process- and macroeconomic-level perspectives (Yalley & Sekhon 2014).

A meta-study found 20 input and 3 output factors on the company level directly or indirectly related to productivity (Gotsch et al. 2013). Thus, productivity does not depend on a single input or output factor. Instead, it is influenced by a variety of different factors that have mutual interactions. In addition, feedback loops appear.

Service companies compete on time, costs (input variables) and quality (output variable) – all these criteria are central drivers for productivity. To get a more detailed view on how to identify, measure and influence determinants and factors of service productivity, a scheme for conceptualisation can be based on these three drivers. Some researchers propose concrete productivity indicators, such as the ratio between the number of new customers and the number of employees or the ratio between the number of new contracts and the average time for the acquisition, to help companies to improve their specific productivity numbers in terms of time, quality and costs.

Another possibility for influencing and designing productivity in service is the focus on concrete productivity-driving service peculiarities like customer integration: IT platforms for ordering, FAQ and status information, standardised customer interaction routines and self-service components support interaction with customers and help to fulfil special wishes, improve trust and reduce frontline office support. All kinds of IT support can help to overcome typical service characteristics and make the whole service process more controllable and quality, time and cost forecasts less risky (see also 3.2.6).

However, greater use of automation does not always result in higher service quality, and the effectiveness of automation depends on how advanced the technology level is. Rust and Ming-Hui (2012) developed a theory of optimal service productivity and distinguish between short-term effects of service productivity due to labour-automation trade-offs and long-term effects due to the advance of technology and the increase of service quality. These two authors show that service productivity should be lower when factors (e.g. higher profit margin, higher price) motivate the company to provide better service quality, and service productivity should be higher when factors discourage the provision of better service quality.

In the future, output indicators such as quality and related concepts like customer satisfaction will be measured continuously and 'on the job'. Customer data will be collected systematically and used to better address customer needs. Independent platforms guarantee information, market transparency, and service and data security. Audits also support the service provider and the customer with quality signals and quality standards in front- and back-office processes.

Despite all these research efforts, scientists still have to answer questions about the productivity gap in the service sector itself compared to manufacturing, and the appropriate explanation and use of different qualitative and quantitative input and output variables of services (see also 3.2.5). For a comprehensive understanding of all perspectives with their interrelations, the mechanism influencing and controlling service productivity is of major im-

portance. However, a comprehensive understanding of the productivity determinants has yet to be created.

3.2.5 Sustainability and Service

Sustainability and service is the first new research area identified in our study and interviews. The following topics were stated:

- Ethical buying behaviour in the context of services
- Sustainability aspects of services
- Ethics in service marketing
- Consumer perceptions of sustainability in services
- Fairness perceptions of services

The following journal papers are rated as helpful and inspiring in this research area:

Anderson, L., Ostrom, A.L., Corus, C., Fisk, R.P., Gallan, A.S., Giraldo, M., Mende, M., Mulder, M., Rayburn, S.W., Rosenbaum, M.S., Shirahada, K. and Williams, J.D. (2013). Transformative Service Research: An Agenda for the Future. *Journal of Business Research*, 66, 1203–1210.

Huang, M.-H. & Rust, R.T. (2011). Sustainability and Consumption. *Journal of the Academy of Marketing Science*, 39, 20–54.

Hunt, S.D. (2011). Sustainable Marketing, Equity, and Economic Growth: A Resource-advantage, Economic Freedom Approach. *Journal of the Academy of Marketing Science*, 39, 7–20.

Lacoste, S. (2016). Sustainable Value Co-creation in Business Networks. *Industrial Marketing Management*, 52, 151–162.

McDonagh, P. & Prothero, A. (2014). Sustainability Marketing Research: Past, Present and Future. *Journal of Marketing Management*, 30, 1186–1219.

Sheth, J.N., Sethia, N.K. & Srinivas, S. (2011). Mindful Consumption: A Customer-centric Approach to Sustainability. *Journal of the Academy of Marketing Science*, 39, 21–39.

Wolfson, A., Tavor, D., Mark, S., Schermann, M. & Krcmar, H. (2010). S3 – Sustainability and Services Science: Novel Perspective and Challenge. *Service Science*, 2, 216–224.

Sustainability is a mega-trend, facing the challenge of a system to meet the needs of the present without compromising the ability of future generations to meet their own needs (Wolfson et al. 2010; Lacoste 2016). More and more frequently, we are inundated with reports of increasing environmental problems such as climate change, water and air pollution, and scientists as well as politicians show alarming future perspectives for a constantly growing population within a world of increasingly exploited re-

sources. Social and economic inequity within and between countries is another important dimension of the 'triple bottom line' of sustainability (Sheth et al. 2011). Hence, sustainability research has gained vastly in importance within the last decades, covering various management disciplines, ranging from production and supply chain management (e.g. Gunasekaran & Spalanzani 2012; Lacoste 2016; see also 3.2.2), to finance and accounting (e.g. Martin & Moser 2016; Khan et al. 2016; Burritt & Schlatterer 2010), to marketing and consumer behaviour (e.g. McDonagh & Prothero 2014; Hunt 2011; Sheth et al. 2011; Huang & Rust 2011). However, extant research is lacking in several aspects: first, it is more domain specific than interdisciplinary, not accounting for the complex interconnections of causes and effects grounded in different research streams. Second, and associated with the first aspect, sustainability research – specifically in marketing – is criticised as following an issue-based approach rather than a universal viewpoint (McDonagh & Prothero 2014; Sheth et al. 2011). Third, sustainability research is more related to the present than to the future and therefore neglects an important part of the sustainability approach: the ability of future generations to meet their own needs.

Despite increasing attention to the topic in general, sustainability aspects are widely neglected in service research. The few exceptions are predominantly branch specific and address service industries that are characterised by a high degree of tangible aspects in service production and delivery, such as transportation services (Park et al. 2016), retailing (Van Doorn & Verhoef 2015), tourism (Hardenman et al. 2017) and the hotel business (Susskind 2014). The reasoning behind this is probably the fact that sustainability aspects influence consumer perceptions and evaluations, particularly in those services that are obviously linked to environmental concerns, and hence companies pay more attention to these aspects when running their business. Therefore, the intangible nature of services might be one reason for the lack of sustainability-related service research. Nevertheless, we believe that the topic will gain in importance for any kind of service, and that research should respond to the increasing need for a better understanding of the creation of sustainable service solutions in terms of environmental, social and economic issues (see also 3.2.1). For example, financial service providers are called upon to offer both profitable and sustainable investment products; health-care services are facing the challenge of an ageing population with increasing costs of the health-care system, making it difficult but necessary to ensure affordable and socially equitable health care. Service research should address the complex, multidimensional topic of sustainability in services. Scholars should address the question of the motivation of service providers to account for sustainability concerns in their business models. Also it is of particular interest to investigate in

what way and how far service transformation such as the development from manufacturers to (access-based) service providers contributes to sustainability in an economic system. Further research on sustainability could also consider technological developments that might increase sustainability in service industries (see also 3.2.6), as well as the effect of sustainability-based decisions and behaviour on the economic outcomes of companies (see also 3.2.4) and the well-being of consumers, both in the present and in the future.

A promising yet under-researched field in terms of sustainability and services is the customer's role in service production and value creation. Since customers contribute to the service outcome and therefore to the value of the service, the approach of co-production and value co-creation might be extended to the co-creation of sustainability within service production and delivery. Extant research on customers' role related to sustainability solely addresses buying behaviour or consumption (e.g. Sheth et al. 2011; Huang & Rust 2011). However, in many cases service customers actively participate in service production and thereby can increase as well as decrease sustainability through the way they act in service co-production. Service research could expand the concept of value co-creation by an additional sustainability dimension, reflecting the environmental, social or societal value, to which a service customer can contribute. Research on this subject could include the issue of methods for companies to create awareness and behavioural change towards sustainable value co-creation in services management. Questions on the motivation of service customers to contribute to societal value, and the type of communication or incentives to overcome a potential attitude-behaviour gap in terms of sustainable co-production, need to be addressed in future research.

Since sustainability implies by definition a multifaceted and forward-looking way of thinking, research should address the complexity and long-term effects of service management concepts and measures on the environment, society and economic success. This is a major challenge of sustainability research, particularly in the current VUCA world, which is characterised by volatility, uncertainty, complexity and ambiguity, including fundamental changes of industry structures and business models due to globalisation, technological developments (see also 3.2.6) and behavioural changes. Many service firms, particularly those in the 'new economy', are strongly affected by these developments and therefore cause-effect relations are difficult to determine and analyse. A fundamental resulting question is thus how to capture sustainability effects in a dynamic service world. Anderson et al. (2013) presented initial ideas for a conceptual approach of transformative service research, and Wolfson et al. (2010) offered a new and inspiring perspective by defining sustain-

ability itself as a service; that is, a service to the next generation, with the present generation (current suppliers and consumers) being the service providers and the next generation being the service customers. Yet following this understanding of sustainability will lead us to a corresponding basic question: Do we have to redefine the constitutive characteristics of services with regard to a cross-generational service idea, such that simultaneity of service production and consumption as well as customer participation in service production are no longer necessary or constitutive? However, the fact that literature within this research stream is hitherto only conceptual indicates the challenges of an empirical research approach to capturing complex and future-focused sustainability effects. Even though empirical research on this topic is highly ambitious, we encourage longitudinal field studies that try to identify the long-term environmental, social and economic effects of different service business models, innovations and trends in service usage.

3.2.6 IT-driven Services

Another promising topic in service research is IT-driven services. In this context, the following topics were mentioned:

- Digitalisation of services
- Process management of digital services
- Information systems for services
- Mobile devices for services
- Value co-creation in digital services
- Big data in service industries

The following papers may be helpful and inspiring for future research in this area:

Barrett, M., Davidson, E., Prabhu, J. & Vargo, S.L. (2015). Service Innovation in the Digital Age: Key Contributions and Future Directions. *MIS Quarterly*, 39, 135–154.

Böhmann, T., Leimeister, J.M. & Mösllein, K. (2014). Service Systems Engineering: A Field for Future Information Systems Research. *Business & Information Systems Engineering*, 6, 73–79.

Brynjolfsson, E. & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies* New York.

Iansiti, M. & Lakhani, K.R. (2014). Digital Ubiquity: How Connections, Sensors, and Data Are Revolutionizing Business. *Harvard Business Review*, 92, 91–99.

Porter, M.E. & Heppelmann, J.E. (2014). How Smart, Connected Products Are Transforming Competition. *Harvard Business Review*, 92, 11–64.

Westerlund, M., Leminen, S. & Rajahonka, M. (2014). Designing Business Models for the Internet of Things. *Technology Innovation Management Review*, 4, 5–14.

IT is a relevant phenomenon and a major area of interest within the field of services. Its sphere and intensiveness of influence on the practices of service management and service engineering have continuously grown over time. More recently, the term *digitalisation* has been established, mainly in Europe, as an analogy to industrialisation, indicating that a similar game-changing effect on economies could be expected from the continued advance of IT capabilities. We believe that digitalisation raises questions for service research in several ways.

First, digitalisation changes the face of the discipline's reference object, which is the appearance of services. Porter and Heppelmann (2014) used three waves of IT-driven transformations as a condensed metaphor to explain how companies' value creation changes through digitalisation. Managers riding the first wave use IT as an instrument to automate single activities that are often only parts of complex service process chains. Wave 2 washes up IT, which can implement and execute increasing portions of process chains. Digital infrastructures establish the needed flows of information and control between activities, possibly across processes and economic actors (Becker et al. 2013). This is one of the reasons why digitalisation asks for new tools and techniques for the 'process management of digital services'. Finally, wave 3 brings digitalisation of the products and services themselves. Wave 3 causes entirely new service offerings to appear as well as offerings that are transformations of existing ones.

The latter category includes, for instance, fully digital services that are mainly algorithms drawn from the highly specialised knowledge base. For decades, mechanical engineering companies were built up through the practice of offering product-related industrial services, such as 'optimising the machine'. It has been noted that in the past it was difficult to deliver these services globally at a high level of quality and in a profitable way. But in the near future, the digital factory will allow companies to inject an algorithm into a customer's analytical application environment that can tap into the knowledge base remotely. However, at the same time, it can also locally tap into all production-related sensor data in standardised ways.

Entirely new service offerings, involving a manufacturer's data-driven services, can be created based on analyses of huge amounts of data ('big data'). Big data can be obtained from the installed base due to the products' digital connectedness at runtime. Car manufacturers, for instance, can then convert into services their knowledge of movement profiles and driving behaviours.

After discussing some of the general IT-driven transformations related to services, we further consider some

more specific phenomena of IT-driven services. Mobile devices, starting with mobile phones, have become omnipresent as connected devices in the hands of customers and employees. They constitute an important customer contact point and are one of the several new digital platforms on which value is co-created. Today, the internet (of things) connects more technical agents than human agents, of whom many are even interacting with the physical environment via sensors and actuators.

In view of all these novel phenomena, IT remains an instrument to improve the efficiency and effectiveness of mature applications in mature service-related problem domains. Thus, the creation of methods and techniques intended to improve information systems for services that can better assist in the managerial and engineering tasks of service development and service operations management is and will be an ongoing task.

3.2.7 Networks and Cooperation in Service Industries

Networks and cooperation in service industries are evaluated as further essential topics in service research. The following research topics were stated by the scholars surveyed:

- Service ecosystems, service delivery networks, management of service networks
- Relational view of the firm in service networks
- Management of inter-organisational relations in service industries
- Organisational design of inter-organisational processes and tasks, such as human resource management, service delivery and innovation
- Creative processes in service organisations and networks
- New business models and service transition in networks

In this research area, the following journal papers are helpful and inspiring:

Adner, R. & Kapoor, R.R. (2010). Value Creation in Innovation Ecosystems: How the Structure of Technological Interdependence Affects Firm Performance in New Technology Generations, *Strategic Management Journal*, 31, 306–333.

Eloranta, V. & Turunen, T. (2015). Seeking Competitive Advantage with Service Infusion – A Systematic Literature Review, *Journal of Service Management*, 26, 394–425.

Gawer, A. & Cusumano, M.A. (2014). Industry Platforms and Ecosystems Innovation, *Journal of Product Innovation Management*, 31, 417–433.

Gebauer, H., Paiola, M. & Saccani, N. (2013). Characterizing Service Networks for Moving from Products to Solutions, *Industrial Marketing Management*, 42, 31–46.

McIntyre, D.P. & Srinivasan, A. (2017). Networks, Platforms, and Strategy: Emerging Views and Next Steps, *Strategic Management Journal*, 38, 141–160.

Romero, D. & Molina, A. (2011). Collaborative Networked Organisations and Customer Communities – Value Co-creation and Co-innovation in the Networking Era, *Production Planning & Control*, 22, 447–472.

Vargo, S.L. & Akaka, M.A. (2012). Value Co-creation and Service Systems (Re)Formation: A Service Ecosystems View, *Journal of Service Science*, 4, 207–217.

Vargo, S.L. & Lusch, R.F. (2010). From Repeat Patronage to Value Co-creation in Service Ecosystems – A Transcending Conceptualization of Relationship, *Journal of Business Market Management*, 4, 169–179.

Westerlund, M., Leminen, S. & Rajahonka, M. (2014). Designing Business Models for the Internet of Things, *Technology Innovation Management Review*, 4, 5–14.

Wieland, H., Polese, F., Vargo, S.L. & Lusch, R.F. (2012). Toward a Service (Eco) Systems Perspective on Value Creation, *International Journal of Service Science, Management, Engineering, and Technology*, 3, 12–25.

Past service research on networks and cooperation focused on classical topics such as contracts, verticalisation, joint ventures and franchising systems. Papers within this research area followed the classical paradigm of one partner taking control while the others are suppliers in a setting in which value creation is pre-defined. Within this setting, partnerships and networks serve to complement and distribute the core product or service.

With the above-mentioned journal papers in mind, we believe that the role and structure of networks have changed significantly in the age of digitalisation, which in turn leads to a plethora of new research areas (see also 3.2.6). As a result of service-dominant logic and digitalisation, the logic behind value creation is shifting from classical value chains to complex value networks consisting of a dynamic set of actors. The target within these networks is not to verticalise but to build horizontal relationships and alliances. In the following we outline some important specific characteristics of the new network logic.

The thought of value-in-use is central. Not the product but the value created for the customer through use is decisive for the design of new offerings. From a network perspective, value for the customer is created through the integration of products and services as well as the integration of physical and digital offerings. The market, its actors and the rules within the market are changing continuously.

Within the resulting service networks or service ecosystems, new solutions emerge from the dynamic interaction and (re)combination of different actors, resources and market offerings. Service innovation (see also 3.2.1) represents an iterative, collaborative process between actors within the network rather than an in-house process of a specific organisation. Relationships are multidirectional and the behaviour of every actor influences the other actors as well as the whole network. Examples can be found in new mobility offerings or in the internet of things (see also 3.2.6). Value-in-use is not generated by the car itself or a single transportation service. Instead, it is a result of the combined use of multiple offerings. Car providers, public transportation, sharing providers and mobility platforms converge to create value – in this case the transportation from point *a* to point *b*, be it cost efficient, time efficient or in the most comfortable way. Depending on the customers' needs, the set of actors and their interaction is different. Historically, the customer integrates these offerings himself/herself to maximise the value-in-use. More and more this role is being fulfilled by services or platforms. One or more actors can take a central role within the network, acting as central players and integrators who actively manage the ecosystem.

Building and managing service ecosystems lead to a plethora of research topics, such as the stipulation of the development of new offerings through network constellations, and how the customers' adoption of new offerings can be assessed. Further, criteria for organisations for choosing partners need to be identified, as well as methods to manage the chosen relationships proactively. Research may also consider the way in which companies can respond to the adaptive, dynamic and complex characteristics of said networks. New management approaches, technological solutions (hardware and software) for easy access by all actors, the guarantee of interoperability, as well as the access, ownership and management of the data generated are additional subjects that need to be considered by scholars in the future. Likewise, the extraction of pricing mechanisms and revenue models to assess and share value, and the marketing of new offerings, should not be neglected.

An important factor is the role of cocompetition, a state of simultaneous cooperation and competition. Actors in networks are often competitors while cooperating at the same time through complementary offerings from a value-in-use perspective. Apple and Google, for example, are competitors regarding the diffusion and market share of their smartphone platforms. At the same time, Google Maps complements the value of the iPhone and vice versa. Important research topics include the assessment benefits and risks of partners, the distribution of value or the implications for a firm's core business.

The emerging service networks and ecosystems and the new logic of value creation require new kinds of network-oriented business models (see also 3.2.8). It is essential to define on what levels actors participate in joint value creation and through what business models they accomplish their targets. A car manufacturer can sell a connected car or offer it as a service while allowing others to complement the offering through digital and physical services. A central platform or integrator connects the individual actors (customers, product provider, service providers, digital service providers) and acts as a venue for value exchange. Firms need to open up their business models for other actors, thus allowing for a cooperative creation of value that goes beyond the traditional concept of value chains. Numerous research questions arise from this. Future studies in the field of networks and cooperation should address suitable methods to develop innovative network-oriented business models. This is based on the analysis of existing types and patterns of network-oriented business models and the assessment of the optimal degree of opening up one's business model. Possible types of platform-based business models should also be identified. Furthermore, it is of vital interest for both researchers and practitioners to learn how organisations can open up their business models and reach their targets at the same time, but also how the risks and benefits of cooperative business models can be assessed. Understanding the dynamics of competing business models, such as competing platforms and the design of a systematic process for service ecosystem business development, is a further promising topic in network research. Last, the testing of new business models and the description and management of interdependencies between business models in networks (see also 3.2.8) complete the variety of potential research topics in this area.

Service ecosystems offer great potential for the transition of product manufacturers towards service (see also 3.2.6). We believe that the basis for service business development is the question of what type of business model the firm is focusing on. A classical product provider focuses on the product as the core offering. Value-adding services, offered through the network and other actors, enhance the value of the product (product-oriented type). A solution provider focuses on a product-service bundle that combines product and service offerings into a solution (solution-oriented type). A service provider offers a service within the ecosystem (service-oriented type). In the case of a high degree of integration of customer-provider processes, the provider leverages the network to act as a value co-creator for the customer (value co-creation-oriented type). Relevant questions for future research should consider the leverage of the network for the transition towards service. Essential knowledge on how a manufacturer transforms into a solution provider within the ecosys-

tem, how a solution provider uses a network to become a service provider and how a service provider becomes a value co-creator needs to be collected.

The above-mentioned aspects of increasing network orientation have extensive implications for organisational management as well. The complexity of value networks and relationships and the dynamic evolution of these systems require new organisational capabilities, structures, processes and mindsets. Managerial decisions are taken under increased uncertainty, networks and their evolution are only partially projectable and the success of market actions heavily depends on the actions of other actors. The internal and external transformation processes that are necessary give rise to a plethora of research topics regarding the internal organisation of network orientation. For one thing, ways to stimulate creativity in service development to find new cooperative market solutions need to be identified (see also 3.2.1). For another, the application of open systems to facilitate the collaboration of departments such as IT, marketing, sales or human resources within and between firms, and the identification of new forms of collaboration within these departments, should be addressed by future research. The variety of possible research subjects also includes suitable incentive systems for fostering collaboration, the synchronisation of internal and external processes, organisational designs that enable firms to act more dynamically, methods and processes to help take strategic decisions under uncertainty, and methods for organisations to operate experimentally.

Researchers need to address these diverse topics using new approaches. When classical empirical methods reach their limits, alternative approaches such as design science research may be useful. These aim to combine research and practice to develop and validate new artefacts (i.e. models and methods) for manifold purposes, for example models or methods to describe and develop network-oriented business models.

Summarising, from our perspective networks and cooperation represent a promising research area for service researchers. Firms must manage complex sets of relationships and analyse their ecosystems to build value networks instead of value chains. The focus lies on network effects and multisided markets rather than economies of scale and traditional customer-provider relationships. This development is accelerated by the ongoing digitalisation (see also 3.2.6). There are many examples in practice where networks have replaced traditional industry logics. Research needs to deal with the importance of network effects, the direct and indirect drivers of network effects, the rules of services ecosystems, the quality, mechanisms and value of platforms, the roles of different actors and many other important aspects. Specific network analysis will become increasingly important. The network logic leads to a

shift from traditional views such as that of Porter and the resource-based view to a relational view of the firm. In the age of service networks and ecosystems, competitive advantage is a result of the cooperation and interaction of actors within such systems.

3.2.8 Services in the Sharing Economy

Noticeably relevant and growing in importance for both service research and management is the subject of services in the sharing economy. Scholars stated the following topics:

- Sharing and alternative economies
- Collaborative consumption of services

The following journal papers may be helpful and inspiring for research in this area:

Bardhi, F. & Eckhardt, G.M. (2012). Access-Based Consumption: The Case of Car Sharing. *Journal of Consumer Research*, 39, 881–898.

Belk, R. (2014). You Are What You Can Access: Sharing and Collaborative Consumption Online. *Journal of Business Research*, 67, 1595–1600.

Lamberton, C.P. & Rose, R.L. (2012). When Is Ours Better Than Mine? A Framework for Understanding and Altering Participation in Commercial Sharing Systems. *Journal of Marketing*, 76, 109–125.

Lawson, S.J., Gleim, M.R., Perren, R. & Jiyoung Hwang, J. (2016). Freedom from Ownership. An Exploration of Access-based Consumption. *Journal of Business Research*, 69, 2615–2623.

Lovelock, C. & Gummesson, E. (2004). Whither Services Marketing? In Search of a New Paradigm and Fresh Perspectives. *Journal of Service Research*, 7, 20–41.

Möhlmann, M. (2015). Collaborative Consumption: Determinants of Satisfaction and the Likelihood of Using a Sharing Economy Option Again. *Journal of Consumer Behaviour*, 14, 193–207.

Schaefers, T., Lawson, S.J. & Kukar-Kinney, M. (2016). How the Burdens of Ownership Promote Consumer Usage of Access-based Services. *Marketing Letters*, 27, 569–577.

Wittkowski, K., Moeller, S. & Wirtz, J. (2013). Firms' Intentions to Use Nonownership Services. *Journal of Service Research*, 16, 171–185.

Companies increasingly face the emerging business phenomenon of a sharing economy. This development is based on changes in consumer behaviour, such as ownership becoming less important, and on the facilitating role of new technologies, especially online applications, which enable new business models with reference to the sharing

economy (see also 3.2.6). Although there is a variety of terms and concepts in this research field, they all have the common idea of sharing services: providing access to a physical good or facility for a short period of time without the transfer of ownership. A growing number of companies have begun to introduce services that are based on the principles of a sharing economy, for example Car2Go in the mobility sector or AirBnB in the hospitality industry. Scenarios indicate a further growth of this market up to a global revenue of \$335 billion in 2025 (PWC 2015). From an economic as well as an ecological perspective (see also 3.2.5), there is significant potential for collaborative consumption, since products and facilities remain widely unused, enabling owners to become providers by offering access-based services in a sharing network. This principle may not be limited to the consumer sector. Collaborative usage in the B2B context in terms of data processing, cloud computing, technical equipment and even human resources may constitute new business services, following a service-dominant logic.

However, research in this area is still at the beginning and has as yet mainly focused on the antecedents or motives of using services in a sharing economy (Bardhi & Eckhardt 2012; Lamberton & Rose 2012; Moeller & Wittkowski 2010; Möhlmann 2015), including the utility of an access offer and related cost aspects (Lamberton & Rose 2012; Möhlmann 2015), the convenience of product usage (Moeller & Wittkowski 2010) or community belonging within collaborative consumption (Möhlmann 2015). More recently, the topic of resistance against sharing services has come into focus. For example, Akbar et al. (2016) investigate the role of consumers' materialism as an inhibitor of sharing. In this early stage of this research stream, the extant literature mainly addresses different aspects of consumer behaviour in the context of collaborative consumption, yet widely neglects the far-reaching consequences for market structures and mechanisms and for different players and their changing role in a sharing economy.

From a holistic service markets perspective, research may investigate the influence of the collaborative consumption trend on entire market structures. Currently, we observe two different developments. On the one hand, a multitude of individual providers offer access to products or services in a peer-to-peer sharing setting; that is, consumers are becoming important service providers and markets are getting more atomistic. On the other hand, we see the emergence of a few dominant players determining the market in certain segments (e.g. AirBnB or Uber). The impact of changing market structures on the behavioural aspects of supply and demand, on transparency and competitiveness, and consequently on price levels could be an interesting topic for further research in the sharing economy. According to this, a subject for further research could also be the role of collaborative consumption as an antecedent

of buying behaviour and new financing models for product owners. This additional revenue received from offering short-term access to products may individually lead to an uplift of the purchased product line and to new business models of combined ownership and service offers, and therefore to a transformation of manufacturers' and service providers' roles in a sharing economy (see also 3.2.7). Moreover, current research has widely neglected the manufacturers' role in a sharing economy as a potential beneficiary. So far, academic as well as managerial discussion on access-based services predominantly emphasises the substitutive or diminishing effects of collaborative consumption on product ownership, and therefore the negative consequences for manufacturers. However, since consumers might get access to new and innovative products within the services of the sharing economy (see also 3.2.1), trial or spill-over effects from access-based service usage on subsequent buying behaviour can occur as well. These effects and with them the consequences for manufacturers could be an interesting topic for further research.

From a service consumer perspective, there is a large body of research on motivations to engage in access-based consumption. However, it is necessary to better understand conditional factors for engaging or even not engaging in collaborative consumption services. These could be either situational antecedents or personal characteristics. Moreover, the examination of the promotional and preventional sides of access-based consumption is not limited to the consumer perspective. Business models such as performance contracting – building on a service solution instead of facility ownership in a B2B context – are gaining in importance and offer diverse research potential (see 3.2.7). Besides addressing the antecedents of service usage in a sharing economy in detail, research could also pay more attention to the consequences of such service offers for both service providers and access-based service consumers; that is, when or under what conditions this business model pays off for providers and consumers.

Another avenue for further research lies in the investigation of the access user image. The early users could be a kind of opinion leader influencing the earlier and later majority. With this, the question is immanent of whether access-based services or their usage could be considered as a status symbol (e.g. being more flexible and smarter than traditional consumers).

Furthermore, we still do not know which values and norms underlie the ostensible motives for access-based service usage, and thereby which kind of communication actually gets consumers to use services in the sharing economy. A suitable communication strategy needs to be designed, which may differ from traditional marketing exchanges (Lovelock & Gummesson 2004). It might also be helpful to apply cross-cultural studies for a better under-

standing of cultural differences in relation to collaborative consumption. Since underlying consumption values vary among cultural backgrounds (Furrer et al. 2000), different promotional strategies could target different consumer groups. Besides the promotional factors, research is needed to examine barriers for participating in collaborative consumption modes.

3.2.9 Leadership of Frontline Employees

The scholars surveyed did not explicitly mention the subject of leadership as a research topic on which they are currently focusing, but we believe that leadership is central to the field of service management, showing a number of topics where research is missing. As with research on HRM, this area focuses on employees working in direct contact with customers. As mentioned in section 3.2.3, basic to understanding the leadership of customer contact employees is a deepened understanding of service work, especially the two-sided task of accomplishing the core service and interacting with the customer in the socially required manner. This requires in-depth demand analysis, resulting in different models of work behaviour for different types of service work, which again are basic to understanding the requirements for leading employees in helpful ways (see also 3.2.3).

Certainly the most central demand of working in contact with customers is performing in a service-oriented way. Therefore, it would be plausible to start research with the concept of service leadership, developed by Schneider et al. (2005). Following the perspective of 'linking research' – assuming that what employees experience in their work is correlated with the experiences they provide for their customers and that these customer experiences translate into customer satisfaction – Schneider et al. (2005) postulate that service leadership is the origin of this chain. These authors define their concept as leadership that communicates a commitment to high levels of service quality by recognising and appreciating high-quality service, removing obstacles to service delivery and setting clear standards for service quality. However, this concept is problematic, because it implies that service leadership is fostering and sustaining a service climate for employees, implying that the service climate is the decisive variable mediating between leader behaviour and employee experience. For this reason, studies have as yet only investigated the effects of service leadership on employee behaviour mediated by service climate. Whether service leadership directly affects the experiences of employees in the same way as it affects their behaviour in contact with customers is still unclear.

Correlations between leader behaviour and employee experiences are meanwhile well established for some so-called generic models of leadership, describing behaviour occurring across situations and outcomes, especially for

transformational leadership. These models imply that leaders fundamentally change the values, goals and aspirations of followers in such a way that employees' performance is consistent with these values and not dependent on expecting rewards for their efforts. There is some empirical evidence that this transformation shows positive effects on the emotional well-being of employees working in customer contact. Transformational leadership reinforces employees' self-efficacy beliefs, enhances their job satisfaction and their affective commitment to the organisation as well as their customer orientation, and buffers the negative effects of work stress. This in turn affects emotion regulation, by for instance fostering displays of positive emotions in the interaction with customers. This again leads to better service behaviour, resulting in positive consequences for customers and economic benefits for the organisation (see also 3.2.4). Some studies, however, also show possible negative effects on employees, including the experience of higher role ambiguity, a reduction of trust in the leader and a reduction of customer orientation when the transformational leader shows no customer orientation on his or her own. These effects can be attributed to the central mediating aspect of transformational leadership: the high identification with the leader. Therefore, it is inevitable to thoroughly investigate in more detail under which circumstances this type of leadership is recommended.

The role of higher-ranked leaders is a further important question to address in this context. It is well known that so called trickle-down effects need to be considered in this regard. Trickle-down effects describe the transmission of employee perceptions, attitudes and behaviours down the hierarchical chain from supervisors to subordinates, even reaching customers. Such effects emerge from the central position of leaders, resulting in special relationships with their followers, which then lead to detailed observations of every type of behaviour the leader shows. Leaders who realise this fact understand the need to communicate by acting and that this form of communication counts more than words alone. As higher leaders behave in accordance with the organisational culture, it influences the attitudes and behaviour of employees.

In one of the early demonstrations of the trickle-down effect, Masterson (2001) proposed that the experience of organisational justice would cross over from employees to their customers. She found that employees who experience organisational justice are more committed to the organisation, exert extra effort and exhibit prosocial behaviours when serving customers. Customers in turn feel that they are treated fairly by employees. A further study illustrates that organisational identification also has an impact on relationships between business unit managers and salespeople, and between regional directors and business unit managers (Wieseke et al. 2009). The leadership behaviour of higher management has direct effects on the

leadership of employees in customer contact, and mediated effects on the behaviour of these employees and lastly on the experiences of customers. This existing knowledge of the impact of leadership on employee and customer behaviour is very important for theory and practice. Nevertheless, it is only limited, as the situational requirements of such effects are yet unknown and constitute a significant area for future research.

Linkage research subsumes the 'inside-out' effect of front-line employee job satisfaction on customer satisfaction, but most studies ignore the possibility of an 'outside-in' effect of customer satisfaction on employees' job satisfaction. In a recent study using a cross-lagged design, Zablah et al. (2016) demonstrated that customer satisfaction and employee job satisfaction are reciprocally related and that the outside-in effect was even predominant in their study. If further evidence of this effect can be found, demands on leadership will be more complex. Managers would be obliged to maximise both customer and employee welfare, and to view customer satisfaction as an important motivation for improving the outcomes of customer contact employees. However, this obligation may result in conflicting situations, because employee morale can be hurt when employees interpret this leader behaviour as a signal of the firm caring more about customers than about them. To explore the antecedents as well as moderating and mediating variables of this type of leadership seems to be an important task of future research.

As an introduction to the research on service leadership, we recommend the following papers as inspiring:

Masterson, S.S. (2001). A Trickle-down Model of Organizational Justice: Relating Employees' and Customers' Perceptions of and Reactions to Fairness. *Journal of Applied Psychology*, 86, 594–604.

Schneider, B., Ehrhart, M.G., Mayer, D.M., Saltz, J.L. & Niles-Jolly, J. (2005). Understanding Organization-Customer Links in Service Settings. *Academy of Management Journal*, 48, 1017–1032.

Wieseke, J., Ahearne, M., Lam, S.K. & van Dick, R. (2009). The Role of Leaders in Internal Marketing. *Journal of Marketing*, 73, 123–145.

Zablah, A.R., Carlson, B.D., Donavan, D.T. Maxham, J.G., III & Brown, T.J. (2016). A Cross-lagged Test of the Association between Customer Satisfaction and Employee Job Satisfaction in a Relational Context. *Journal of Applied Psychology*, 101, 743–755.

4. Conclusion

Our detailed outline of the key research areas in service research highlights future challenges that service research

has to face. The nine research areas identified and the variety of promising research topics demonstrate the huge span that service research covers. Our findings are in line with those of Ostrom et al. (2015), who recognised a similar range of research topics in service research.

We would like to point out the fact that the research topics presented cannot be fully addressed in a classic, disciplinary way. On the contrary, it is evident that researchers from different academic disciplines need to work together on these research topics. Indeed, interdisciplinary research will shape the future of service research.

Certainly, our study also has limitations with regard to representation, but this was never our aspiration. We rather intended to identify significant and in particular new research areas in a qualitative survey among European service researchers. Furthermore, we want to show interested scholars the relevant areas of research in which results can be published in the *Journal of Service Management Research (SMR)*. Therefore, it should come as no surprise that our opinions influence this paper's presentation of a publishing philosophy for *SMR*, although our opinions did not influence the results we collected from the researchers surveyed. From all perspectives, it becomes apparent that the future of service research is an interdisciplinary process.

The *SMR* will offer a forum to this interdisciplinarily oriented service research. Researchers who devote themselves to such interdisciplinarity are invited to publish their research results in *SMR*.

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Keywords

Service Research, Service Innovation, Service Process, Service Productivity, IT and Service, Service Networks, Sharing Economy, Human Resource Management