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Customer Involvement and Service Innovation: Further Exploration

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Abstract:

The extant paper extends previous research on the relationship between customer involvement and service innovation. Building on prior research that suggested a positive relationship between customer involvement and service innovation, this paper increases our understanding about the relationship by introducing three moderators from the strategic management literature that have a direct influence on the relationship: absorptive capacity, technological capability, and strategic flexibility. The paper proposes that service providers with high levels of absorptive capacity, technological capability, and strategic flexibility are more likely to reap the benefits of customer involvement in service innovation. The paper advises managers of service-providing organizations to build such capabilities to increase their service innovativeness.

Keywords: Service innovation, Customer involvement, Absorptive capacity, Technological capability, Strategic flexibility

إشراك العملاء في الابتكار في الخدمات التي تقدمها المؤسسات.

المخلص:

يهدف هذا البحث النظري إلى التوسع في دراسة العلاقة بين إشراك العملاء في الابتكار في الخدمات التي تقدمها المؤسسات. بناء على الدراسات السابقة التي وجدت علاقة إيجابية بين إشراك العملاء والابتكار الخدمي، يهدف البحث إلى زيادة فهمنا لهذه العلاقة وذلك بدراسة ثلاثة عوامل وسيطة مستقاة من أدبيات الإدارة الاستراتيجية ويتوقع أن يكون لها تأثير مباشر على العلاقة. الثلاثة عوامل هي: القدرة الاستيعابية، القدرة التقنية، والمرونة الاستراتيجية. تقترح الدراسة أن مقدمي الخدمات الذين يملكون مستوى عال من القدرة الاستيعابية، القدرة التقنية، والمرونة الاستراتيجية هم الأكثر قدرة على الاستفادة من إشراك العملاء في عملياتهم الابتكارية. توصي الدراسة مدراء المؤسسات الخدمية بتطوير هذه القدرات الثلاث لدى مؤسساتهم للمساهمة في زيادة ابتكاراتهم الخدمية.

كلمات مفتاحية: ابتكار الخدمات، إشراك العملاء، القدرة الاستيعابية، القدرة التقنية، المرونة الاستراتيجية

Introduction:

Given the fact that most economies are service-based (Zeithaml, Bitner, & Gremler, 2011), there is a growing interest in service research, as evidenced by the global increase in service-related publications (Ostrom et al, 2015). Particularly, the service innovation literature is progressing to rival that of product innovation (Nijssen et al, 2006). Recent research has discussed various aspects of service innovation. For example, den Hertog, Van der Aa, and De Jong (2010) examine the dynamic capabilities of managing service innovations, while Ordanini and Parasuraman (2011) build on the service-dominant logic (SDL) to propose a conceptual framework to investigate the antecedents and consequences of service innovation. Also, van Riel and his colleagues (2013) illustrated how service innovation should be thought of from the constellation perspective, which requires a consideration of all the steps involved in the service innovation process.

However, there is still a need for more research to further understand service innovation. Indeed, a recent review indicates that service innovation is at the top of topics that need to be considered by scholars (Ostrom et al, 2015). Among the suggested sub-topics in service innovation is examining the management of customers, and partners collaboration throughout the service innovation process. Customer involvement is a major source of service innovation (Alam, 2006; Magnusson, Matthing, & Kristensson, 2003), as service providers aim to think on behalf of their customers in order to exceed their satisfaction by offering new and valuable services (Kandampully, 2002). Hence, the current paper aims to contribute to the literature on service innovation by further investigating the role of customer involvement in new service development.

The role of customer involvement in service innovation has been much discussed in the literature (e.g. Abramovici & Bancel-Charensol, 2004; Alam, 2002; von Hippel, 2001; Magnusson, Matthing & Kristensson, 2003; Matthing, Sanden, & Edvardsson, 2004). Importantly, it has been suggested that customers are usually vital as co-creators of value in the process of service innovation, mainly in the idea-generation stage (Alam, 2002; Alam & Perry, 2002; Priem, 2007). That being said, there are some questions that need more discussions, especially those related to why some service providers are better than others in taking advantage of customer involvement (Ritala & Hurmelinna-Laukkanen, 2013). For instance, are all service providers able to develop new services by involving customers? What capabilities are necessary for service providers to benefit from customer involvement? What types of service providers are most likely to benefit from customer involvement in their process of new service development?

Problem statement:

The present paper attempts to fill a specific gap in the literature by trying to answer the aforementioned questions. It is suggested that an under-explained relationship can be clarified by contextualizing it, mainly by introducing moderating variables (Rosenberg, 1968). Thus, I borrow from the strategic management literature to introduce moderating variables to the relationship between customer involvement and service innovation. Specifically, leaning on the RBV and dynamic capabilities literature, three moderating variables are introduced in this paper: absorptive capacity, technological capability, and strategic flexibility. The paper asserts that those variables are crucial as service providers seek to alter the way they innovate, by incorporating inputs from their

customers in their usual process of service innovation. From a service domain logic (SDL) perspective, absorptive capacity, technological capability, and strategic flexibility represent operant resources that could lead to a competitive advantage for service providers (Vargo & Lusch, 2004; Vargo, Magilo, & Akaka, 2008). Figure 1 depicts the framework discussed in this paper.

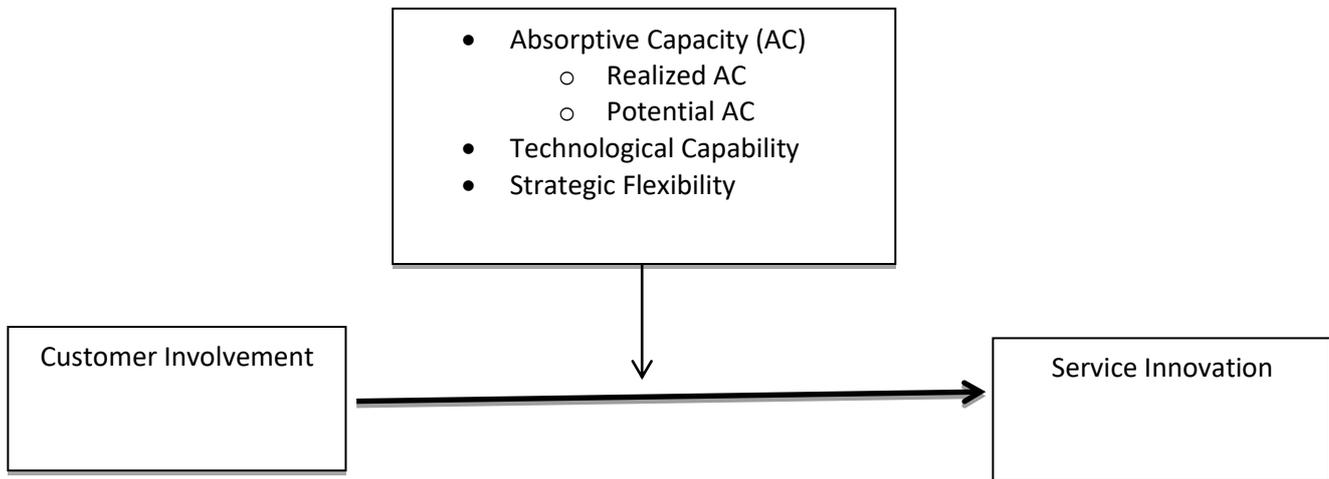


FIGURE 1

The Moderating Roles of Absorptive Capacity, Technological Capability, and Strategic Flexibility
in The Relationship Between Customer Involvement and Service Innovation

Study Questions:

The main question of the study is:

"Does customer involvement lead to more service innovation?"

Additionally, the following questions are derived from the main question:

- If customer involvement lead to more service innovation, are firm with higher levels of absorptive capacity more likely to benefit from this relationship than those with lower levels?
- If customer involvement lead to more service innovation, are firm with higher levels of technological capability more likely to benefit from this relationship than those with lower levels?
- If customer involvement lead to more service innovation, are firm with higher levels of strategic flexibility more likely to benefit from this relationship than those with lower levels?

Importance of the study:

By assessing the moderating effects of the three variables, the paper contributes to the service innovation literature in two important ways. First, from a broader point of view, the paper builds on theories from the strategic management literature to better understand service innovation. This is important because most of the service innovation literature is dominated by the marketing discipline (e.g. Berry & Parasuraman, 1991; Parasuraman, Zeithmal, & Berry, 1985; Lovelock & Wirtz, 2007); hence, a different, yet related, discipline should provide another point of view to the service arena. Second, the paper proposes specific dynamic capabilities that service providers could find useful in their service innovation efforts.

The rest of the paper is structured as follows. Next, I provide a brief overview of RBV and dynamic capabilities and their impact on service innovation, going back to early theories of strategy, all the way to recent trends in the literature. Then, I briefly review the literature of customer involvement and service innovation. I follow that with a discussion on absorptive capacity, technological innovation, and strategic flexibility, providing arguments for their role in the relationship between customer involvement and service innovation. Finally, I conclude with discussions about practical and research implications.

Literature Review and Theoretical Background

While conducting a thorough literature review is not the paper's goal here, the extant paper adopts an integrative review approach in order to briefly assess and synthesize the literature on service innovation (Snyder, 2019). Specifically, the paper reviews the basic and most common frameworks on the role of customers (users) on service innovation, in order to address the question of what type of customers are more likely to contribute to service innovation. The author looked for theories and frameworks of customer involvement and service innovation, focusing on major journals in the related fields of innovation, management, and marketing.

The search was conducted through three popular and often-used databases—JSTOR, Business Source Complete, and Google Scholar. While the search was not time-bounded, most of the service innovation articles referenced in the paper were relatively new (last 20 years), which reflects the newness of service innovation as a field. It should be noted that the paper injects new insights from other fields, mainly strategy, to develop a new framework of service innovation. Obviously, given that strategy is a more mature field, the strategy articles that I build on are much older than the ones used from the service innovation field.

The following sections go through those articles in order to propose a framework of customer involvement and service innovation, borrowing from major strategy theories.

RBV and dynamic capabilities in service innovation

Building on theories from other fields to study phenomena in the service literature is not new (Spohrer, Kwan, & Fisk, 2014). One of the fields that scholars in the service literature have been leaning on is the field of strategic management. While other aspects of strategy is useful in studying service innovation, such as the demand-side stream of research (Priem, 2007), the

contribution of strategy to the service field in this paper is based on the resource-based view of the firm (RBV) and the dynamic capabilities view, following previous research (e.g. den Hertog et al, 2010).

The RBV is a framework of explaining competitive advantage within firms (Barney, 1991; Nelson, 1991; Penrose, 1959; Peteraf, 1993; Prahalad & Hamel, 1990; Schumpeter, 1934; Wernerfelt, 1984). It has gained popularity and has been employed to understand several phenomena in strategy as well as other fields. The RBV emphasizes that firms' resource that are valuable, rare, inimitable, and non-substitutable (VRIN) are the primary sources of competitive advantage. In the service literature, the theory is helpful in understanding how resources of a service provider contribute to their innovativeness (Gallouj & Windrum, 2009; den Hertog et al., 2010; Toivonen & Tuominen, 2009). More importantly, it acknowledges what resources are necessary for service providers to create value for their customers. Research suggests that the ability to adapt to environmental changes largely hinges on the service provider's ability to build and re-configure its VRIN resources (Damanpour, Walker, & Avellaneda, 2009). Others have developed a framework where the intellectual, organizations, and physical resources of a service provider are linked to the successful development of new services (Froehle & Roth, 2007). Summarizing the adequacy of RBV to study service innovation, it has been concluded that RBV is more appropriate as a framework to study service innovation than other strategy-related frameworks (Bryson, Ackermann, & Eden, 2007; Damanpour et al, 2009; Matthews and Shulman, 2005; Pablo et al., 2007).

The concept of "dynamic capabilities" was introduced in the strategy literature as an extension of the RBV to explain firm performance in dynamic markets (Eisenhardt & Martin, 2000; Pisano, 1994; Teece, Pisano, & Shuen, 1997). Dynamic capabilities refer to "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments." (Teece et al, 1997: P. 516). Dynamic capabilities are suitable for service studies because services are intangibles and service innovation relies heavily on underlying processes and routines (den Hertog et al, 2010; Pablo et al, 2007). Previous research has explored the role of dynamic capabilities in service innovation. For instance, den Hertog et al (2010, P. 498) define service innovation capabilities as "those hard to transfer and imitate service innovation capabilities which organizations possess to develop, (re-) shape, (dis-)integrate and (re) configure existing and new resources and operational capabilities." Then, they develop a framework of six dimensions of service innovation capabilities that are necessary for service organizations to develop new services and to adapt to environmental changes.

The first dimension is "service concept," which describes the value provided to the customers by the service provider, often in collaboration with the customer himself. The second dimension relates to the role that customers play in the creation of value, which labels customer as co-creators of value (Priem, 2007; Vargo & Lusch, 2004; 2008; Vargo et al, 2008). According to den Hertog et al (2010), the third dimension of service innovation dynamic capabilities is the new value system, in which value is provided by a network of collaborators. The fourth dimension focuses on the distribution of costs and revenue in order to come up with a new and suitable revenue model. The fifth dimension is about the structure and organization of the service provider and their role in delivering the service. Finally, the sixth dimension is also about the delivery

system, but it focuses more on the technological side, more than the organizations and interpersonal aspects as in the fifth dimension.

Another interesting research on the role of dynamic capabilities in service innovation discussed the microfoundations of three different dynamic capabilities: "sensing," "seizing" and "reconfiguring" and how they should be considered by organizations in the service industry (Kindstorm, Kowalkowski, & Sandberg, 2013). The "sensing" capability is about discovering opportunities that could be exploited by providing an innovative service. Particularly, they suggest that service providers sense opportunities for innovation via customers (i.e. customer-linked), through the whole service delivery system, by building internal sensing inside the organization, or by using technology to scan the environment outside the delivery system. On the other hand, the "seizing" capability is concerned with the capitalization of the discovered opportunities. It discusses how interacting with customers and managing the delivery system helps in the implementation of the service innovation. It also emphasizes the importance of structuring the service development process and adopting a new revenue mechanism. Finally, the third dynamic capability discussed by Kindstorm et al (2013) is related to sustaining a competitive advantage following the development of a new service. Thus, the "reconfiguring" capability focuses on orchestrating the new system, including the management of resources and different actors involved in the system delivery. Also, it highlights the need to balance the service and product assets that the service provider possesses, along with building a service-oriented mental model within the organization, which helps in the learning process and in framing the organization as a service-innovating one.

In the extant paper, RBV and dynamic capabilities are utilized as a theoretical base for the arguments that absorptive capacity, technological capability, and strategic flexibility affect the relationship between customer involvement and service innovation. The aforementioned concepts are resources that service providers should possess and be able to deploy and reconfigure to develop new services in an environment characterized by competition and frequent changes. In such environments, research asserts that valuable resources and dynamic capabilities are vital. In the following sections, I briefly explain the three variables and discuss their impacts on customer involvement and service innovation.

Customer involvement and service innovation

Although most of the innovation research has been devoted to product innovation (Drejer, 2004; Droege, Hildebrand, & Forcada, 2009), the importance of service innovation in economic growth and firm performance is widely recognized in the literature. In this paper, I follow den Hertog et al's (2010, P. 494) to define service innovation as "new service experience or service solution that consists of one or several of the following dimensions: new service concept, new customer interaction, new value system/business partners, new revenue model, new organizational or technological service delivery system." Several aspects of service innovation have been examined in the literature, including the management of service innovation (e.g. Sundbo, 1997), the process of service innovation (e.g. Thomke, 2003), collaboration and relationships and their role in service innovation (e.g. Kandampully, 2002; Moller, Rajala, & Westerlund, 2008), among others.

Importantly for this paper is the stream of research that focused on customer involvement and their impact on service innovation (e.g. Alam, 2002; Magnusson et al, 2003; Matthing et al, 2004)

As mentioned previously, the literature on the relationship between customer involvement and service innovation is well established (see Alam (2006) for a brief review). Research suggests that customer involvement is positively related to the development of new services (e.g. de Brentani, 1991; 1995; Lundkvist & Yakhlef, 2004; Vargo et al, 2008). Specifically, the impact of customers as co-creators of a new service is stronger when the new service is highly relevant to the customers and when the knowledge required in the new service is moderately novel (Mahr, Lievens, & Blazevic, 2013). Others have also pointed out that involving customers in the service innovation process brings knowledge of high value (e.g. Fallatah, 2018), and leads to faster development of new services that are of high quality (Carbonell, Rodríguez-Escudero, & Pujari, 2009).

Generally, the importance of customer involvement in service innovation stems from two common concepts: Market Orientation and Service Dominant Logic (SDL). Market Orientation emphasizes that firms should focus on satisfying customers' needs and preferences, and to achieve higher organizational performance (Kohli & Jaworski, 1990; Jaworski & Kohli, 1993). It has been linked with service innovation in previous research. For example, one research finds significant relationship between market orientation and the performance of innovation projects (Atuahene-Gima, 1996). Similar results were found in other studies, where market orientation had a positive impact on innovation, which in turn impacted the overall performance of the service providers involved in the study (Agarwal, Krishna Erramilli, Dev, 2003; Liu, 2013). Additionally, in a study of service organizations in Australia, Newman, Prajogo, and Atherton (2016) find a strong relationship between market orientation and exploratory innovation.

On the other hand, one of the foundational premises of SDL is that customers are always co-creators of value (Vargo & Lusch, 2004; 2008; Vargo et al, 2008). The value co-creation stream of research asserts that customers are integral part in creating value in service (Prahalad & Ramaswamy, 2000; Priem, 2007). According to Vargo and Lusch (2004; 2008), customers are resource integrator and, value is created through their exchange with service providers. Additionally, from a network perspective, customers are seen as actors within a network that interactively co-create value (Kandampully, 2002; Priem, 2007).

To better understand the customer involvement impact in service innovation, I build on the framework of Alam (2002), in which he develops four dimensions. The first dimension concerns the purpose of involvement, which describes why customers are involved in new service development. Second, stages of involvement, which focus on the stages of new service development in which customers are involved. Third, intensity of involvement, which relates to how the intensity of customers involvement varies across the different stages of new service development. Finally, Alam (2002) introduces modes of involvement as the fourth dimension of his framework. This dimension explains the means through which information is obtained from the customers.

As for the first dimension; purpose of involvement, the paper assumes that customers' involvement is important for developing superior new services via multiple roles. From a strategic point of view, service providers innovate continuously to differentiate themselves in competitive

markets (Hitt et al, 1998). They use technological and market knowledge to introduce services that either have lower costs or provide higher quality (Afuah, 2003; Kandampully, 2002). This assumption builds on similar arguments and empirically-tested propositions in the literature that highlighted the importance of customers in service innovation. Particularly, recent research suggests three different roles for customers in the innovation process (Cui & Wu, 2016).

First, customers could be utilized as a source for information that service providers could use to get new insights and ideas. This supports earlier research that emphasizes the role lead users play in providing valuable feedback about their needs and preferences that might lead to a new product or service (Hoyer et al, 2010; von Hippel, 1986). Second, customers could be co-developers where they could be used not as generator of ideas, but rather as co-developers of a new service (Cui & Wu, 2016; Hoyer et al, 2010). In such cases, customers moves beyond delivering ideas to be members of the developing team by integrating knowledge and interacting actively with the service provider (Bogers & Horst, 2014). Third, customers are employed as innovators, where the service providers provide them with the platform and the necessary tools to innovate (Cui & Wu, 2016; von Hippel & Katz, 2002). In this role, customers are the primary innovators while service providers take a supportive role. Others also emphasize the importance of information and feedback service providers can acquire from their customers and how they can be used in new service development (Ordanini & Parasuraman, 2011). Other positive outcomes of customer feedback include the service providers' well-being (Nasr et al, 2014), higher service quality (Wirtz, Tambyah, & Mattila, 2010) and the generation of competitive advantage (Lusch, Vargo, & O'Brien, 2007).

As for the second dimension in the framework, Alam (2002) suggests 10 sequential stages of service development. Those stages are: strategic planning, idea generation, idea screening, business analysis, formation of the cross-functional team, service process and design, personnel training, service testing and pilot run, test marketing, and commercialization. Customers involvement varies in scope (Cui & Wu, 2016), as they could participate in different stages of the new service development. However, while customers could contribute in any stage, their contribution is mostly present in the idea generation stage, where they can communicate their needs and suggestions to service providers (Alam & Perry, 2002). Ordanini and Parasuraman (2011) refer to customers who are involved in the idea generation stage of new service development as "knowledge provider[s]." Acquiring various knowledge and new ideas is one of the most important steps that service providers take in the early stages of new service development. Ample research relates to the importance of new knowledge in innovation (e.g. Pennings & Harianto, 1992; Dewar & Dutton, 1986).

The third dimension of Alam's (2002) framework of customer involvement in new service development is about the intensity of customers involvement. Although customers can regularly communicate their needs and preferences to service providers in various stages, their involvement in new service development varies also based on intensity (Alam, 2002; Cui & Wu, 2016). Alam (2002) suggests that the intensity of customer involvement in service innovation is best described on a continuum. He posits that participative decision-making represents the most intense form of involvement, and passive participation is at the least intense end of the continuum. In the middle of the continuum, there are customers who provide information and feedback at different stages of

new service development, and those who are invited by service developer to provide their input in a planned process. For service providers, it depends on the type of innovation and the quality of customers' feedback to decide to what extent customers are involved. For example, for less-risky innovation and when suggestions from customers are of high quality, service providers could allow more intense customer involvement. On the other hand, costly and risky innovations, in which detailed and specific knowledge is required, customers' involvement could be less intense, as they are expected to know little about the innovation. Thus, Magnusson et al (2003) argue that it is important to manage customer involvement carefully and to keep it in congruence with the entire process of new service development. Generally, I suggest that a moderate participation (i.e. in the middle of the continuum) is considered helpful for service providers as customers are allowed to voice out their feedback without actual participation in service development.

The final dimension of customer involvement in new service development as described by Alam (2002) concerns modes of customer involvement. As idea generator, customers can deliver their ideas and suggestions in multiple ways. Currently, with the advanced technology, customers have the luxury of communicating via social media outlets, emails, and service providers' websites, along with the traditional ways (e.g. face-to-face, phone). On the other hand, as co-developers and innovators, service providers are expected to provide customers with the required knowledge platforms and toolkits that enable them to engage in developing new services (Bogers & Horst, 2014; von Hippel & Katz, 2002).

In summary, the impact of customer involvement in service innovation is much supported in the literature. As suggested by the strategic innovation paradigm (Sundbo, 1997), service providers generate ideas internally from their employees and externally from their customers and other actors in their network. Customer involvement comes mainly from generating new ideas in the form of feedback and suggestions that service providers can use in developing new services to satisfy customers' needs and preferences. Beyond the generation of ideas and suggestions, customers also contribute as co-developers and innovators. Because service providers strive to differentiate themselves in competitive markets, and because the ultimate goal of all for-profit service providers is to meet their customers' needs, customers are considered one of the major sources of innovation. Hence, the first proposition is consistent with what previous research has proposed in the literature:

Proposition 1: Customer involvement in the new service development process is positively related to service innovation.

Despite the well-supported arguments that customer involvement increases a service provider's opportunities of innovation, the extent to which a service provider can actually capitalize on that varies among firms. In the following sections, I discuss three factors that I believe have an impact on the relationship between customer involvement and service innovation. Those factors are: absorptive capacity, technological capability, and strategic flexibility. Those factors are much discussed in the literatures of strategy, technological innovation, and knowledge transfer. Absorptive capacity affects service providers' ability to acquire ideas from customers and to

translate them to commercial ends, whereas technological capability impacts their ability to combine customers' ideas with the service providers' own stock of knowledge. Strategic flexibility, on the other hand, contributes to service providers' ability to move from the traditional way of innovation that relies on the service providers' own personnel. Previous research asserts

that the aforementioned inter-related constructs are important for organizational innovativeness (Zhou & Wu, 2010). Table (1) summarizes the role of each construct in the relationship between customer involvement and service innovation.

Moderating variable	Its impact on customer involvement and service innovation
Absorptive Capacity	<p>Realized absorptive capacity:</p> <ul style="list-style-type: none"> • It helps service providers to acquire and assimilate ideas and feedback from customers <p>Potential absorptive capacity:</p> <ul style="list-style-type: none"> • It helps service providers to exploit ideas acquired from customers in order to innovate
Technological Capability	<ul style="list-style-type: none"> • It helps service providers to use technology to acquire and store feedback from customers in an organizational storage • It helps service providers to use advanced technology to exploit customers' ideas to develop new services or improve existing ones
Strategic flexibility	<ul style="list-style-type: none"> • It enables customers to adapt to changing environments in which customers play an integral role as co-creators of value

Absorptive capacity:

As mentioned earlier, dynamic capabilities are necessary for service providers to adapt to dynamic markets (Eisenhardt & Martin, 2000; Teece et al, 1997). One of the most important dynamic capabilities for firms in general, and especially when it comes to innovation, is absorptive capacity (Cohen & Levinthal, 1990; Zahra & George, 2002). Cohen and Levinthal (1990) have introduced the term “absorptive capacity” to describe an organization’s ability to recognize the value of new information, assimilate it, and apply it to commercial ends. Further, Zahra and George (2002) distinguished between potential and realized absorptive capacities. The former pertains to a firm's ability to acquire and assimilate knowledge, while the latter relates to a firm's ability to exploit acquired knowledge. Both types of absorptive capacity are critical in innovation. Although research has almost exclusively related absorptive capacity to product innovation, the link between absorptive capacity and service innovation is rather clear. To illustrate, previous research suggests that absorptive capacity is a vital dynamic capability that enable change and evolution for organizations (Zott, 2003). Such change is needed for service providers in environments where they are not relying exclusively on their internal resources; instead, customers are involved as co-

creators as well.

The importance of potential absorptive capacity stems from its direct influence on firms' abilities to acquire new knowledge (Cohen & Levinthal, 1990; Lam et al, 2017). To explain, research posits that one of the purposes of customer involvement in service production is to gain new service ideas (Alam, 2002). Organizations can acquire new knowledge from customers in terms of feedback and suggestions, and then transfer them internally within the organization. Hence, as a major factor in organizational learning (Cohen & Levinthal, 1990; Lane & Lubatkin, 1998), absorptive capacity is critical for service providers as they acquire new knowledge. In other words, service providers with higher absorptive capacity are more suited to acquire and transfer knowledge internally and add to their own stock of knowledge. Additionally, the literature shows that high levels of absorptive capacity help organizations break the barrier of causal ambiguity associated with new knowledge (Inkpen, 2008). This suggests that service providers with high absorptive capacity are more likely to understand customers' ideas and transfer them internally with ease. This role of absorptive capacity is further supported by Szulanski (1996), who posits that lack of absorptive capacity is a major barrier to knowledge transfer and learning. Accordingly, for a service provider to adequately transfer the knowledge (ideas) delivered by customers, a higher level of absorptive capacity is needed. It should be noted that a service provider's absorptive capacity is a byproduct of the level of existing related knowledge. That is, the more related knowledge a service provider has from previous experiences, the higher its absorptive capacity.

Realized absorptive capacity is also crucial for service providers who intent to incorporate ideas from their customers. The literature suggests that acquiring new knowledge is positively related to innovation (e.g. Ahuja & Lmpert, 2001). Newly acquired knowledge can then be recombined with a service provider's existing knowledge to introduce heterogeneity that facilitates problem solving (Amabile, 1988; Fleming, 2001). The variety in problem-solving approaches should help a service provider to innovate in order to find solutions for its various problems (Kotha, Zheng, & George, 2011). However, the ability to combine customers' ideas with a service provider's own knowledge is challenging. Service providers with lower levels of realized absorptive capacity might be able to acquire new knowledge from customers, but should struggle to combine it with existent knowledge due to lack of adequate level of realized absorptive capacity. Therefore, I argue that without an acceptable level of absorptive capacity, service providers are less likely to benefit from knowledge acquired via customer involvement, and hence, less likely to innovate. This leads to the following proposition:

Proposition 2: Absorptive capacity moderates the relationship between customer involvement and service innovation in such a way that the positive relationship between customer involvement and service innovation for a service provider with higher levels of absorptive capacity is stronger than for a service provider with lower levels of absorptive capacity.

Technological capability:

In the current paper, consistent with previous research, I define technological capability as the technological resources an organization possesses, and the organization's ability to deploy, reconfigure, and utilize them (Afuah, 2002; Zhou & Wu, 2010). Technological capability has been

much linked to innovation in the literature (e.g. Rothaermel and Deeds (2004), including explorative (Rosenkopf & Nerkar, 2001) and exploitative innovations (Levinthal and March,1993; Rothaermel and Deeds, 2004; Stuart & Podolny, 1996). However, the majority of research focuses on product innovation, whereas the examination of the relationship between technological capability and service innovation is somewhat ignored. This is surprising, given the advancement of technology and how service providers are more able now to communicate and collect data from customers in order to provide better services (Kandampully, 2002; Rust & Huang, 2014). Research on dynamic capabilities (e.g. Eisenhardt & Martin, 2000; Teece et al, 1997) helps us to better understand the role of technological capability in service innovation. As previously defined, dynamic capabilities is an indication of a firm's ability to build and re-configure its resources to adapt to changing environments in order to create value and achieve a competitive advantage (Eisenhardt & Martin, 2000; Teece et al, 1997). Hence, for service providers, technological capability reflects a service provider's ability to build on its competences or to reconfigure its current resources in order to introduce new services (Zhou & Wu, 2010).

As it relates to product innovation, an organization's technological capability can be built by investing substantial resources in research and development (R&D), which involves the discovery of new products, the accumulation of technical knowledge, and the training of technical employees (Afuah, 2002; Zhou & Wu, 2010). Likewise, the same could be applied to a service provider. That is, technological capability in service innovation plays a similar role to that it plays in product innovation. Although the common belief associates R&D with product innovation, research argues that it is actually more related to service innovation. In their study of small and medium-sized service and product enterprises, Nijssen et al (2006) find that R&D strength is important in developing new services more than in new products. As a result, one can suggest that the relationship between technological capability and service innovation is rather supported.

The importance of technological capability in service innovation is twofold. First, it helps service providers acquire and store information provided by customers (Afuah, 2002; Saldanha, Mithas, Krishnan, 2017). As they continue to acquire information from customers, service providers could find themselves in need of higher technological capability in order to assimilate and store such information inside the organization. Recent research highlighted the need for service providers to have the required technology to benefit from big data collected from customers by frontline employees (Lam et al, 2017).

Second, technological capability is important for service providers in exploiting the information they acquire from customers (Levinthal and March,1993; Rothaermel and Deeds, 2004; Stuart & Podolny, 1996). Zahra and George (2002) argue that technological capability increases the firm's ability to evaluate and use new technologies and skills in innovation. As service providers get new insights from their customers, the likelihood of transforming those insights into actual new services depends on the service provider's readiness to innovate. Service providers could receive ample ideas and insights from its customers, but without sufficient technological capabilities, they might struggle to capitalize on those ideas. In dynamic and competitive markets, service providers are expected to listen to customers and create value by introducing new services that satisfy customers' needs. Therefore, service providers with low levels of technological capabilities face the

risk of losing their customers to providers that are more technologically-prepared to develop new services. In contrast, service providers with high levels of technological capabilities have the technological foundation to apply new knowledge and convert it into new services easier and faster than those with lower levels of technological capabilities.

Proposition 3: Technological capability moderates the relationship between customer involvement and service innovation in such a way that the positive relationship between customer involvement and service innovation for a service provider with higher levels of technological capability is stronger than for a service provider with lower levels of technological capability.

Strategic flexibility

Service providers develop resources and establish processes and routines to deliver services (Gilbert, 2005). Over time, allocation of resources and processes and routines become embedded within service providers and employees become accustomed to those specific routines. This ultimately might lead to resistance of any change that forces them to change their work behavior. Hannan and Freeman (1984) refer to this phenomenon as “organizational inertia”, which reflects the stability in products (services), processes, and policies that underlies the inadequate adaptation to changing environments. The dynamic capabilities of service providers are critical in such changing environments. One of those capabilities that is helpful as service providers try to overcome organizational inertia and adapt to evolving environments is strategic flexibility, defined as the ability to precipitate intentional changes and adapt to environmental changes in competitive markets through continuous asset reconfiguration and deployment, and investment strategies (Aaker and Mascarenhas, 1984; Evans, 1991; Sanchez, 1995).

Ample research has discussed strategic flexibility and the benefits organizations could realize from it (e.g. Hitt, Keats, & DeMarie, 1998; Sanchez, 1995; Wei, Yi, & Guo, 2014; Zhou & Wu, 2010). For example, it has been suggested that strategic flexibility is critical for achieving competitive advantage in the 21st century (Hitt et al, 1998). Interestingly, strategic flexibility has also been linked to higher firm performance (Nadkarni & Narayanan, 2007), especially after crises (Grewal & Tansuhaj, 2001). Others have found that a higher level of strategic flexibility is necessary in explorative innovation (Zhou & Wu, 2010) and the development of new products (Wei, Yi, & Guo, 2014).

Two important aspects of strategic flexibility have been discussed in the literature: resource deployment and competitive actions. Both are vital for service providers as they indulge in developing new services (D’Aveni, 1994; Eisenhardt & Martin, 2000; Miller *et al.*, 1996; Nadkarni & Narayanan, 2007). As stated above, service providers should face dynamic environments by changing strategies and offering new services to align with customer preferences in competitive markets. Customers communicate their preferences in the form of new ideas or feedback delivered

to the service provider. Customers' objective is to get the most valuable and economical service from service providers, and service providers in turn, strive to create value for their customers in an attempt to retain current customers and attract new ones. To do so, service providers must have the ability to attend to the changing preferences of their customers. As noted by Sanchez (1995: 138) "In dynamic environments[,] a firm can achieve competitive advantage by creating strategic flexibility in the form of alternative courses of action."

Service providers, typically, develop new services using their own resources; but when customers are involved in the new service development, service providers are required to adapt to such a change. Indeed, previous research suggests that taking the interests of other actors (i.e. customers) into account in new product (service) development changes the nature of innovative processes (Driessen & Hillebrand, 2013). Adapting to such change requires more flexibility from service providers to accept customer involvement in the process of service innovation. Strategic flexibility becomes more important when customer involvement becomes more intense, as their ideas tend to be of high quality and highly regarded by service providers (Alam, 2002).

To conclude, the paper proposes that service providers with the ability to deploy resources and take competitive actions in dynamic environments are said to have more strategic flexibility, and consequently, are better equipped to develop new services and to eventually survive in dynamic environments that those with lesser strategic flexibility.

Proposition 4: Strategic flexibility moderates the relationship between customer involvement and service innovation in such a way that the positive relationship between customer involvement and service innovation for a service provider with higher levels of strategic flexibility is stronger than for a service provider with lower levels of strategic flexibility.

Implications and conclusions

In this paper, I discussed the importance of innovation for service providers to survive in a competitive market. Innovation represents a strategy that service providers can adopt to differentiate themselves in order to have a competitive advantage. I discussed one of the most important sources of service innovation—customer involvement. Whereas previous research has proposed a positive relationship between customer involvement and service innovation, we still do not know what types of service providers are more likely to benefit from such involvement. This paper proposed three capabilities that, when available, could help service providers increase their innovativeness via customer involvement.

First, I argued that service providers with higher absorptive capacity (Cohen & Levinthal, 1990) are more likely to innovate when involving customers in new service development process. I argued that relational and potential absorptive capacities (Zahra & George, 2002) make it easier for service providers to acquire knowledge from their customers and combine it with their own knowledge in order to develop new services (Ahuja & Lampert, 2001). Second, I proposed that technological capabilities moderate the relationship between customer involvement and service

innovation. That is, service providers with higher technological capabilities are better suited to assimilate and store ideas from customers, and more capable of incorporating those ideas and develop them into a new service. This is vital because without technological capabilities, service providers cannot implement the ideas they receive from their customers. Finally, I suggested that service providers with higher levels of strategic flexibility are more capable of reaping the benefits of involving customers in their innovation process. Having the ability to deploy resources and take competitive actions in dynamic environments, service providers with higher levels of strategic flexibility are suggested to be more likely than their competitors to capitalize on the ideas generated from their customers.

Managerial implications

The paper offers multiple implications for managers in service-providing organizations. First, service providers must recognize that in competitive markets, they have to continuously innovate and develop new services to satisfy the changing needs and preferences of customers. One way to increase innovativeness in a service-providing organization is to engage customers by acquiring information from them, collaborating with them in developing a new service, or providing them with the tools that enable them to innovate for the organization. Hence, it is essential for service providers to design an effective program to enable customers to communicate their needs. The concept of Market orientation asserts that customers tend to favor those organizations that listen to them and provide them with services that match their preferences (Kohli & Jaworski, 1990; Jaworski & Kohli, 1993). Second, service providers should invest in R&D to increase their absorptive capacity and technological capability, as both are important in enhancing service providers' abilities to recognize and assimilate new knowledge gathered from customers, and to eventually apply it into a new service (Cohen & Levinthal, 1990; Zahra & George, 2002; Zhou & Wu, 2010). Third, service providers need to make sure they are technologically prepared to develop new services. Technological capability increases service providers' chances of acquiring and storing, as well as implementing new ideas generated by customers. It also reflects and organization's readiness to provide the needed tools for customers in cases where customers are involved as innovators (Cui & Wu, 2016; von Hippel & Katz, 2002). Finally, managers have to design their organizations to be strategically flexible in order to respond to any change in dynamic environments. Strategic flexibility enables organizations to deploy their resources and to choose among different alternatives as they look for competitive advantage against their competitors (Hitt et al, 1998).

Future research

Although this paper attempts to fill some gaps in the literature of service innovation, ample areas of research need to be further explored. First and foremost, using the strategic management literature to understand service innovation, I believe that adopting an interdisciplinary approach where multiple fields are used to study an under-studied phenomenon is much encouraged. In the service innovation area, interested scholars should find it useful to adopt well-developed theories from strategic management and other areas to better understand several topics related to service innovation. This is particularly important given the need for more research in the area (Ostrom et al,

2015). Second, an empirical test of the propositions developed in this paper should give a better idea about their validity. Third, future research should also examine other dynamic capabilities or other environmental factors that could moderate the relationship between customer involvement and service innovation. For example, one could examine what organizational structure is more suitable for involving customers in new service development.

Fourth, interested scholars might explore what service industries are more likely to engage customers in their new service development. One can argue that organizations in the health care industry, for instance, are less likely to incorporate customers' feedback in developing new services, especially when it is related to medically critical services such as surgical operations. On the other hand, restaurants, arguably, have less risk when changing some attributes of their services based on customers' feedback. Finally, researchers in psychology or consumer behavior could investigate characteristics of customers who are more likely to get involved and provide feedback for service providers. Individual differences exist among customers and it would be interesting to examine what personality traits are associated with feedback-givers.

Conclusions

This article is a respond to calls for more research in service innovation (Drejer, 2004; Ostrom et al, 2015). It is only an attempt to increase our understanding of the relationship between customer involvement and service innovation by utilizing theories from the strategic management literature. Specifically, the paper builds on RBV and dynamic capabilities to better understand the customer involvement-service innovation relationship. It develops propositions in which absorptive capacity, technological capability, and strategic flexibility are suggested to have a moderating role in the relationship between customer involvement and service innovation. Those variables are much discussed in the product innovation literature. In the extant paper, I adopt the synthesis approach for studying service innovation (Coombs & Miles, 2000) and argue that product and service innovations share some common characteristics. Hence, the moderating variables are suggested to have an impact on service innovation as well. The paper ought to contribute to the service innovation literature in two major ways. First, it builds on sound theories from the strategic management field to contribute to our understanding of service innovation. Second, it proposes three important dynamic capabilities that service providers should build in order to effectively benefit from involving their customers in the process of new service development. That being said, the service innovation phenomenon is still understudied, in my opinion, and further research is much encouraged.

References

- Aaker, D. A., & Mascarenhas, B. (1984), "The need for strategic flexibility", *Journal of Business Strategy*, Vol. 5 No. 2, PP. 74-82.
- Abramovici, M., & Bancel-Charensol, L. (2004), "How to take customers into consideration in service innovation projects", *The Service Industries Journal*, Vol. 24 No. 1, 56-78.
- Afuah, A. (2002), "Mapping technological capabilities into product markets and competitive advantage: the case of cholesterol drugs", *Strategic Management Journal*, Vol. 23 No. 2, PP. 171-179.
- Afuah, A. (2003), *Innovation Management: Strategies, Implementation, and Profits*, Oxford University Press, New York, NY.
- Agarwal, S., Krishna Erramilli, M., & Dev, C. S. (2003), "Market orientation and performance in service firms: role of innovation", *Journal of Services Marketing*, Vol. 17 No. 1, PP. 68-82.
- Ahuja, G. & Lampert, C.M. (2001), "Entrepreneurship in the large corporation: a longitudinal study of how established firms create breakthrough inventions", *Strategic Management Journal*, Vol. 22 No. 6-7, PP. 521–543.
- Alam, I. (2002), "An Exploratory Investigation of User Involvement in New Service Development", *Journal of the Academy of Marketing Science*, Vol. 30 No. 3, PP. 250-61.
- Alam, I., & Perry, C. (2002), "A customer-oriented new service development process", *Journal of Services Marketing*, Vol. 16 No. 6, PP. 515-534.
- Alam, I. (2006), "Removing the fuzziness from the fuzzy front-end of service innovations through customer interactions", *Industrial Marketing Management*, Vol. 35 No. 4, PP. 468-480.
- Amabile, T.A. (1988), "From individual creativity to organizational innovation", In K. Gronhaug & G. Kaufmann (eds), *Innovation: Cross Disciplinary Perspective*, Norwegian University Press, Oslo, PP. 139–166.
- Atuahene-Gima, K.(1996), "Market orientation and innovation", *Journal of Business Research*, Vol. 35 No. 2, PP. 93-103.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, PP. 99-120.
- Berry, L. and Parasuraman, A. (1991), *Marketing Services: Competing through Quality*, The Free Press, New York, NY.

- Bogers, M., & Horst, W. (2014). Collaborative prototyping: Cross-fertilization of knowledge in prototype-driven problem solving. *Journal of Product Innovation Management*, 31(4), 744-764.
- Bryson, J. M., Ackermann, F. and Eden, C. (2007). "Putting the resource-based view of strategy and distinctive competencies to work in public organizations", *Public Management Review*, Vol. 67 No. 4, PP. 702–17.
- Carbonell, P., Rodríguez-Escudero, A. I., & Pujari, D. (2009), "Customer involvement in new service development: An examination of antecedents and outcomes", *Journal of Product Innovation Management*, Vol. 26 No. 5, PP. 536-550.
- Cohen, W.M. & Levinthal, D.A. (1990), "Absorptive capacity: a new perspective on learning and innovation", *Administrative Science Quarterly*, Vol. 35 No. 1, PP. 128–152.
- Coombs R. & Miles I. (2000), "Innovation, measurement and services: The new problematic", In J. S. Metcalfe, & I. Miles (Eds.), *Innovation systems in the service economy; Measurement and case study analysis*, Kluwer, Boston, MI, PP. 85–103.
- Cui, A. S., & Wu, F. (2016), "Utilizing customer knowledge in innovation: antecedents and impact of customer involvement on new product performance", *Journal of the Academy of Marketing Science*, Vol. 44 No. 4, PP. 516-538.
- D'Aveni, R. (1994), *Hypercompetition: Managing the dynamics of strategic management*, Free press, New York, NY.
- de Brentani, U. (1991), "Success factors in developing new business services", *European Journal of Marketing*, Vol. 25 No. 2, PP. 33-59.
- de Brentani, U. (1995), "New industrial service development: Scenarios for success and failure", *Journal of Business Research*, Vol. 32 No. 2, PP. 93-103.
- den Hertog, P., Van der Aa, W., & De Jong, M. W. (2010), "Capabilities for managing service innovation: towards a conceptual framework", *Journal of Service Management*, Vol. 21 No. 4, PP. 490-514.
- Dewar, R. & Dutton, J.E. (1986), "The adoption of radical and incremental innovation: An empirical analysis", *Management Science*, Vol. 32 No. 11, PP. 1422–1433.
- Drejer, I. (2004), "Identifying innovation in surveys of services: A Schumpeterian perspective", *Research Policy*, Vol. 33 No. 3, PP. 551–562.
- Driessen, P.H. and Hillebrand, B. (2013), "Integrating multiple stakeholder issues in new product development: an exploration", *Journal of Product Innovation Management*, Vol. 30 No. 2, PP. 364-379.

- Droege, H., Hildebrand, D., & Heras Forcada, M. A. (2009), "Innovation in services: present findings, and future pathways", *Journal of Service Management*, Vol. 20 No. 2, PP. 131-155.
- Eisenhardt, K.M. & Martin J.A. (2000), "Dynamic capabilities: what are they?", *Strategic Management Journal*, Vol. 21 No. 10-11, PP. 1105 – 1121.
- Evans, J. S. (1991). "Strategic flexibility for high technology manoeuvres: a conceptual framework", *Journal of Management Studies*, Vol. 28 No. 1, PP. 69-89.
- Fallatah, M. I. (2018). Does value matter? An examination of the impact of knowledge value on firm performance and the moderating role of knowledge breadth. *Journal of Knowledge Management*, Vol. 22 No. 3, PP. 678-695.
- Fleming, L. (2001), "Recombinant uncertainty in technological search", *Management Science*, Vol. 47 No. 1, PP. 117-132.
- Froehle, C. M., & Roth, A. V. (2007), "A resource-process framework of new service development", *Production and Operations Management*, Vol. 16 No.2, PP. 169-188.
- Gallouj, F., & Windrum, P. (2009), "Services and services innovation", *Journal of Evolutionary Economics*, Vol. 19 No. 2, PP. 141–148.
- Gilbert, C.G. (2005), "Unbundling the structure of inertia: resource versus routine rigidity", *Academy of Management Journal*, Vol. 48 No. 5, PP. 741–763.
- Grewal, R., & Tansuhaj, P. (2001), "Building organizational capabilities for managing economic crisis: The role of market orientation and strategic flexibility", *Journal of Marketing*, Vol. 65 No. 2, PP. 67-80.
- Hannan, M.T. & Freeman, J.H. (1984), "Structural inertia and organizational change", *American Sociological Review*, Vol. 49 No. 2, PP. 149–164.
- Hitt, M. A., Keats, B. W., & DeMarie, S. M. (1998), "Navigating in the new competitive landscape: Building strategic flexibility and competitive advantage in the 21st century", *The Academy of Management Executive*, Vol. 12 No. 4, PP. 22-42.
- Hoyer, W. D., Chandy, R., Dorotic, M., Krafft, M., & Singh, S. S. (2010), "Consumer cocreation in new product development", *Journal of Service Research*, Vol. 13 No. 3, PP. 283-296.
- Inkpen, A. (2008), "Knowledge transfer and international joint ventures: the case of NUMMI and General Motors", *Strategic Management Journal*, Vol. 29 No. 4, PP. 447 – 453.
- Jaworski, B. J., & Kohli, A. K. (1993), "Market orientation: antecedents and consequences", *The Journal of Marketing*, Vol. 57 No. 3, PP. 53-70.
- Kandampully, J. (2002), "Innovation as the core competency of a service organisation: the role of technology, knowledge and networks", *European Journal of Innovation Management*, Vol. 5 No. 1, PP. 18-26.

- Kohli, A. & Jaworski, B. (1990), "Market Orientation: The Construct, Research, Propositions, and Managerial Implications", *Journal of Marketing*, Vol. 54 No. 2, PP 1-18.
- Kotha, R., Zheng, Y., & George G. (2011), "Entry into new niches: the effect of firm age and the expansion of technological capabilities on innovative output and impact", *Strategic Management Journal*, Vol. 32 No. 9, PP. 1011-1024
- Lam, S. K., Sleep, S., Hennig-Thurau, T., Sridhar, S., & Saboo, A. R. (2017), "Leveraging frontline employees' small data and firm-level big data in frontline management: An absorptive capacity perspective", *Journal of Service Research*, Vol. 20 No. 1, PP. 12-28.
- Lane, P. & Lubatkin, M. (1998), "Relative absorptive capacity and inter-organizational learning", *Strategic Management Journal*, Vol. 19 No. 4, PP. 61-77.
- Levinthal, D. A., & March, J. G. (1993), "The myopia of learning", *Strategic Management Journal*, Vol 14 No. S2, PP. 95-112.
- Liu, S. (2013), "The role of service innovativeness in the relationship between market orientation and innovative performance: moderator or mediator?", *The Service Industries Journal*, Vol. 33 No. 1, PP. 51-71.
- Lovelock, C.H. and Wirtz, J. (2007), *Services Marketing: People, Technology, Strategy*, Pearson Prentice-Hall, Upper Saddle River, NJ.
- Lundkvist, A., & Yakhlef, A. (2004), "Customer involvement in new service development: a conversational approach", *Managing Service Quality: An International Journal*, Vol. 14 No. 2-3), PP. 249-257.
- Lusch, R.F., Vargo, S.L. and O'Brien, M. (2007), "Competing through service: insights from service-dominant logic", *Journal of Retailing*, Vol. 83 No. 1, PP. 5-18.
- Magnusson, P., Jonas, M., & Kristensson, P. (2003), "Managing user involvement in service innovation: experiments with innovating end users", *Journal of Service Research*, Vol. 6 No. 2, PP. 111-124.
- Mahr, D., Lievens, A., & Blazevic, V. (2014), "The value of customer cocreated knowledge during the innovation process", *Journal of Product Innovation Management*, Vol. 31 No. 3, PP. 599-615.
- Matthews, J. and Shulman, A. D. (2005), "Competitive advantage in public-sector organizations: explaining the public good/sustainable competitive advantage paradox", *Journal of Business Research*, Vol. 58 No. 2, PP. 232– 40.
- Matthing, J., Sandén, B., & Edvardsson, B. (2004), "New service development: learning from and with customers", *International Journal of Service Industry Management*, Vol. 15 No. 5, PP. 479-498.

- Miller, D., Lant, T. K., Milliken, F. J., & Korn, H. J. (1996), "The evolution of strategic simplicity: Exploring two models of organizational adaption", *Journal of Management*, Vol. 22 No. 6, PP. 863-887.
- Nadkarni, S., & Narayanan, V. K. (2007), "Strategic schemas, strategic flexibility, and firm performance: the moderating role of industry clockspeed", *Strategic Management Journal*, Vol. 28, No. 3, PP. 243-270.
- Nasr, L., Burton, J., Gruber, T., & Kitshoff, J. (2014), "Exploring the impact of customer feedback on the well-being of service entities: a TSR perspective", *Journal of Service Management*, Vol. 25 No. 4, PP. 531-555.
- Nelson, R. R. (1991), "Why do firms differ, and how does it matter?", *Strategic Management Journal*, Vol. 12 No. S2, PP. 61-74.
- Newman, A., Prajogo, D., & Atherton, A. (2016), "The influence of market orientation on innovation strategies", *Journal of Service Theory and Practice*, Vol. 26 No. 1, PP. 72-90.
- Nijssen, E.J., Hillebrand, B., Vermeulen, P. & Kemp, R.G. (2006), "Exploring product and service innovation similarities and differences", *International Journal of Research in Marketing*, Vol. 23 No. 3, PP. 241-251.
- Ordanini, A. & Parasuraman, A. (2011), "Service Innovation Viewed Through a Service-Dominant Logic Lens: A Conceptual Framework and Empirical Analysis", *Journal of Service Research*, Vol. 14 No. 1, PP. 3-23.
- Ostrom, A. L., Parasuraman, A., Bowen, D. E., Patricio, L., & Voss, C. A. (2015), "Service research priorities in a rapidly changing context", *Journal of Service Research*, Vol. 18 No. 2, PP. 127-159.
- Pablo, A. L., Reay, T., Dewald, J. R. and Casebeer, A. L. (2007), "Identifying, enabling and managing dynamic capabilities in the public sector", *Journal of Management Studies*, Vol. 44 No. 5, 687–708.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1985), "A conceptual model of service quality and its implications for future research", *Journal of Marketing*, Vol. 49 No. 4 , pp. 41-50.
- Pennings, J. & Harianto, F. (1992), "The diffusion of technological innovation in the commercial banking industry", *Strategic Management Journal*, Vol. 13 No. 1, PP. 29-46.
- Penrose ET. (1959), "*The Theory of the Growth of the Firm*", Wiley: New York.
- Peteraf, M. A. (1993), "The cornerstones of competitive advantage: A resource-based view", *Strategic Management Journal*, Vol. 14 No. 3, PP. 179-191.
- Pisano, G. P. (1994), "Knowledge, integration, and the locus of learning: An empirical analysis of process development", *Strategic Management Journal*, Vol. 15 No. S1, PP. 85-100.

- Prahalad CK, Hamel G. (1990), "The core competence of the corporation", *Harvard Business Review*, Vol. 68 No. 3, PP. 79–91.
- Prahalad, C.K. & Ramaswamy, V. 2000, "Co-opting customer competence", *Harvard Business Review*, Vol. 78 No. 1, PP. 79–87.
- Priem, R. L. (2007), "A consumer perspective on value creation", *Academy of Management Review*, Vol. 32 No. 1, PP. 219-235.
- Ritala, P., & Hurmelinna-Laukkanen, P. (2013), "Incremental and radical innovation in coopetition—The role of absorptive capacity and appropriability", *Journal of Product Innovation Management*, Vol. 30 No. 1, PP. 154-169.
- Rosenberg, M. (1968), *The logic of survey analysis*, Basic Books, New York, NY.
- Rosenkopf, L., & Nerkar, A. (2001), "Beyond local search: boundary-spanning, exploration, and impact in the optical disk industry", *Strategic Management Journal*, Vol. 22 No. 4, PP. 287-306.
- Rothaermel, F. T., & Deeds, D. L. (2004), "Exploration and exploitation alliances in biotechnology: A system of new product development", *Strategic Management Journal*, Vol. 25 No. 3, PP. 201-221.
- Rust, R. T., & Huang, M. H. (2014), "The service revolution and the transformation of marketing science", *Marketing Science*, Vol. 33 No. 2, PP. 206-221.
- Saldanha, T. J., Mithas, S., & Krishnan, M. S. (2017), "Leveraging Customer Involvement for Fueling Innovation: The Role of Relational and Analytical Information Processing Capabilities", *MIS Quarterly*, Vol. 41 No. 1, PP. 267-286.
- Sanchez, R. (1995), "Strategic flexibility in product competition", *Strategic Management Journal*, Vol. 16 No. S1, PP. 135-159.
- Schumpeter, J. A. (1934), *The theory of economic development*, Harvard University Press, Cambridge, MA.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, Vol 104, PP 333-339.
- Spohrer, J., Kwan, S. K., & Fisk, R. P. (2014). Marketing: a service science and arts perspective. *Handbook of Service Marketing research*, 489-526.
- Stuart, T. E., & Podolny, J. M. (1996), "Local search and the evolution of technological capabilities", *Strategic Management Journal*, Vol. 17 No. S1, PP. 21-38.
- Sundbo, J. (1997), "Management of innovation in services", *Service Industries Journal*, Vol. 17 No. 3, PP. 432– 455.

- Szulanski, G. (1996), "Exploring internal stickiness: Impediments to the transfer of best practice within the firm", *Strategic Management Journal*, Vol. 17 No. S2, PP. 27–43.
- Teece, D., & Pisano, G. (1994), "The dynamic capabilities of firms: an introduction", *Industrial and Corporate Change*, Vol. 3 No. 3, PP. 537-556.
- Teece, D.J., Pisano, G. & Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, PP. 509–533.
- Thomke, S. (2003), "R&D comes to services", *Harvard Business Review*, Vol. 81 No. 4, PP. 70-79.
- Toivonen, M., & Tuominen, T. (2009), "Emergence of innovations in services", *The Service Industries Journal*, Vol. 29 No. 7, PP. 887-902.
- van Riel, A. C., Calabretta, G., Driessen, P. H., Hillebrand, B., Humphreys, A., Krafft, M., & Beckers, S. F. (2013), "Consumer perceptions of service constellations: implications for service innovation", *Journal of Service Management*, Vol. 24 No. 3, PP. 314-329.
- Vargo, S. & Lusch, F. (2004), "Evolving to a new dominant logic for marketing", *Journal of Marketing*, Vol. 68 No. 1, PP. 1–17.
- Vargo, S. L., & Lusch, R. F. (2008), "Service-dominant logic: continuing the evolution", *Journal of the Academy of Marketing Science*, Vol. 36 No. 1, PP. 1-10.
- Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008), "On value and value co-creation: A service systems and service logic perspective", *European Management Journal*, Vol. 26 No. 3, PP. 145-152.
- von Hippel, E. (1986), "Lead Users: A Source of Novel Product Concepts", *Management Science*, Vol. 32 No. 7, PP. 791-805.
- Von Hippel, E. (2001), "Innovation by user communities: Learning from open-source software", *MIT Sloan Management Review*, Vol. 42 No. 4, PP. 82-86.
- Von Hippel, E., & Katz, R. (2002), "Shifting innovation to users via toolkits", *Management Science*, Vol. 48 No. 7, PP. 821-833.
- Wei, Z., Yi, Y., & Guo, H. (2014), "Organizational learning ambidexterity, strategic flexibility, and new product development", *Journal of Product Innovation Management*, Vol. 31 No. 4, PP. 832-847.
- Wernerfelt, B. (1984), "A resource-based view of the firm", *Strategic management Journal*, Vol. 5 No. 2, PP. 171-180.

- Wirtz, J., Tambyah, S.K. and Mattila, A.S. (2010), "Organizational learning from customer feedback received by service employees – a social capital perspective", *Journal of Service Management*, Vol. 21 No. 3, PP. 363-387.
- Zahra, S. & George, G. (2002), "Absorptive capacity: A review, reconceptualization and extension", *Academy of Management Review*, Vol. 27 No. 2, PP. 185–203.
- Zeithaml, V.A., Bitner, M. & Gremler, D. (2011), *Services Marketing: Integrating Customer Focus Across the Firm*, (6th ed). McGraw-Hill, New York, NY.
- Zhou, K. Z., & Wu, F. (2010), "Technological capability, strategic flexibility, and product innovation", *Strategic Management Journal*, Vol. 31 No. 5, PP. 547-561.
- Zott, C. (2003), "Dynamic capabilities and the emergence of intraindustry differential firm performance: insights from a simulation study", *Strategic Management Journal*, Vol. 24 No. 2, PP. 97-125.