

Spring 6-10-2017

# SELLING CENTER HETEROGENEITY AND ITS INTERPLAY WITH THE BUYING CENTER FOR INCREASING ADOPTION OF IT-SUPPORTED SERVICE INNOVATIONS

Nicolas Zacharias

*Technische Universität Darmstadt, Germany, zacharias@bwl.tu-darmstadt.de*

Ferdinand Rausch

*Technische Universität Darmstadt, rausch@bwl.tu-darmstadt.de*

Follow this and additional works at: [http://aisel.aisnet.org/ecis2017\\_rip](http://aisel.aisnet.org/ecis2017_rip)

---

## Recommended Citation

Zacharias, Nicolas and Rausch, Ferdinand, (2017). "SELLING CENTER HETEROGENEITY AND ITS INTERPLAY WITH THE BUYING CENTER FOR INCREASING ADOPTION OF IT-SUPPORTED SERVICE INNOVATIONS". In Proceedings of the 25th European Conference on Information Systems (ECIS), Guimarães, Portugal, June 5-10, 2017 (pp. 3082-3091). ISBN 978-0-9915567-0-0 Research-in-Progress Papers.  
[http://aisel.aisnet.org/ecis2017\\_rip/57](http://aisel.aisnet.org/ecis2017_rip/57)

This material is brought to you by the ECIS 2017 Proceedings at AIS Electronic Library (AISeL). It has been accepted for inclusion in Research-in-Progress Papers by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact [elibrary@aisnet.org](mailto:elibrary@aisnet.org).

# SELLING CENTER HETEROGENEITY AND ITS INTERPLAY WITH THE BUYING CENTER FOR INCREASING ADOPTION OF IT-SUPPORTED SERVICE INNOVATIONS

*Research in Progress*

Zacharias, Nicolas, Technische Universität Darmstadt, Darmstadt, Germany,  
zacharias@bwl.tu-darmstadt.de

Rausch, Ferdinand, Technische Universität Darmstadt, Darmstadt, Germany,  
rausch@bwl.tu-darmstadt.de

## Abstract

*IT-supported service innovations attract considerable interest as drivers of competitive advantage in a business-to-business (B2B) context. Sales managers are in need of insights regarding how to set up their selling centers (SC) with regard to SC's heterogeneity of expertise and values to raise the success of new services. However, literature in the area of SC heterogeneity in relationship with service innovations is scarce. Noting the increasing practical relevance, this study investigates how the different forms of SC heterogeneity influence the customers' intention to adopt a service innovation, considering the moderating effects of degree of service digitalization as well as buying center (BC) heterogeneity of expertise and values. Drawing on organizational buying behavior theory, we hypothesize a positive effect of SC heterogeneity of expertise on the intention to adopt, while SC heterogeneity of values is expected to weaken the intention to adopt. In addition, we propose varying moderating effects for the two different forms of BC heterogeneity as well as the degree of service digitalization. We will test the proposed hypotheses on the basis of a dyadic data collection. The expected findings will help sales managers to design their SCs in order to increase adoption rates of new services.*

*Keywords: Service Innovations, Digitalization, Selling Center Heterogeneity, Organizational Buying Behavior Theory.*

## 1 Introduction

Service innovations are a primary source of competitive advantage in a business-to-business (B2B) context (Lusch et al., 2007). In recent years, such innovations are increasingly supported or completely provided by IT (Lusch and Nambisan, 2015). For example, companies that used to sell and install hardware, such as servers or desktop computers, might now offer Infrastructure as a Service (IaaS) to customer companies, enabling them to use computing infrastructure online (Choudhary and Vithayathil, 2013). Examples like this illustrate that supplier companies have more and more opportunities to become service innovators. However, this development also creates new challenges for sales managers and members of sales departments within these companies, which have the task to raise customer acceptance for these new IT-supported services (Paluch and Wunderlich, 2016).

Against this backdrop, the challenges for supplier companies lie particularly in the characteristics of the selling/buying process in B2B relationships, in which many individuals are involved. Supplier companies usually set up a selling center (SC) that encompasses specialists of different departments (e.g., key account managers, engineers, controlling specialists). Customer companies generally involve a buying center (BC), which also consists of multiple individuals with different roles within buying process (e.g., procurement, members of different business units, IT). Thus, SCs as well as BCs are

both heterogeneous regarding the backgrounds and expertise of their members. This heterogeneity might have beneficial or detrimental effects on the intention to adopt the service innovation. In order to foster the adoption of their service innovations, supplier companies need to understand the interrelationship between the two centers in more detail and require recommendations regarding how they can best deal with different structures of their customers' BCs.

More specific, sales managers are in need of insights regarding how to set up their SCs most effectively, while taking into account the structure of customers' BCs. The solution may be to set it up effectively with regard to the heterogeneity of expertise, which refers to the variety of individuals in the SC with respect to experience, functional background, knowledge, and skills (Heyden et al., 2013; Homburg et al., 2010). Furthermore, the SC's heterogeneity of values, which refers to the variety of goals, work values, and beliefs what is important within or to the SC as a whole (Liang et al., 2012; Jehn, 1999), might affect sales performance and customers' intention to adopt the new service as well. Altogether, supplier companies are eager to know how different forms of SC heterogeneity affect customers' intention to adopt the new service, especially if they offer new IT-supported service innovations.

Extant literature in the area of SC heterogeneity in relationship with service innovations is scarce. Liang et al. (2012) explored heterogeneity of values (value diversity) in project teams and found that it adds to both beneficial and detrimental conflict. Just a few authors investigated BC heterogeneity and emphasize that heterogeneity goes along with different skills and knowledge in the BC, which allows a more objective evaluation of buying decisions (e.g., Homburg et al., 2010). Sales literature addressed success factors of selling teams in terms of size and shape of the team (e.g., Moon and Gupta, 1997) or different types of selling teams, their structure, and characteristics (e.g., Moon and Armstrong, 1994; Arnett and Badrinarayanan, 2005). They found that the structure and performance of the team is crucial for team success. Johnston and Lewin (1996) analyzed the topics of BC research including organizational characteristics like size, structure, orientation, and backgrounds. Their results show that the BCs are composed according to the buying situation and that customers' perceived risk can be decreased by good communication between multiple members of the supplier and the customer companies (Johnston and Lewin, 1996). To the best of the authors' knowledge, there is no research addressing SC heterogeneity and its influence on the customers' intention to adopt.

Furthermore, organizational buying behavior theory (Webster and Wind, 1972) assumes that organizational buying involves many people with different personal and organizational goals. The theory addresses BC and SC heterogeneity as well as the relationship between SCs and BCs (Webster and Wind, 1972). However, to the best of the authors' knowledge, there is no research which addresses the optimal fit between SC and BC heterogeneity. To understand the theoretical mechanisms lying in the interaction between SCs and BCs, it is necessary to investigate the role of the centers by including both the supplier and the customer perspective.

In order to close the gaps in extant research and with the ambition to support managers in the optimal design of their SCs, we strive to answer the following research question: *How do different forms of SC heterogeneity influence customers' intention to adopt a service innovation, considering the contingency effects of degree of service digitalization and BC heterogeneity?*

By answering this question, we make three important contributions. First, we close a relevant gap in the literature by investigating SC heterogeneity as a central part of the organizational selling process. In specific, we distinguish between SC heterogeneity of expertise and SC heterogeneity of values, which has not been examined in organizational sales research but will help managers to evaluate which kind of heterogeneity influences their selling efforts and their customers' intention to adopt a service innovation. Drawing on organizational buying behavior theory (Webster and Wind, 1972; Sheth, 1973), we also investigate the other side of B2B relationships by incorporating BC heterogeneity of expertise and values in our research, which will help sales managers to form their SCs accordingly.

Second, by focusing on the degree of service digitalization as an important characteristic of service innovations (e.g., Lusch and Nambisan, 2015), we enrich most recent research regarding service char-

acteristics (e.g., Nelson et al., 2014; Vickery et al., 2016). Furthermore, we bridge this literature stream to the field that investigates the optimal design of SCs (e.g., Evans et al., 2012; Steward et al., 2010). In line with this endeavor, we also provide important implications for managers regarding their ambition to adapt their SCs in the light of an increasing number of digitalized services.

Third, from a methodological perspective, we include the supplier and the customer perspective in our data collection approach in order to investigate B2B relationships from both sides. In particular, we conduct a dyadic data collection with key account managers as key informants at the supplier companies and members of the buying center at the customer companies. Extant studies often assess only the perspective of the suppliers (e.g., Lambe et al., 2009). Hence, using our approach we expect a higher validity of the generated findings, compared to a large share of extant literature.

## **2 Organizational Buying Behavior Theory**

To investigate the relationship between SC heterogeneity and customers' intention to adopt, we draw on organizational buying behavior theory. The theory builds on the seminal models of Webster and Wind (1972) and Sheth (1973) and aims to explain the complex process of industrial buying decisions (Brown et al., 2011). The theory relies on two major premises. First, the theory assumes, that organizational decision making is more formalized, influenced by budget, cost, and profit considerations, and buyers are objective decision makers (Brown et al., 2011). Second, the theory poses that "organizational buying involves many people in the decision process with complex interactions among people and among individual and organizational goals" (Webster and Wind, 1972, p. 12). Antecedent variables of the purchase situation are—among others—purchase importance, purchase complexity, and purchase uncertainty (Lewin and Donthu, 2005; Bunn, 1993). Consequently, buying center structures vary strongly (Lewin and Donthu, 2005). Sales managers need to be aware of these different determinants to be able to sell their products and services successfully.

In line with organizational buying behavior theory, our framework reflects supplier and customer characteristics relevant to the buying process. Webster and Wind (1972) and Sheth (1973) already derived implications for marketing managers many years ago. They advise these managers to analyze the tasks, structure, technology, and actors of their customer companies to be able to influence their buying decisions effectively (Webster and Wind, 1972; Sheth, 1973). We build on this recommendation to optimally match customers' structures by investigating, which impact SC heterogeneity of expertise and values have on customers' intention to adopt a service innovation. In line with the assumptions of the theory, we also analyze the moderating effects of BC heterogeneity of expertise and values on the linkages between the two forms of SC heterogeneity and the intention to adopt. Thus, our study framework presented in the next section is strongly embedded in theory.

## **3 Study Framework and Hypotheses**

### **3.1 Study Framework**

The framework in Figure 1 shows two forms of SC heterogeneity as independent variables: SC heterogeneity of expertise and SC heterogeneity of values. Scholars have been investigating organizational buying for a long time (e.g., Robinson et al., 1967; Webster and Wind, 1972; Johnston and Lewin, 1996). However, there has been only little research on the different heterogeneities of SCs. Due to the fact that organizational buying involves many people in the decision process, the composition of SCs is highly relevant. The necessity to adapt to specific customer demands depends—besides characteristics of the service innovation itself—particularly on the heterogeneity of these groups. Therefore, we suggest both kinds of SC heterogeneity to influence the intention to adopt a service innovation as our central dependent variable.

In addition, the framework includes the moderating effects of three contingency variables. First, the degree of service digitalization is investigated. Digital infrastructures have accelerated the emergence of new technologies, which trigger the transformation regarding how companies organize their processes and how whole industries are structured (Fichman et al., 2014). Digitalization is particularly important as not only the general amount of offered services increases in both companies and national economies, but the number of IT-supported services in particular (Yoo, 2010). As a result of the progressing digitalization, the customer contact during the provision of the service is likely to decrease. As a consequence, the importance of selling centers during the sales process increases accordingly, because concerns of customers with regard to the higher degree of digitalization need to be addressed. Hence, the degree of digitalization influences the effect of selling center characteristics (such as heterogeneity) on the intention to adopt significantly. We define the *degree of service digitalization* as the share of the service which is provided by IT and not—as often in the context of common services—by persons (Lyytinen et al., 2016).

Second and third, two forms of BC heterogeneity represent the other moderating factors: BC heterogeneity of expertise and BC heterogeneity of values. Heterogeneity is not only relevant in selling but also in buying centers. Beyond the theoretical importance of BC heterogeneity, our research goals require us to include the same two heterogeneity measures for SCs as well as BCs, because it allows us to investigate the fit between the structure of the BC and the SC. Whereas BC heterogeneity in general has already been the focus of scholars (e.g., Homburg et al., 2010), a more fine-grained analysis in terms of BC heterogeneity of expertise and values offers great potential for more nuanced knowledge creation.

Finally, we include various control variables in our study framework to increase the validity of the results. In particular, we select selling center size, customer orientation, formalization of the sales process, and IT-affinity of selling center members to control for potential direct effects on our dependent variable beyond SC heterogeneity and to provide linkages to extant sales literature.

Organizational buying processes involve many persons with different individual and organizational goals (Webster and Wind, 1972). In extant literature, some authors understand heterogeneity as differences in education, functional experience, and tenure (Carpenter, 2002; Carpenter et al., 2004). Others conceptualize heterogeneity of top management teams as a variety in functional background experiences (Heyden et al., 2013). In the context of organizational transactions only Homburg et al. (2010) investigated BC heterogeneity in general. They define BC heterogeneity as “the variety of individuals in the BC with respect to prior knowledge, functional background, and objectives” (Homburg et al., 2010, p. 203). Transferred to our context, we define *SC heterogeneity of expertise* as the variety of individuals in the SC with respect to experience, functional background, knowledge, and skills. Correspondingly, we define *BC heterogeneity of expertise* as the variety of individuals in the BC with respect to experience, functional background, knowledge, and skills. Drawing on organizational buying behavior theory, salespeople need to understand suppliers’ structure, organization, etc. to be most successful (Webster and Wind, 1972)—represented in the customers’ intention to adopt. Against this background, the interesting question is how salespeople’s heterogeneity of expertise influences the sales success in terms of customers’ *intention to adopt a service innovation*, which is defined as the extant of the customer’s intention to adopt the offered service innovation (Bhattacharjee and Sanford, 2006). Organizational buying behavior theory emphasizes that (early) adoption is a key factor for profit, sales growth, and market share and, hence, an early predictor of a successful selling process (Webster, 1969; Makkonen and Johnston, 2014).

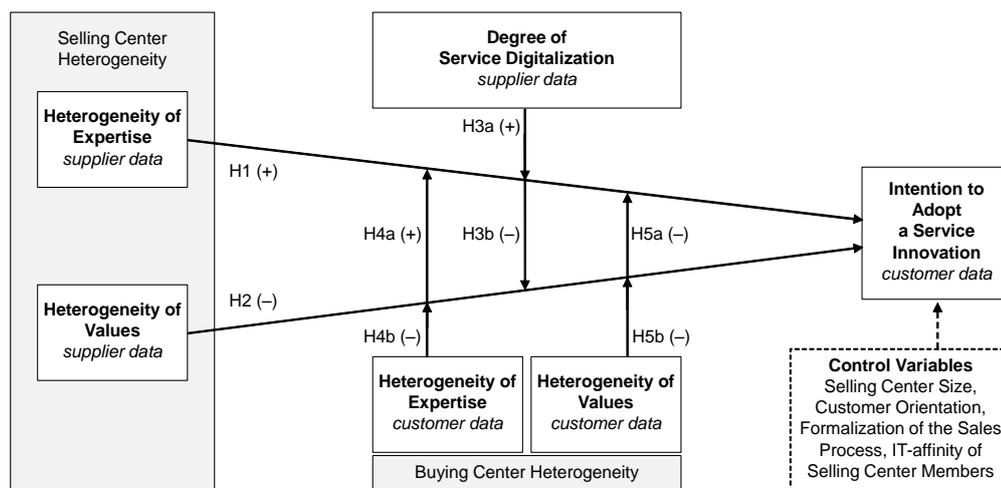


Figure 1. Study Framework

Since there is—to the best of the authors’ knowledge—no further research about SC heterogeneity of values, top management team literature needs to be considered to derive a definition, which has addressed this topic before using the term “value diversity.” Liang et al. (2012) points out that individuals in diverse teams have different beliefs regarding what is necessary to achieve the team’s goals, missions, or principles. According to Jehn (1999, p. 745), “value diversity occurs when members of a workgroup differ in terms of what they think the group’s real task, goal, target, or mission should be. In many cases, these differences can lead to task conflict...” One key characteristic of industrial buying is joint decision making (Sheth, 1973). Many people with different individual and organizational goals are involved (Webster and Wind, 1972). That often sparks conflicts among the individuals who need to decide (Sheth, 1973). Transferred to our context, SC and BC members might have different (individual) goals, work values, and beliefs regarding what is important within or to the center as a whole. Hence, centers whose members are heterogeneous in terms of their values might reduce their chances to achieve their goals. *SC heterogeneity of values* is defined as the variety of goals, work values, and beliefs what is important within or to the SC as a whole. Correspondingly, *BC heterogeneity of values* in our context is defined as the variety of goals, work values, and beliefs what is important within or to the BC as a whole.

## 3.2 Hypotheses

### Main effects hypotheses

The organizational selling process usually involves many people with complex interactions. There is a unique buying behavior of each B2B customer (Webster and Wind, 1972). Hence, sales managers need to deal with different individual and organizational goals among their customers. SCs, whose members are heterogeneous in expertise, can adapt to specific customers and their needs more successfully than SCs with less heterogeneous expertise for two reasons. On the one hand, they have the capability to better *understand* customer needs. On the other hand, they have the expertise to better *meet* these needs. Heterogeneous teams as a whole have higher competencies and more information available (Carpenter, 2002; Homburg et al., 2010). They understand complex, non-routine problems, because they have a variety of skills, knowledge, abilities, and perspectives (Arnett and Badrinarayanan, 2005). In addition, cross-functional teams increase the range of competences present in a team, which enables teams to better meet the customer needs (Arnett and Badrinarayanan, 2005; Moon and Armstrong, 1994). Accordingly, the different expertise enable them to offer customers specific, high-

quality solutions. To be able to offer customized products and services is an important point for differentiation against competitors and an essential argument for buying decisions (von Nordenflycht, 2010). On the basis of the prior considerations we propose:

*H1: SC heterogeneity of expertise positively affects customer's intention to adopt a service innovation.*

If SC heterogeneity of values is high, center members have diverse work values and beliefs what is important for the center. Hence, they might follow different goals in the selling process. Value diversity in teams leads to conflicts, whereas conflicts can arise on the personal and on the task level (Liang et al., 2012). Conflicts on the personal level are rooted in animosity surrounding interpersonal relationships among team members; task conflicts can, for example, arise between group members who value quality and those who value efficiency. Object of the conflict will then be the resource allocation, critical duties, and constraining goals (Jehn, 1997). It is difficult to adapt to changing environments when members of the team do not agree on how to respond to the changes. Successful SCs need to adapt their sales behavior to different sales situations (Ahearne et al., 2010). A changing environment or sale situation can also include changed or different customer needs. If the goals are different or antagonistic, SC members' ability as a whole to adapt to specific customer demands will suffer—with appropriate influence on customer's intention to adopt a service innovation. Based on this reasoning, we hypothesize:

*H2: SC heterogeneity of values negatively affects customer's intention to adopt a service innovation.*

### **Moderating effects hypotheses**

New technologies and IT-supported service innovations can be used to provide functional benefits for customers, but not all customers see these changes as improvements (Meuter et al., 2003). Hence, customers might perceive uncertainty with regard to new IT-supported service innovations (Schmidt and Calantone, 1998). Customers' perceived risk influences technology use, as studies in the B2C context show (Meuter et al., 2003; Ratchford and Barnhart, 2012). One reason for customers' uncertainty is the lack of information and the resulting doubts to be able to make the best decision (Lewin and Donthu, 2005). Members of heterogeneous SCs have a wide range of experience and expertise and will be better able to use their skills to address customers' concerns of not making the right decision. This particularly applies for the selling of highly IT-supported service innovations, because SC members can explicate the service details to customers and reduce their uncertainties (Berry, 1995). SCs with heterogeneity of expertise can use this expertise exactly in case of complex IT-supported service innovations. Hence, they can convince specific customers of the benefits of these services more effectively and mitigate their doubts.

With regard to the effect of SC heterogeneity of values, the impact of digitalized services is different. Customers want to be engaged in the service delivery process as active participants (Auh et al., 2007), particularly if they prefer individualized services. In case of high service digitalization, there is less direct contact between customer and supplier employees during service provision. As a consequence, more details need to be discussed and clarified during the preceding sales process. Members of SCs with a high heterogeneity of values will follow different goals and disagree on what is important to the center. Many options to offer the different benefits of the service will hinder SCs with heterogeneous values to adapt as a whole to certain customers, when service digitalization is high.

Based on the above reasoning, we hypothesize both the positive effect of SC heterogeneity of expertise and the negative effect of SC heterogeneity of values to become stronger, in case of high service digitalization. Hence, we propose:

*H3a: The positive effect of SC heterogeneity of expertise on the intention to adopt is stronger when the degree of service digitalization is high.*

*H3b: The negative effect of SC heterogeneity of values on the intention to adopt a service innovation is stronger when the degree of service digitalization is high.*

If both SC and BC are heterogeneous in expertise, there are members with different experiences and expertise in both centers. To strengthen their relationship to a certain customer, members of the SC may arrange a “mirror structure” (Arnett and Badrinarayanan, 2005) that enables the supplier to have persons matching the structure of the customer’s BC. For example, an engineer from each firm can discuss technical details, while people from logistics can negotiate about transportation issues (Arnett and Badrinarayanan, 2005). This is also in line with organizational buying behavior theory, which recommends that salespeople should have many information about the customer’s structure, tasks, technology, and actors in order to be able to optimize their selling success (Webster and Wind, 1972). The higher the heterogeneity of expertise in the SC, the higher the chance that a specialist in the SC will find its equivalent in the BC. People having similar interests, backgrounds, and experiences are likely to communicate and cooperate easier (Arnett and Badrinarayanan, 2005), making interfirm interactions easier as well.

The moderating impact of BC heterogeneity of expertise on the linkage between SC heterogeneity of values and intention to adopt is different. If SCs have high heterogeneity of values, their members have diverse work values and beliefs what is important for the center; they will pursue different goals (Liang et al., 2012). Hence, members of the BC are likely less capable to meet certain customer needs, because they will make differing suggestions how the customer should be served. Furthermore, in case of high BC heterogeneity of expertise, SCs have more difficulties to adapt to a certain customer. The reason can be found in the behavior of heterogeneous BCs: BC members with different backgrounds (e.g., technical background, financial background) have different experiences and expertise. Thus, the BC has access to more diverse information and will be able to make better decisions (Homburg et al., 2010). If the BC is well informed and competent, a SC with heterogeneous values has more difficulties to comply with the BC’s needs.

Based on the above reasoning, we suggest both the positive effect of SC heterogeneity of expertise and the negative effect of SC heterogeneity of values to become stronger, in case of high BC heterogeneity of expertise. Thus, we suggest:

*H4a: The positive effect of SC heterogeneity of expertise on the intention to adopt a service innovation is higher when the BC heterogeneity of expertise is high.*

*H4b: The negative effect of SC heterogeneity of values on the intention to adopt a service innovation is higher when the BC heterogeneity of expertise is high.*

If BC members are heterogeneous in values, SCs with heterogeneous expertise have lower chances to address customers’ needs with their expertise. If BC members pursue different goals, their decision making in the center is hindered, as team research shows (Jehn, 1997). Personal and task conflicts in the group are likely; there is less cooperation among BC members (Liang et al., 2012). SC members cannot offer the benefits of the new service not as precise as possible to these members since the BC members’ attitude to buying decisions is unclear or vague. The chances to sell the new service decrease if BC members have personal and task conflicts and do not agree with the group’s goals.

Regarding the negative effect of SC heterogeneity of values on intention to adopt, the impact of BC heterogeneity of values differs. If both BCs and SCs are heterogeneous in values, members of both centers have no common goals within their center and probably conflicts (Liang et al., 2012). Hence, the differences in values will complicate the selling process as the heterogeneity is likely to lead to conflicts and different views on the same topic in both centers. As a consequence, customers’ intention to adopt a service innovation will be even lower when BC heterogeneity of values is high in addition to SC’s.

Based on the above argumentation, we propose the positive effect of SC heterogeneity of expertise on intention to adopt becomes weaker and the negative effect of SC heterogeneity of values to become stronger, in case of high BC heterogeneity of values. Hence, we hypothesize:

*H5a: The positive effect of SC heterogeneity of expertise on the intention to adopt a service innovation is weaker when the BC heterogeneity of values is high.*

*H5b: The negative effect of SC heterogeneity of values on the intention to adopt a service innovation is stronger when the BC heterogeneity of values is high.*

## 4 Outlook on the Data Collection and Empirical Analyses

To build the data base for this study, we will collect data from supplier and customer companies. The unit of analysis in the survey are B2B relationships between two companies at the firm level in Germany. We target IT consulting companies, companies of the software industry, and further companies offering digitalized services in our study's context, e.g. IT service management, fintech services, B2B cloud services (like Amazon Enterprise Web Services), and Business Process as a Service (BPaaS). This approach ensures that the data collection captures services with different degrees of digitalization (e.g., consulting services with a low degree of digitalization or customer self-services with a high degree of digitalization). In order to be able to collect the data, we rely on a key information approach (Kumar et al., 1993) to assess information regarding the whole selling center. Key account managers as the targeted key informants in the supplier companies should be knowledgeable about the center as a whole as well as about the specific customer relationship. In a second step, we will contact a BC member of the associated customer company, to which an IT-supported service innovation has been offered but no final decision regarding the adoption has been made. In this process, we will send questionnaires to both key account managers and associated members of the BC at the customer companies and manage the data collection process.

For the measurements of our constructs, standard scale development procedures were applied, including a comprehensive literature review. Whenever possible, existing scales were used, often modified or further developed to match the study context. For the constructs SC heterogeneity of expertise and values and degree of service digitalization, we will collect supplier data. The scale for the main construct SC heterogeneity of expertise was adapted from top management team literature (Heyden et al., 2010) and consists of four reflective items. SC heterogeneity of values was operationalized with six items from Liang et al. (2012). The degree of service digitalization construct is self-developed as a one item percentage-scale since there is no established operationalization available. We will collect customer data to assess BC heterogeneity of expertise and values and the intention to adopt a service innovation. The scale for BC heterogeneity of expertise was adapted from Heyden et al., (2010) and consists of four items. BC heterogeneity of values is based on Liang et al. (2012). The intention to adopt is operationalized with a scale of three items based on Bhattacharjee and Sanford (2006). All scales with the exception of degree of service digitalization are measured using 7-point Likert scales anchored with "strongly disagree" and "strongly agree".

We have finished the development and programming of the survey and are about to start collecting data. Our research project was presented multiple times to supplier companies in order to verify the practical relevance of our research question as well as to receive useful feedback. As a result of these initial discussions, we generated multiple leads, which we have started to contact. Additionally, we plan to recruit participants on sales manager conferences.

For testing the hypothesized relationships, the research project will rely on a variety of multivariate data analysis procedures. Among others, the use of multiple regression analysis and/or structural equation modelling will be most likely.

## References

- Ahearne, M., S. B. MacKenzie, P. M. Podsakoff, J. E. Mathieu and S. K. Lam (2010). "The Role of Consensus in Sales Team Performance." *Journal of Marketing Research (JMR)* 47 (3), 458–469.
- Arnett, D. B. and V. Badrinarayanan (2005). "Enhancing customer-needs-driven CRM strategies: Core selling teams, knowledge management competence, and relationship marketing competence." *Journal of Personal Selling & Sales Management* 25 (4), 329–343.
- Auh, S., S. J. Bell, C. S. McLeod and E. Shih (2007). "Co-production and customer loyalty in financial services." *Journal of Retailing* 83 (3), 359–370.
- Berry, L. L. (1995). "Relationship marketing of services—growing interest, emerging perspectives." *Journal of the Academy of Marketing Science* 23 (4), 236–245.
- Bhattacharjee, A. and C. Sanford (2006). "Influence processes for information technology acceptance: An elaboration likelihood model." *MIS Quarterly* 30 (4), 805–825.
- Brown, B. P., A. R. Zablah, D. N. Bellenger and W. J. Johnston (2011). "When do B2B brands influence the decision making of organizational buyers? An examination of the relationship between purchase risk and brand sensitivity." *International Journal of Research in Marketing* 28 (3), 194–204.
- Bunn, M. D. (1993). "Taxonomy of buying decision approaches." *Journal of Marketing* 57 (1), 38–56.
- Carpenter, M. A. (2002). "The implications of strategy and social context for the relationship between top team management heterogeneity and firm performance." *Strategic Management Journal* 23 (3), 275–284.
- Carpenter, M. A., M. A. Geletkanycz and W. G. Sanders (2004). "Upper echelons research revisited: Antecedents, elements, and consequences of top management team composition." *Journal of Management* 30 (6), 749–778.
- Choudhary, V. and J. Vithayathil (2013). "The Impact of Cloud Computing: Should the IT Department Be Organized as a Cost Center or a Profit Center?" *Journal of Management Information Systems* 30 (2), 67–100.
- Evans, K. R., R. G. McFarland, B. Dietz and F. Jaramillo (2012). "Advancing sales performance research: A focus on five underresearched topic areas." *Journal of Personal Selling & Sales Management* 32 (1), 89–106.
- Fichman, R. G., B. L. Dos Santos and Z. Zheng (2014). "Digital innovation as a fundamental and powerful concept in the information systems curriculum." *MIS Quarterly* 38 (2), 329–A15.
- Heyden, M. L. M., S. van Doorn, M. Reimer, F. A. J. Van Den Bosch and H. W. Volberda (2013). "Perceived environmental dynamism, relative competitive performance, and top management team heterogeneity: Examining correlates of upper echelons' advice-seeking." *Organization Studies* 34 (9), 1327–1356.
- Homburg, C., M. Klarmann and J. Schmitt (2010). "Brand awareness in business markets: When is it related to firm performance?" *International Journal of Research in Marketing* 27 (3), 201–212.
- Jehn, K. A. (1997). "A qualitative analysis of conflict types and dimensions in organizational groups." *Administrative Science Quarterly* 42 (3), 530–557.
- Jehn, K. A., G. B. Northcraft and M. A. Neale (1999). "Why differences make a difference: A field study of diversity, conflict, and performance in workgroups." *Administrative Science Quarterly* 44 (4), 741–763.
- Johnston, W. J. and J. E. Lewin (1996). "Organizational buying behavior: Toward an integrative framework." *Journal of Business Research* 35 (1), 1–15.
- Kumar, N., L. W. Stern, and J. C. Anderson (1993). "Conducting interorganizational research using key informants." *Academy of Management Journal* 36 (6), 1633–51.
- Lambe, C. J., K. L. Webb and C. Ishida (2009). "Self-managing selling teams and team performance: The complementary roles of empowerment and control." *Industrial Marketing Management* 38 (1), 5–16.

- Lewin, J. E. and N. Donthu (2005). "The influence of purchase situation on buying center structure and involvement: a select meta-analysis of organizational buying behavior research." *Journal of Business Research* 58 (10), 1381–1390.
- Liang, T.-P., J. C.-H. Wu, J. J. Jiang and G. Klein (2012). "The impact of value diversity on information system development projects." *International Journal of Project Management* 30 (6), 731–739.
- Lusch, R. F. and S. Nambisan (2015). "Service innovation: A service-dominant logic perspective." *MIS Quarterly* 39 (1), 155–176.
- Lusch, R. F., S. L. Vargo and M. O'Brien (2007). "Competing through service: Insights from service-dominant logic." *Journal of Retailing* 83 (1), 5–18.
- Lyytinen, K., Y. Yoo and R. J. Boland Jr (2016). "Digital product innovation within four classes of innovation networks." *Information Systems Journal* 26 (1), 47–75.
- Makkonen, Johnston (2014), "Innovation adoption and diffusion in business-to-business marketing." *Journal of Business & Industrial Marketing* 29 (4), 324–331.
- Meuter, M. L., A. L. Ostrom, M. J. Bitner and R. Roundtree (2003). "The influence of technology anxiety on consumer use and experiences with self-service technologies." *Journal of Business Research* 56 (11), 899–906.
- Moon, M. A. and S. F. Gupta (1997). "Examining the formation of selling centers: A conceptual framework." *Journal of Personal Selling & Sales Management* 17 (2), 31–41.
- Moon, M. A. and G. M. Strong (1994). "Selling teams: A conceptual framework and research agenda." *Journal of Personal Selling & Sales Management* 14 (1), 17–30.
- Nelson, A., A. Earle, J. Howard-Grenville, J. Haack and D. Young (2014). "Do innovation measures actually measure innovation? Obliteration, symbolic adoption, and other finicky challenges in tracking innovation diffusion." *Research Policy* 43 (6), 927–940.
- Paluch, S. and N. V. Wunderlich (2016). "Contrasting risk perceptions of technology-based service innovations in inter-organizational settings." *Journal of Business Research* 69 (7), 2424–2431.
- Robinson, P. J., C. W. Faris and Y. Wind (1967). *Industrial Buying and Creative Marketing*. Boston: Allyn & Bacon, Inc.
- Schmidt, J. B. and R. J. Calantone (1998). "Are really new product development projects harder to shut down?" *Journal of Product Innovation Management* 15 (2), 111–123.
- Shankar, V., A. K. Smith and A. Rangaswamy (2003). "Customer satisfaction and loyalty in online and offline environments." *International Journal of Research in Marketing* 20 (2), 153–175.
- Sheth, J. N. (1973). "A model of industrial buyer behavior." *Journal of Marketing* 37 (4), 50–56.
- Steward, M., B. Walker, M. Hutt and A. Kumar (2010). "The coordination strategies of high-performing salespeople: internal working relationships that drive success." *Journal of the Academy of Marketing Science* 38 (5), 550–566.
- Vickery, S. K., X. Koufteros, C. Dröge and R. Calantone (2016). "Product modularity, process modularity, and new product introduction performance: Does complexity matter?" *Production & Operations Management* 25 (4), 751–770.
- Von Nordenflycht, A. (2010). "What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms." *Academy of Management Review* 35 (1), 155–174.
- Webster Jr, F. E. and Y. Wind (1972). "A general model for understanding organizational buying behavior." *Journal of Marketing* 36 (2), 12–19.