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Customer involvement capability and service firm performance: The mediating role of innovation

Thomas Anning-Dorson

Department of Marketing and Entrepreneurship, University of Ghana Business School, Legon, Ghana

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ABSTRACT

This study contributes to the literature on customer involvement by assessing the influence firm-level customer involvement capability has on service firm performance in two economic contexts. The study further examines innovation as a necessary mediator between customer involvement capability and firm performance. Data collected from service firms operating in two countries, the United Kingdom and Ghana, is analysed and used to validate the article's theoretical and empirical contributions. The results show that customer involvement capability has a positive and direct relationship with service firm performance in Ghana but a negative and direct relationship in the British context. The implication is that the effect of firm-level capability can be context-specific and that its development must therefore be aligned with the context in which a firm operates. On the other hand, it was found that in both contexts, innovation (product and process) mediated the relationship between involvement capability and firm performance.

1. Introduction

Over the years, scholars have sought to test concepts and theories in consumer research and marketing strategies that are produced from the perspective of both developed and emerging markets, in order to discover the differences between them. Some of these efforts have helped deepen our comparative understanding of the two types of markets. More often than not, however, they present a limited perspective, failing to make theoretical advances and offering few implications for companies in other geographical and economic contexts. Such attempts blur our understanding of the true nature of, for example, emerging markets and the significant ways in which their market structures differ from those of developed markets. The authors of marketing and management concepts and theories are influenced by their environments, which are mostly developed markets. Mere replication of these markets, without proper contextual delineation, offers little that relates to the important contributions being made by emerging markets to the world's economy (Sheth, 2011). The contribution this article makes is in empirically testing the relationship between the customer involvement capabilities of service firms and firm performance in these two different types of markets. This comparative perspective both expands the theoretical boundaries of the discipline of marketing and provides significant practical benefits and managerial implications for service firms and practitioners in both developed and emerging markets. This study argues that, given specific market constraints, the effect of customer involvement capability may not always be positive and that some

boundary conditions may therefore better explain how involvement capability improves firm performance. This study investigates the direct effect of customer involvement capability on firm performance and the possible mediating role of innovation in two countries, the United Kingdom and Ghana. According to Maheswaran and Shavitt (2000) and Bagozzi (1994), cross-country research such as this can help to validate theoretical paradigms, enrich current theorization, and may even lead to new theories. The study enriches the theorization of the effect of involvement capability by explaining some boundary conditions which improve firm performance in different markets.

The general customer/market orientation literature gives credence to the importance of customers in creating value for both the customer and the firm (see Appiah-Adu & Singh, 1998; Han, Kim, & Srivastava, 1998). There is an increasing role for customers in the production and delivery of service (Jaakkola & Alexander, 2014). Indeed, Carbonell, Rodríguez-Escudero, and Pujari (2009) argue that customer involvement in new service development greatly impact a firm's fortunes. The customer participation and involvement literature shows that service firms are actively involving their customers in the production and delivery of service to co-create value (Gallan, Jarvis, Brown, & Bitner, 2013; Grönroos, 2008). In the concept of the joint sphere of the co-creation of value posited by Grönroos and Voima (2013), the customer has a double role: "co-producer of resources and processes with the firm; and value creator jointly with the firm" (p. 140). Customers are now being viewed as proactive co-creators, rather than as passive receivers of value (Chan, Yim, & Lam, 2010; Vargo & Lusch, 2004). The

E-mail address: tanningdorson@ug.edu.gh.

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firm is, therefore, viewed as a facilitator of the value co-creation process rather than as a producer of standardised value (Payne, Storbacka, & Frow, 2008). This notion presupposes that the ability to develop and utilise customer involvement capability enables firms to enhance their performance (Payne, Storbacka, Frow, & Knox, 2009; Prahalad & Ramaswamy, 2004). The term *customer involvement capability* refers to the extent of a firm's ability to engage customers in the value creation and delivery process. To the extent that the involvement of the customer in the value creation process delivers the desired value to the customer, the firm enjoys performance benefits (Auh, Bell, McLeod, & Shih, 2007).

Research over the years has dealt with various aspects of the concept of customer involvement (e.g., Auh et al., 2007; Bendapudi & Leone, 2003; Ngo & O'Cass, 2013; Payne et al., 2009; Yi, Natarajan, & Gong, 2011). In the existing literature, however, two important issues appear not to have received sufficient attention. First, in the empirical research, few studies have investigated firm-level capacity to efficiently and effectively facilitate value creation collaboration. Grönroos (2011) emphasises that the production process is the responsibility of the service firm and that it therefore ought to play the role of value facilitator. Though the postmodernists assert that customers participate in order to customise their own world (Chan et al., 2010), it is the firm that creates the production platform to enable that customisation. The firm must therefore have the competence to bring the customer into the co-creation process and also enable the customer to function effectively and efficiently in the process. As Sharma, Conduit, and Hill (2014) suggest, it is important to assess firm-level capabilities in order to improve the efficiency and effectiveness of value co-creation. This study accordingly seeks to assess the influence firm-level customer involvement capacity has on firm performance. The assessment will highlight how firms can best engage the two-fold functions of the customer—as both resource and co-creator—in the co-production of value and in the delivery process.

Although customer involvement may influence firm performance, the varying outcome recorded in empirical findings (e.g., Auh et al., 2007; Bendapudi & Leone, 2003; Chan et al., 2010; Ennew & Binks, 1999) is a source of concern in terms of its rightful application. Although studies such as Carbonell et al. (2009) have examined the antecedents and outcomes of customer involvement in services, there may be boundary conditions that may shape the effect of customer involvement on firm performance in different contexts. What has not been adequately explored in the literature are the possible mediating factors that may optimise the customer involvement-performance relationship. The last objective of this research is to extend this line of inquiry by investigating how customer involvement capabilities may serve as an antecedent to other higher-level strategic options. Empirical findings from service innovation literature have suggested that the difference between successes and failures in service innovations is in the level of customer involvement (Anning-Dorson, 2016a; Ngo & O'Cass, 2013). Customer involvement is, therefore, seen as an important success factor for innovation (Abramovici & Bancel-Charenso, 2004). In this study, customer involvement capabilities are seen as second-order capabilities whose effect on performance we propose to be best explained through other, first-order capabilities. According to Schilke (2014), there is relatively little attention paid to the specific consequences of second-order capabilities such as customer involvement capability. A first-order capability that is closely related to customer involvement capability is innovation (Ngo & O'Cass, 2013). This research analyses the mediating role of innovation in the relationship between customer involvement and firm performance across the service sectors of Ghana and the UK.

The rest of the paper is structured as follows. The next section deals with a review of literature on customer involvement capability and innovation in service firms. The subsequent section covers the research model and hypotheses development while the fourth section presents the methodology and analysis. The last section concentrates on

discussing the findings and offers both theoretical and pragmatic implications as well as conclusions.

2. Literature review

2.1. Customer involvement capability

The involvement of a customer is one of the key characteristics of any service and has been recognised as the new frontier of competitive advantage (Prahalad & Ramaswamy, 2000). Firms that are able to develop their customer involvement capabilities are able to increase and benefit from customer participation, which improves firm performance (Chan et al., 2010). Customer involvement is described as the ability of the service firm to create the environment for the customer to have direct interaction and engage the customer in the service production and delivery process (Anning-Dorson, 2016a). The importance of involvement capability is that it facilitates the customer's engagement in the service processes to co-design and co-produce solution. As the involvement level increases, there is a concomitant increase in the customer's ability to influence the value to be delivered, which increases satisfaction (Berthon & John, 2006). Involvement capability thus allows firms to create the environment for the customers to perform the two distinct roles of information sharing and co-development (Fang, 2008; Lengnick-Hall, 1996). The involvement capability of firms in this study denotes the extent to which firms are able to engage customers in the value creation and delivery process. It therefore measures the engagement capacity of firms in order to enjoy the benefits customer participation offers to both customer satisfaction and improved firm performance which have been recorded in the literature (e.g., Auh et al., 2007; Chan et al., 2010).

2.2. Innovation in service firms

The complex nature of services in general has led to the discussion of innovation in the area from different perspectives. Anning-Dorson (2016b) offers that innovation in service firms may come from different sources and service firms look for innovation from within their operations; from the market (external environment) and the customers. This study relies on the argument of the synthesis approach where innovation in service is seen as an integration of the assimilation and demarcation approaches. The assimilation approach emphasises that innovation in both manufacturing and services are similar and for that matter, same measures and indicators should be used (Coombs & Miles, 2000). The demarcation approach, on the other hand, sees innovation in service firms as different, so that it therefore should require its sets of theories and analytical instruments to study the patterns (Sundbo & Gallouj, 2000). This study conceptualises innovation in services as a process or outcome of undertaking changes in a service firm's activities targeted at creating new routines and processes, enhancing the delivery of significant benefits of a core service (product) and improving the competitive nature of the service firm.

Innovation in service literature has shown a strong and positive relationship with firm performance (see Cheng & Krumwiede, 2012; Crawford & DiBenedetto, 2007). In that literature, two types of innovation have dominated empirical studies: process and product innovations. Damanpour (1991) described process innovation as creating and improving the method of production and the adoption of new elements (e.g., input materials, task specifications, information flow and equipment). Anning-Dorson (2016b) also posits that process innovation in service defines the “extent to which service firms alter their service systems to enhance value delivery” (p. 6). Product innovation, on the other hand, refers to offering an important new core benefit, to breathing new life into an existing product, or to creating an entirely new service offering that is considered new to the company or the customer or to the market (Anning-Dorson, 2016b; Berry, Wall, & Carbone, 2006). This suggests that product innovation could be

incremental or radical (Brettel, Heinemann, Engelen, & Neubauer, 2011; Snyder, Witell, Gustafsson, Fombelle, & Kristensson, 2016). The development of entirely new service offerings (radical) offers service firms the opportunity to reach new market segments (Grawe, Chen, & Daugherty, 2009). Incremental product innovations are value-added in nature and allow service firms to revamp their offerings to attract new customers, increase the value delivered to current customers and sometimes break into new markets. Empirical studies on product innovation in service have shown a positive relationship with competitiveness (see Anning-Dorson, 2016b) and overall performance in terms of sales volumes, market share, return on investment, profitability and customer satisfaction (see Anning-Dorson, 2017a; Cheng & Krumwiede, 2012; Huffman & Skaggs, 2010; Jiménez-Jiménez & Sanz-Valle, 2011; McDermott & Prajogo, 2012).

2.3. Service firm performance

Bititci, Carrie, and McDevitt (1997) explain that firm performance measurement is a key business activity central to the sustenance and prosperity of any enterprise. Performance measurement indicates the health of the enterprise and most often helps management to realign its strategies in order to improve on the measures. Firm performance generally has been assessed from multiple perspectives. Two of the dominant performance measurements in the management literature are financial and non-financial measures.

Non-financial measures, such as customer satisfaction (Ittner & Larcker, 1998), service quality (Banker, Potter, & Srinivasan, 2005) and employee satisfaction (Ittner & Larcker, 2003), are seen as key drivers of firm value. Ittner and Larcker (1998) found a non-financial performance measure (e.g., customer satisfaction) to relate to accounting performance generally, while others have used customer satisfaction and service quality to measure how well management is performing. Kaplan and Norton (2005) assert that these measures are better indicators of future financial performance than accounting measures and that they are valuable in evaluating and motivating managerial performance.

The combined effect of financial and non-financial performance is important as current profit and other financial measures reflect the effects of past and current activities, whereas non-financial measures reflect the effect of current managerial actions that will not show up in financial performance for some time. In a number of empirical service studies, either individual or combined measurement has been used to better explain the effect of strategic actions of service firms on both the present and future value of a firm (see Anning-Dorson, 2016b, 2017a; Bello, Radulovich, Javalgi, Scherer, & Taylor, 2016; Morris, Shirokova, & Shatalov, 2013).

In measuring both financial and non-financial performance among service firms, previous studies have generally adopted objective and subjective measurement approaches. Objective measures are data-based, while subjective measures are usually self-reported. In privately held enterprises, where there is the hierarchy of ownership is higher, disclosing private financial performance is extremely difficult. Bello et al. (2016) submit that subjective performance measures are appropriate and serve the same purpose as the objective measures. Prior studies (e.g., Pearce, Robbins, & Robinson, 1987) have also established the reliability of subjective, self-reported measures, while Venkatraman and Ramanujam (1986) have shown that both direct and indirect measures of performance are strongly correlated. Services studies (e.g., Anning-Dorson, 2017b; Bello et al., 2016; Karpen, Bove, Lukas, & Zyphur, 2015; Meier & O'Toole, 2013) have used subjective measures.

3. Research model and hypotheses development

The main arguments of this study are depicted in a conceptual model in Fig. 1. The study argues that a service firm's customer

involvement capability will have an influence on firm performance. This is based on the argument that developing a firm's capabilities will influence firm performance (Augier & Teece, 2009; Teece, 2007). However, customer involvement capability should be further seen as an essential capability that enhances service firms' innovation potential in order to positively influence their performance. The activation of involvement capability enables firms to exploit customers as resources through the generation of necessary market intelligence that can be used to produce innovative and competitive offerings. Innovation in the form of process and product are therefore shown to be important mediators between customer involvement capability and firm performance.

3.1. Customer involvement and firm performance

How firms incorporate sets of specific, identifiable processes or best practices into their operations explains their level of performance over time (Branzei & Vertinsky, 2006; Eisenhardt & Martin, 2000). The level of capability possession and deployment explains the difference in firm performance (Teece, 2007). Firms that seek to improve their competitiveness and enhance their performance endeavour to intentionally and purposely develop key capabilities (Teece, Pisano, & Shuen, 1997). Firm-level capability is the capacity of an organization to purposely extend, create or modify its resource base (Helfat et al., 2009). In service, the customer is a key external resource that the firm can purposely extend or modify in order to enhance market performance (Grönroos, 2008). Srivastava, Shervani, and Fahey (1998) suggest that customers are a market-based resource and, when effectively exploited, will bring about firm performance improvement. Developing the right capability to exploit this market-based resource, therefore, becomes important for performance enhancement. The ability of firms to learn from, utilise and collaborate with their customers—internal firm capability—to create value is contingent on firms' external dynamic fitness (Augier & Teece, 2009). Service firms that have dynamic fitness can, for instance, exploit their customers as a resource through their involvement capability.

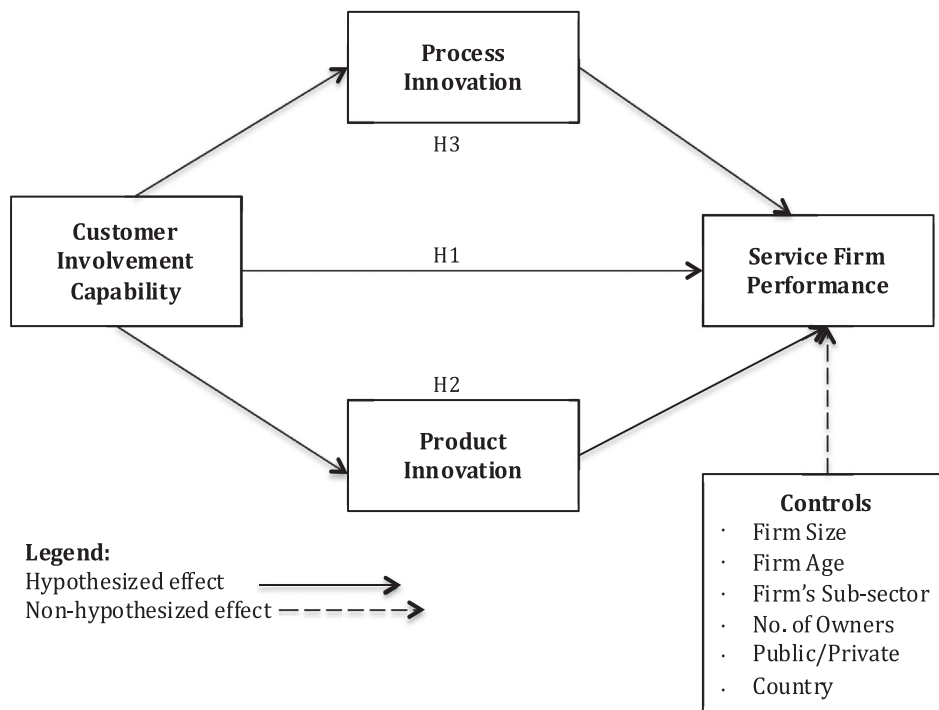
External fitness allows a firm to fully utilise its customer involvement capability by lining up the necessary complements, including customer involvement, to improve the value delivered. The customer, as a resource, is externally available to all competitors. However, firms that have the necessary capabilities to take advantage of such resources will enjoy the resource rent. Involvement capability becomes idiosyncratic and specialised assets that enhance operational efficiency create competitive advantage. Since such capability (customer involvement) is idiosyncratic and should be developed intentionally and purposefully to achieve competitiveness, service firms that consciously develop their customer involvement capability will enhance their performance. The study therefore makes the supposition that, barring any country-specific factor influence, firms are likely to benefit immensely from the development of customer involvement capabilities. The study therefore hypothesises that:

H1. There is positive relationship between service-firm customer involvement capability and firm performance.

3.2. Innovation as a mediator between customer involvement and firm performance

Although customer involvement capability may have an effect (–/+) on firm performance in both Ghana and the UK, this can be reshaped and boosted if it is first targeted at enhancing other, higher-level strategic competencies of service firms. Customers normally provide market trends and direction and technical support in the process, which should lead to better understanding of future demands (Sin, Tse, & Yim, 2005). In effect, when a service firm builds its internal capability to utilise the customer as a resource, that firm is able to scale

Fig. 1. Research model.



up the effect on formulating effective strategies to increase performance. Customer involvement capabilities are therefore seen as second-order capabilities whose effect on performance is mediated by other first-order capabilities (Schilke, 2014). For instance, firms with high levels of customer involvement capabilities are able to stay close to customers and therefore to generate and respond to intelligence on customers' present and future needs better (Kohli & Jaworski, 1990). Staying close to customers also helps firms develop innovative products and processes tailored to customer preferences, which in turn improve overall performance (Story, Boso, & Cadogan, 2015). Customer involvement capability allows firms to develop new ideas on what exactly customers are asking for, which leads to the introduction of new products and processes. This indicates that innovation plays an important intermediary role between customer involvement and firm performance.

Some studies have found that innovation plays a mediating role in the relationship between certain organizational orientations and firm performance. Agarwal, Krishna Erramilli, and Dev (2003) found innovation to mediate the relationship between market orientation and firm performance. Tseng, Kuo, and Chou (2008) also found that in the relationship between organizational culture and firm performance, innovation serves as a mediator that improves performance. Uz Kurt, Kumar, Semih Kimzan, and Eminoglu (2013) found innovation to play a mediating role on the relationship between organizational culture and key performance measures such as market share, profitability and the market value of firms. The empirical literature therefore supports this study's assertion that some competencies of a firm provide fertile grounds for the innovation that can improve performance. This study proposes a two-step causal chain from second-order capabilities (customer involvement) to first-order capabilities (innovation) to performance outcomes. In this two-step causal chain, the outcome is expected to be positive in both Ghana and the UK. In both markets, customer involvement capabilities are expected to facilitate the innovation developments that are aligned with customer preferences, which eventually enhance overall performance.

Thomke and von Hippel (2002) explain that, in the new value exchange regime, the firm's role changes from designing product solutions to providing customers technical support and utilising customers'

designs. This reinforces the assertion that the customer becomes the actual source of the introduction of new services and products, while the service firm provides the platform for the value exchange. However, the ability to perform this function depends on the firm's level of customer involvement capability. The successful introduction of new products and services in the service sector is dependent on a service firm's ability to create a platform through its involvement capability, which allows the customer to produce the required product that satisfies his/her need (Cui & Wu, 2016). Abramovici and Bancel-Charensol (2004) suggest that customer involvement is an important factor in the success of product innovation. Customers (current and future buyers) are the most important external source of knowledge for the innovation process (Mahr, Lievens, & Blazevic, 2014; Prahalad & Ramaswamy, 2004). Service firms may benefit from their customers by activating their involvement capability to engage them in the innovation process. As the service firm increases its involvement capability, cooperative gains are made through seamless interactions with customers, an essential element of new service development through joint resource coordination (Henke, Yenyurt, & Zhang, 2009). This implies that developing involvement capability is an important prerequisite for fully exploiting the product innovation potential of service firms, which will eventually influence firm performance. We therefore submit the hypothesis that:

H2. Product innovation will mediate the relationship between customer involvement capability and service firm performance in both Ghana and the UK.

Customer involvement in process innovation is widely acknowledged in the literature (Bogers, Afuah, & Bastian, 2010; Schaarschmidt & Kilian, 2014; von Hippel, Ogawa, & De Jong, 2011). Cui and Wu (2016), in explaining customer involvement as an information source, argue that customers directly participate in the process of combining information and technology to generate product solutions. Customers thus closely interact and engage in joint problem solving with employees. Customer involvement capabilities allow customers to determine and influence the process through which value is delivered. In services, the process of value delivery is considered as important as the product or service delivered, and value assessment is based on the total experience delivered to the customer (Bitner,

Faranda, Hubbert, & Zeithaml, 1997). Service firms are able to deliver excellent service experiences across the various service delivery points if customers find the flow of value delivery to be seamless, rather than cumbersome, unwieldy or frustrating. Service firms with higher knowledge of customer involvement capability are able to make the necessary changes in organizational processes to help deliver higher value in the overall service experience. Higher customer involvement capability provides support for increased flexibility, supports employee interaction with customers, and allows customers to direct the interaction. This leads to effective and pleasant service delivery. Hidalgo and D'Alvano (2014) suggest that customer collaboration capabilities influence the level of process innovation intensity and when firms easily integrate customers into the value delivery process, the value delivered is high. The study hypothesises that:

H3. Process innovation will mediate the relationship between customer involvement capability and service firm performance in both Ghana and the UK.

4. Methodology

4.1. Data setting and collection

This study sampled service firms located in Ghana and the UK. The UK is the fifth largest economy on earth (IMF, 2014; World Bank, 2014) and possesses most of the characteristics of advanced countries in general, with a strong service sector. The service sector accounts for nearly 80% (77.8%) of the British economy (Office for National Statistics, 2016). The main areas of its service industry are financial services, real estate, education, health, hospitality, transport and communication. Ghana is considered an emerging sub-Saharan African market (Burgess & Steenkamp, 2006; Sheth & Sinha, 2015). It was judged the fastest growing economy in the world in 2013 (World Bank, 2014) and has a thriving private sector that partly accounts for the growth it has recorded since the end of the military regime in 1992. Its service sector grew an average of 8% between 2002 and 2012 and now accounts for more than half of the country's GDP (Ghana Statistical Service, 2014). The service sector has spurred economic growth with such industries as retail, banking, insurance, telecom, professional services and hospitality contributing significantly to both employment and GDP. This makes Ghana an important example of an emerging sub-Saharan African market.

The study targeted a sample of service firms operating in each country. Due to the specificity of opportunities and limitations offered by each country, actual data collection procedures varied slightly to accommodate differences. In both countries, a top manager other than the finance manager/officer filled out most of the questionnaire, except where the questionnaire stipulated that the questions regarding performance measures (i.e., financial and non-financial performance) were to be answered by a finance manager or officer. In both settings, managers were contacted for information and their competence was assessed in three key areas (Morgan, Katsikeas, & Vorhies, 2012): (1) knowledge about the questions, (2) accuracy of the information provided and (3) confidence in the answers provided. The three key areas were included in the questionnaire in both samples. The measures were assessed on a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). A minimum score of 6.25 was obtained, which implies that informants were highly knowledgeable on the issues under study and were confident in their responses given.

4.1.1. The Ghana Study

This part of the study used the Ghana Business Directory (ghanaweb.com) database as the sample frame, as previously used by Anning-Dorson (2016b) and Story et al. (2015). This database contained up-to-date information and contact on firms in banking, insurance, consulting, retailing, communications and the IT and

hospitality subsectors. A total of 627 firms with valid contact addresses was obtained and an initial e-mail was sent to solicit their willingness to participate in the study. 336 responded to the email and agreed to be part of the study after two reminders sent at a one-week interval. Questionnaires were then sent in person to these firms and were filled by a member of management whose work was related to operations, innovation and/or business development. After two reminders and follow-ups, complete responses were received from 201 firms; these were subsequently used in the study. The participating firms can be broken down into the following proportions per category: 48.3% banking institutions, 17.4% insurance institutions, 13.4% consulting, 6.5% communications and IT, 0.5% hospitality and 13.9% retailing firms.

4.1.2. The UK Study

Data was collected in the UK using the services of SurveyMonkey, a renowned UK-based company that provides free and paid customisable survey services. The survey was customised for UK service firms in the SurveyMonkey database and specifically for managerial-level staff who are involved in the firms' innovative strategies. The study created a sampling from Ezilon UK, an online database of firms based in Great Britain. The service firms were created out of a mother list with contact details. An initial generic email was sent to all the service firms on this database to introduce the study and to solicit their willingness to participate in the study. 800 of them responded to the email. A survey questionnaire was sent to these prospective respondents, and 190 were returned after two reminders at a one-week interval. Out of the 190 returned, a total of 19 were rejected for incompleteness, leaving 171 valid responses. This final sample of 171 came from employees of highly capitalised and well-known UK firms along with other mid-size, yet competitive firms in consulting, IT, and hospitality. The breakdown of industry categories was 10% banking institutions, 2% insurance institutions, 37% consulting, 18% communications and IT, 12% hospitality and 21% retailing firms.

4.2. Variables and measures

4.2.1. Dependent variable

Firm performance was measured in both financial and non-financial terms. Most of the firms sampled for this study were privately held enterprises and posed difficulty for obtaining an objective measure of performance. This study followed the established practice of using self-reported performance measures, which are deemed as good as objective measures (see Bello et al., 2016; Pearce et al., 1987; Venkatraman & Ramanujam, 1986). Financial performance was assessed on five measures: return on investment, profit, sales volume, market share and cash flow, as done in studies such as Claycomb, Germain, and Dröge (1999) and Jaworski and Kohli (1993). Non-financial performance was measured by service quality, customer satisfaction and employee satisfaction, as done in the Anning-Dorson, Hinson, and Amidu (2015). Both measures were combined to rate service firm performance in relation to major competitors. This was done to allow the control of performance differences caused by unevenness among sectors and served markets. Performance is measured as the top managers' assessment of the indicators mentioned above. Again, the seven-point Likert scale is used ("over the past three years, our company has shown much better performance across these indicators than the main competitors, 1 = much worse 7 = Much better performance").

Hoskisson, Eden, Lau, and Wright (2000) note that hard data across performance measures for a large number of enterprises is unavailable in developing economies. The situation in this study of Ghana was no different; hence, the use of subjective measures for firm performance in this study across both samples. However, as previous studies have found a strong correlation between subjective assessments and their objective counterparts (see Slater & Narver, 1994), this study considers

the performance measurement appropriate in the face of the data collection challenges.

4.2.2. Independent variables

Customer involvement capability reflects the extent to which service firms allow customers to direct the interactions and participate in service delivery, co-design and co-production. It further measures how customer insights are gathered and how customers are incentivised to participate and invite other prospective customers. These elements were measured following the procedures in Anning-Dorson et al. (2015), Stokes (2014), and Berthon and John (2006). Six items were used on a 7-point Likert scale.

4.2.3. Mediating variable

Innovation in service was assessed with two different types of innovation that have been widely used in service research: *product innovation* and *process innovation* (see Anning-Dorson, 2016a; Prajogo, 2006; Sundbo, 2003; Sundbo, Orfila-Sintes, & Sørensen, 2007). *Product innovation* occurs when a service firm offers an important new core benefit (service or product), breathes new life into existing products, or creates entirely new service offerings that are either new to the firm, customers or market. Five items measured product innovation. *Process innovation* occurs when service firms alter their service systems to enhance value delivery. Process innovation was measured by the extent to which service firms create and either improve the method of service delivery or adopt new elements (e.g., input materials, task specifications, information flow, and equipment; see Damanpour & Gopalakrishnan, 2001) in the firm's production process (Gallego, Rubalcaba, & Suárez, 2013). The items used were guided by the work of Damanpour and Gopalakrishnan (2001), Sirilli and Evangelista (1998), and Sundbo (2003). Four items were used to measure process innovation.

4.2.4. Control variables

Although the interest was in developing a parsimonious model, the study added some additional variables to assess the vulnerability of the findings to the possibility of a spurious association. Control variables were included to ensure that the results are not unjustifiably influenced by these factors. As in the literature (e.g., Anning-Dorson, 2017b), the study controlled for the following factors as having potential influence on the competitive advantage of a service firm: firm size, type of service, firm age, number of owners and form of ownership. Larger and older firms may possess a superior pool of resources and the capacity as well as the scale necessary to invest in innovation. Size was measured by total number of full-time employees; firm age was measured by the number of years the firm had been in business and a natural logarithm transformation that was taken. The study also controlled for number of owners and form of business ownership (i.e., private or public).

4.3. Common method bias

Considering the fact that both the dependent and the independent variables were collected from a subjective assessment of managers from the same firms, there exists the possibility of common method bias (CMB). To deal with this potential threat, two tests were performed to assess the extent to which common method variance affected this study. Lindell and Whitney's (2001) test was conducted through the marker variable approach. The analysis identified a marker variable and tested for CMB. The results showed no significant correlation between the marker variable item and performance ($r = 0.013$; $p > 0.10$). The study also showed low, non-significant correlations between the marker variable item and other constructs, ranging between 0.013 and 0.076, which indicates that CMB does not affect this study. Subsequently, a Harman's one-factor test in CFA and exploratory factor analysis were run, with the results showing that CMB was not a concern for this study in either sample.

4.4. Analyses

To test the hypothesised relationships among the constructs (customer involvement capability, product, process innovation and firm performance), the study followed the commonly established two-stage procedure (Anderson & Gerbing, 1988). In the first step, a confirmatory factor analysis (CFA) was conducted on both samples to assess the validity of the measurement model and the discriminant validity of individual constructs. The CFA is used to test the psychometric properties of measurement scales and it is recommended for assessing construct validity and the reliability of subjective measurement instruments (Montoya-Weiss & Calantone, 1994). CFA also improves congeneric measurement properties of scales for further relationship testing (Arnold & Reynolds, 2003; Lin & Hsieh, 2006). In the second step, regression analyses were performed with robust estimation. Both samples showed acceptable model fits. The model fit indices for the UK were as follows: χ^2 (d.f.) = 752.78 (384), RMSEA = 0.05, NNFI = 0.93, CFI = 0.95 and SRMR = 0.03. For Ghana they were: χ^2 (d.f.) = 642.37 (288), RMSEA = 0.06, NNFI = 0.94, CFI = 0.95 and SRMR = 0.04. Both samples met the thresholds of all the indices (Schreiber, Nora, Stage, Barlow & King (2006)).

The study tested for equivalence of the measures to check that respondents from the two countries ascribed same meanings to the scale items. Following best practices, the study showed that construct measurement across the two samples was equally reliable (Boso et al., 2016; Runyan, Ge, Dong, & Swinney, 2012; Steenkamp & Baumgartner, 2000). The multi-group CFA analysis indicated that configural, metric, scalar, factor variance and error variance invariances existed. This means that there were no cross-cultural differences in scale and there were no biases in the way managers from the UK and Ghana responded to the scales. This clearly points out that apples are being compared with apples, rather than with oranges.

The study assessed reliability, convergent validity and discriminant validity tests. The study assessed the reliability of individual items by inspecting their internal consistency values and the loadings of the items on their respective construct (Fornell & Larcker, 1981). The positive and significant loadings confirm the convergent validity of the measures. Table 1 shows that the composite reliability and discriminant validity of the variables are acceptable with indices exceeding a minimum cut-off point of 0.60 and 0.05, respectively (Bagozzi & Yi, 1988). The UK sample shows a high validity for the variables with the minimum composite reliability (CR) of 0.92 and AVE of 0.66. Likewise, the Ghanaian sample also shows high composite reliability and discriminant validity with a minimum construct CR of 0.91 and an AVE of 0.61. The measures also showed satisfactory discriminant validity by showing a larger average variance extracted for all constructs being over and above the inter-construct squared correlations. The study therefore concludes that each construct of our study was unique and captured phenomena that other measures have missed, in both samples (Table 2).

5. Results

To test the research hypotheses, multiple regression analysis with robust standard errors was performed. In Model 1, the controls were estimated with customer involvement capabilities on the overall sample (Ghana and the UK combined) while controlling for country-specific effects to assess H1. In Model 2, the study estimated the effect of involvement capability on performance across the two samples to test whether there were differences. The study also tested the mediating effect of innovation (product and process) on the relationship between customer involvement capability and firm performance in the third set of hypotheses. Baron and Kenny (1986) suggest that three basic conditions must be met to establish a mediation model. First, a significant relationship between the dependent variables and the independent variables must be established. Model 2 satisfied the first condition.

Table 1
Details of measures and results of validity tests.

	The UK		Ghana	
	Estimate	t-Values	Estimate	t-Values
Customer involvement capabilities (UK: CR = 0.92; AVE = 0.66) (GH: CR = 0.91; AVE = 0.61)				
We allow customers to direct the interaction during service delivery at all times	0.860	Fixed	0.793	Fixed
We always encourage our customers to help us in the production of the quality service	0.820	9.752	0.810	18.765
Our customers generally co-design and co-produce most of our offerings	0.750	8.632	0.769	17.796
We continuously encourage our customers to persuade prospective customers to experience our offerings	0.792	9.173	0.765	17.788
We frequently provide incentives to foster participation of customers in new service development	0.819	9.601	0.767	17.802
We always gather market insights from through face-to-face customer meetings, visits, workshops, or customer suggestions	0.809	9.491	0.791	17.986
Product innovation (UK: CR = 0.93; AVE = 0.72) (GH: CR = 0.91; AVE = 0.67)				
Our company is always able to differentiate our services from the competition	0.832	Fixed	0.804	Fixed
Our new service introductions offer us new competitive advantage	0.848	13.310	0.799	15.883
Our company is faster in bringing new service offerings into the market than any other	0.873	13.611	0.829	16.646
Our company has introduced more innovative services during the past five years than any other	0.820	13.054	0.807	16.110
New services in our company often take us up against new competitors	0.881	13.778	0.859	17.151
Process innovation (UK: CR = 0.94; AVE = 0.81) (GH: CR = 0.91; AVE = 0.73)				
We adapt to different service processes to meet customer needs	0.912	Fixed	0.858	Fixed
Our future investments in new service process are significant compared with our annual turnover	0.878	11.738	0.812	14.376
Our company changes service process at great speed in comparison with our competitors	0.921	12.024	0.870	15.164
We are constantly improving our business process	0.876	11.699	0.867	14.926
Firm performance (UK: CR = 0.96; AVE = 0.75) (GH: CR = 0.94; AVE = 0.66)				
Better cash flow	0.887	Fixed	0.825	Fixed
Better return on investment	0.879	17.440	0.843	13.919
Better market share	0.844	15.405	0.810	13.691
Better sales volumes	0.854	16.660	0.798	12.831
Better profit	0.860	16.930	0.784	12.503
Employee satisfaction	0.868	17.021	0.854	14.449
Customer satisfaction	0.889	17.943	0.822	13.765
Service quality	0.858	16.789	0.732	12.098

Secondly, a significant relationship between the mediator and the independent variables must be established. The study satisfied this condition with Model 3, in which relationships between customer involvement capabilities and innovation (product and process) were estimated across the two countries. Finally, the third condition specified that the significant relationship between the dependent variables and the independent variables must become non-significant when the mediator is specified in the model. This study satisfied the third condition with Models 4 and 5. The results are displayed in Table 3.

Some of the controls proved to have a significant effect on firm performance. In the main model (Model 1), this was found for industry and both public and private sectors. This shows that specific sub-sector service firms might be approaching customer involvement differently and will explain the extent to which different sub-service sectors will benefit from customer involvement capabilities. The rationale behind

this finding is that customer involvement may play a critical role in explaining the performance of service firms in such areas as consulting, telecom and IT. To the extent that customer involvement plays a central role in such service firms, they are likely to benefit more from involvement capability than other service firms. The results also showed that the fact of a service firm being private or public also helps to explain the level of effect their involvement capability has on firm performance. Firm size, age, number of owners and foreignness were not found to significantly affect firm performance and therefore will not affect the relationship between customer involvement capability and service firm performance.

The regression analysis in Model 1 provided support for H1 as customer involvement capability was found to be positively and significantly related to firm performance ($\beta = 0.187, p < 0.01$) at the general sample level. At the disaggregated level, however, the effect of

Table 2
Descriptive statistics and inter-construct correlation.

	1	2	3	4	5	6	7	8	9	10
1. Size	1	0.327**	0.052	0.037	0.247**	-0.410**	0.256**	0.154*	0.185**	0.254**
2. Age	0.310**	1	0.059	-0.050	-0.044	-0.196**	0.086	0.068	0.039	0.113
3. Industry (service type)	0.702**	0.199**	1	-0.026	-0.170*	0.139	0.151*	0.235**	0.056	0.350**
4. Foreignness	-0.289**	-0.134	-0.394**	1	0.046	-0.092	-0.031	0.178*	0.114	0.026
5. No. of owners	0.300**	0.220**	0.075	-0.097	1	-0.181*	0.115	0.075	0.187**	0.020
6. Private/public	-0.546**	-0.252**	-0.413**	0.375**	-0.184*	1	-0.138	-0.063	-0.150*	-0.190**
7. Involvement	-0.211**	-0.165*	-0.181*	0.057	0.065	0.334**	1	0.415**	0.484**	0.380**
8. Product innovation	0.460**	0.252**	0.380**	-0.322**	0.150*	-0.598**	0.005	1	0.470**	0.458**
9. Process innovation	0.250**	0.173*	0.212**	-0.372**	0.140	-0.229**	0.130	0.352**	1	0.387**
10. Performance	0.352**	0.150*	0.181*	0.050	-0.223**	-0.102	0.009	0.399**	0.257**	1
Mean	UK	-	-	-	-	-	5.4391	5.097	5.916	4.240
	Ghana	-	-	-	-	-	4.632	4.535	4.784	4.702
Standard deviation	UK	-	-	-	-	-	0.924	0.935	0.972	0.903
	Ghana	-	-	-	-	-	1.331	1.038	0.966	1.157

Correlations for the British sample appear in the lower-left half of the matrix, and correlations for the Ghanaian sample appear in the upper-right half of the matrix.

* $p < 0.05$.

** $p < 0.01$.

Table 3
Regression results for hypotheses.

Variables	Overall Sample	Condition one		Condition two				Condition three			
		UK	Ghana	UK	Ghana	UK	Ghana	UK	Ghana	UK	Ghana
		Model 2: direct effect		Model 3: mediators				Model 4: product mediation effect		Model 5: process mediation effect	
	Performance	Performance		Product innovation		Process innovation		Performance		Performance	
Control effect											
Size	0.03 (0.06)	0.05 (0.03)	0.14 (0.1)	0.09 (0.06)	0.04 (0.10)	0.04 (0.03)	0.04 (0.09)	0.06* (0.04)	0.12 (0.10)	0.06 (0.04)	0.12 (0.10)
Age	0.07 (0.08)	-0.07 (0.04)	0.05 (0.13)	0.15* (0.08)	0.12 (0.14)	0.06 (0.05)	0.01 (0.12)	-0.05 (0.04)	0.013 (0.13)	-0.06 (0.04)	0.08 (0.12)
Industry	0.16*** (0.03)	-0.06*** (0.02)	0.22*** (0.05)	0.03 (0.03)	0.10** (0.04)	-0.01 (0.02)	-0.01 (0.04)	-0.06*** (0.02)	0.19*** (0.05)	-0.06*** (0.02)	0.22*** (0.05)
Foreignness	0.15 (0.11)	0.01 (0.06)	0.05 (0.20)	-0.09 (0.10)	0.47*** (0.16)	-0.21*** (0.05)	0.28* (0.15)	0.01 (0.07)	-0.11 (0.19)	-0.03 (0.06)	-0.04 (0.18)
No of owners	-0.08 (0.12)	0.01 (0.12)	-0.04 (0.16)	-0.09 (0.15)	0.08 (0.16)	0.02 (0.08)	0.22 (0.14)	-0.01 (0.12)	-0.10 (0.15)	0.01 (0.12)	-0.11 (0.14)
Public/private	-0.72*** (0.14)	-0.66*** (0.07)	-0.73 (0.57)	-0.76*** (0.10)	0.04 (0.33)	-0.06 (0.05)	-0.17 (0.30)	-0.75*** (0.08)	-0.77 (0.52)	-0.67*** (0.07)	-0.67 (0.57)
Country	-1.04*** (0.05)	-	-	-	-	-	-	-	-	-	-
Customer involvement	0.19*** (0.04)	-0.45*** (0.05)	0.34** (0.11)	0.25*** (0.06)	0.27*** (0.05)	0.10*** (0.03)	0.33*** (0.05)	-0.22** (0.05)	0.14 (0.086)	-0.23** (0.05)	0.12* (0.07)
Product innovation								0.12** (0.05)	0.35*** (0.11)		
Process innovation										0.22** (0.09)	0.34*** (0.11)
Constant	5.62*** (0.49)	6.62*** (0.41)	4.17*** (1.42)	4.61*** (0.56)	1.56 (0.96)	5.59*** (0.28)	2.60*** (0.87)	7.17*** (0.44)	3.699*** (1.346)	7.84*** (0.62)	3.18** (1.36)
Observations	361	179	182	179	179	179	179	179	180	179	180
R-squared	0.53	0.66	0.27	0.45	0.22	0.21	0.27	0.67	0.35	0.67	0.33

Robust standard errors in parentheses.

*** p < 0.01.

** p < 0.05.

* p < 0.1.

involvement capabilities on firm performance differed across the samples. In the Ghanaian context, the findings showed that there is a positive relationship between involvement capabilities and firm performance ($\beta = 0.339$, $p < 0.01$). The British sample, on other hand, showed a negative relationship ($\beta = -0.454$, $p < 0.01$).

As indicated earlier, the mediation hypotheses were assessed using Baron and Kenny's (1986) approach. The mediation hypotheses stated that the relationship between involvement capabilities and firm performance would be mediated by innovation (product and process innovations). The disaggregated model for H1 served as the satisfactory ground for mediation condition one as specified by Baron and Kenny (1986). Model 3 in Table 3 shows regressions of product and process innovations onto involvement capabilities. The analysis recorded positive and significant beta coefficients across the Ghanaian and British samples, satisfying the second mediation condition. Considering the fact that the first and second conditions are met, the study preceded in assessing whether mediation existed or not with Models 4 and 5. If a non-significant coefficient were recorded for the dependent (involvement capabilities) variable as the mediator (product/process innovation) is introduced into the equation, then full mediation would have occurred. On the other hand, if the coefficient of the dependent variable is less than what was recorded in Model 2 but remains significant in the presence of the mediator variable, then partial mediation would have occurred. Model 4 assessed the mediation effect of product innovation and showed that product innovation mediates the relationship between involvement capability and firm performance fully in the Ghanaian sample but partially in the British sample. Model 5 tested the mediation effect of process innovation. The results demonstrate that the mediation effect of process innovation in Ghana is full while that of the UK is partial.

6. Discussion and conclusions

This study seeks to assess the firm-level capability for efficiently and effectively facilitating value creation collaboration with customers and the mediating effect of innovation on the relationship between customer involvement capability and firm performance. The findings support the three hypotheses specified and therefore present significant implications for theory and practice.

The initial hypothesis posited that customer involvement capability would positively influence firm performance. This was supported at the general sample analysis level and thus confirms what existing studies have found. The finding confirms the assertion made by Srivastava et al. (1998) that customers are market-based resources and that firms with the right kind of capability (involvement) could exploit this resource to improve their performance. The positive effect thus found reinforces the assertions of Prahalad and Ramaswamy (2004) and of Payne et al. (2009) that developing and utilising customer involvement capability enhances firm performance. It shows that involvement capability licenses service firms to create the needed platform for customers to engage with the firm in order to customise their own world (Chan et al., 2010). The disaggregated analysis at the specific country level, however, shows that the much-emphasised positive relationship can be context-specific and that the relationship is not positive at all times. While a positive relationship was found within the Ghanaian sample, a negative effect was recorded within the British sample. The findings clearly reinforce Youngdahl, Kellogg, Nie, and Bowen's (2003) warning that "we cannot assume that what holds true in one context will apply to another" (p. 110) and that it would be inappropriate to circumvent ethnocultural issues in communicating research applicability. The specific country findings attest to the fact that context is an important

element in strategic management (Boso, Story, & Cadogan, 2013; Hoskisson et al., 2000) and international marketing (Sharma, 2011; Sheth, 2011).

The results may be explained by context-specific factors such as appreciation for relationship development across Ghana and the UK. Burgess and Steenkamp (2006) explain that institutional context in the form of human development and culture may explain the differences between countries such as Ghana (emerging market) and the UK (high-income country). The positive relationship between involvement capability and firm performance in Ghana may be explained by the fact that Ghana's culture emphasises collectivism (Hofstede, 1991) where they are more expressively motivated and hope to establish social relationships and place a high value on “touch” in their relationships (Malhotra, Ulgado, Agarwal, & Baalbaki, 1994). Members of such cultures are more attentive to the opportunity and value of building relationships and tend to adapt their behaviour in order to facilitate cooperation and personal connections. They are thus likely to directly reward firms with the capacity to facilitate this relationship building. Service firms in such cultural environment may therefore benefit directly from their customer involvement capabilities than would firms outside such an environment. In the British cultural context, cooperation between individuals and organizations is more voluntary than it is socially ordered. Firms may therefore not benefit directly from customer involvement but rather may benefit in other ways. Consequently, firms in contexts similar to that of the UK should see such capabilities as of a second order, functioning to enhance the utilisation of other capabilities.

In hypotheses H2 and H3, product and process innovations were seen as mediators. The results are consistent with the findings of Agarwal et al. (2003), who found that innovation mediates the relationship between marketing orientation and firm performance. These results are also in agreement with Tseng et al. (2008) and Uzkurt et al. (2013), who find that innovation mediated organizational culture and firm performance. The findings confirm Abramovici and Bancel-Charensol's (2004) suggestion that customer involvement is an important success factor in innovation. The involvement capability of service firms enables them to draw upon customers in the dual role of information provider and co-creators (Fang, 2008; Lengnick-Hall, 1996). A high level of involvement capability creates a platform for better firm-customer engagement in which the customer is able to share information about needs, wants and values and also to serve as a source of knowledge that helps provide for current and future needs through process and product innovation. The findings corroborate Story et al.'s (2015) assertion that staying close to customers, which is made possible by involvement capability, helps firms to develop innovative products and processes tailored to customer preferences, and to improve overall performance, in turn. Irrespective of the lack of a positive and direct effect of involvement capability and firm performance in the UK, the findings show that involvement capability is an important antecedent to innovation in both products and processes for enhanced service firm performance.

6.1. Theoretical implications

This study makes key contributions to the literature on customer involvement and firm-level capability. In the emergent service logic, customers play an active role in the value creation process, as opposed to being passive recipients of value (Chan et al., 2010; Vargo & Lusch, 2004). This implies that service firms that are able to develop their customer involvement and collaboration capacity are able to utilise customers more effectively. Despite the breadth and depth of the existing research on customer involvement, however, the empirical literature has placed little emphasis on firm-level capacity to efficiently and effectively facilitate the value creation collaboration. This study has empirically shown and confirmed Grönroos' (2011) assertion that the production process in service is the responsibility of the firm and

that the firm ought to play the role of value facilitator. The empirical findings suggest that developing this competence enables firms to create a platform for the customer to customise his/her experiences—something to which the postmodernists refer (Chan et al., 2010). Service firms with the needed involvement capability are able to create value for both the customer and the firm (improved performance), either directly or indirectly, depending on the cultural context.

The theoretical implication of the first hypothesis is that customers are market-based resources available to all firms. This means that developing the right capability (involvement capability) to exploit this market-based resource is critical to performance enhancement. Involvement capability becomes an important firm capability with the capacity to enhance the utilisation of the customer as a resource because it allows the firm to learn from, utilise and collaborate with their customers as a means of creating value. A customer is a necessary complement. Customer involvement thus enables dynamic fitness through alignment with a necessary complement—the customer—to deliver value.

This study shows that the effect of firm capability on performance could be context-specific and that cultural value priorities may directly influence the impact of involvement capability on firm performance. Although firm-level capacity, such as customer involvement, may have important effects on performance, we cannot simply assume that such managerial practices transfer across cultural boundaries (Chan et al., 2010; Morris & Pavett, 1992). The findings from this study throw light on why there is significant variation found in the effect of customer participation studies such as Cegala, Street, and Clinch (2007) and Street, Gordon, Ward, Krupat, and Kravitz (2005). Involvement capability is seen as possibly having some cultural underpinnings, and the effect of customer engagement may be explained by the cultural contexts within which customer-firm collaborations take place.

Lastly, the rightful application of customer involvement as an antecedent to performance has raised concerns in the literature due to the varying outcomes recorded in empirical studies (Auh et al., 2007; Bendapudi & Leone, 2003; Chan et al., 2010). The current study shows that certain boundary conditions explain the relationship between customer involvement and firm performance. In providing empirical support for the possible boundary condition effect, the current study shows that innovation mediates the link between involvement capability and firm performance. This implies that the relationship can be optimised if firms would see involvement capability as an antecedent to other, higher-level strategic capabilities. The results of the current study show that involvement capability should be seen as a second-order capability whose effect on performance is best explained through first-order capabilities, such as innovation. This study provides empirical support for the specific consequence of second-order capability such as involvement capability which Schilke (2014) indicates that little attention has been paid to it in the literature. Involvement capability as a second-order capability enhances the deployment and the effect of first-order capability such as product and process innovation.

6.2. Practical implications

The first practical implication of this study is that the development of the involvement capability of a service firm creates the necessary platform upon which customers are able to customise their experiences. Even though customers may take an active role in service production, their effectiveness hinges on how well the service firm facilitates the value creation process through its involvement capabilities and avenues of collaboration. The involvement capabilities of service firms enhance their chances of creating a competitive advantage. As indicated earlier, the customer is a market-based resource available to all, so the firm that is able to exploit this resource creates competitive advantages since relational advantages are difficult to imitate. Service firms should endeavour to utilise their relational assets through their involvement capabilities to co-opt customers into the value delivery process.

While customer involvement appears to be an important firm capability, the level of returns generated out of it may be context dependent. In cultural contexts where there is high level of collectivism, for example, service firms may be able to profit more directly from developing their involvement capabilities than can firms in individualistic cultures. Multinational companies must bear in mind that while developing involvement capacity may be beneficial, such benefits will be more pronounced in contexts where relationships are valued and socially ordered. The implication is that managerial practices cannot be transferred wholesale without due cognizance of ethnocultural issues. In seeking to profit from involvement capability, firms must examine the local social institutions and how they lend themselves to relationship development, maintenance and appreciation.

Even though the development of involvement capability may not offer direct profit, this study's findings suggest that it is able to complement other capabilities, such as innovation, to positively influence firm performance. The current study therefore brings clarity to the rightful application of customer involvement capability as an antecedent to other, higher-order capabilities and the fact that its impact on firm performance is best observed through such higher-order capabilities (e.g., innovation). Firms should seek to align their involvement capability with innovation development as the former facilitates the effectiveness of the latter in improving firm performance.

6.3. Limitations and future research

Like any other research, this study has limitations which it must acknowledge. First of all, the study focused on only two countries in assessing emerging and developed contexts. Although the countries share significant characteristics with others of similar status, there may be notable differences which must guide managers in the use of the study's findings and implications. Future studies may look at multiple country-contexts in testing the current study's model. Such studies may look at how relationships are formed within different contexts and how they impact the development of involvement capabilities and their consequences. Alternative data collection and analysis methods, such as structural equation modeling, longitudinal panel data and objective performance measures, may be used in future studies to test this study's model. The use of cross-sectional data, for instance, did not allow for the examination of the extent to which customer involvement influences performance over time. Future researchers should seek to explore longitudinal data to see the pattern of change and the extent to which developing customer involvement capability influences firm performance over time in different cultural contexts. Additionally, even though this study does not examine the effect of specific industries on the model, it would be interesting for future studies to look at the nuances in specific service sectors and the life-cycle stage in different contexts. Despite these limitations, we believe that the study offers insightful theoretical and practical implications regarding the application of capabilities and their boundary conditions as well as the integration of first and second-order capabilities across different contexts.

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