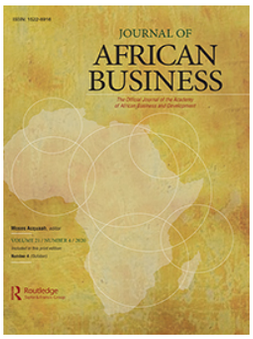

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Engagement Capability, Innovation Intensity and Firm Performance: The Role of Competitive Intensity

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ABSTRACT

This study assesses how service firms' engagement capability enhances their value creation advantages. We analyze how the development of engagement capability helps service firms to create innovation advantages and enhance firm performance. The study also evaluates the moderating effect of competitive intensity on the relationship between engagement capability and firm performance. We collected data from the service sectors from an emerging African economy, Ghana. The validity and the reliability of the constructs were confirmed through a confirmatory factor analysis. We then assessed our hypothesized relationships through robust standard error hierarchical regression. The results show that developing and deploying customer engagement capability by firms produces positive effects on both innovation intensity and firm performance. The study also finds that competitive intensity as a market condition serves as a boundary condition and therefore moderate the relationship between customer engagement and firm performance. A useful implication from this study is that, inasmuch as service firms must encourage customer engagement and participation in the value creation process, firms must also be mindful of their capacity to meet the engagement requirements for effective value co-creation of the market conditions under which they currently operate.

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KEYWORDS
Customer engagement; service innovation; co-creation; competitive intensity; capability; service firm performance

In the service marketing literature, co-creation has been advanced as a central tenet of the service-dominant logic as customers have become active participants in the value creation process (Grönroos & Voima, 2013). Both scholars and practitioners of marketing have recognized the importance of enhancing customer participation and engagement in the value creation process as an important avenue for competitive advantage creation (Dong, 2015). In the same vein, there is an increasing role played by customers in the development of new products and services (Cui & Wu, 2016). The literature on both innovation and marketing has prioritized the critical role of customer involvement in the value creation process. However, both innovation and marketing literature are overly concentrated on how customers participate as oppose to how firms are able to engage customers in the process. There are still knowledge gaps that need to be filled to ensure

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that firms optimize their customers' engagement to improve customer experiences which will in turn improve firm performance. The knowledge gap situation in the African context is evident in the lack of empirical work on how firms can optimize their customer engagement through internal relational capacity such as engagement capability building to enhance customer experience and firm's bottom-line (Roberts-Lombard & Du Plessis, 2012).

Cui and Wu (2016) assert that a substantial body of work is devoted to examining customers' motivations to participate and their ability to contribute to the value creation process. Yet, very few studies in the service and innovation literature have assessed the firm's perspective and critically examined the organizational mechanisms needed to the facilitate customer engagement (Foss, Laursen, & Pedersen, 2011). Firms undoubtedly need competence in terms of customer engagement to fully benefit from customers' participation in the value creation process.

In this study, we refer to this competence as a firm's customer engagement capability (CEC). CEC is defined in this study as the capacity of the firm to continuously connect with the customer in ways that allow the customer to make input and participate in the value creation and delivery process with the aim of enhancing the overall customer experience. Studies have shown that the internal workings of firms in terms of their capability to facilitate external collaborations enhance value co-creation (example, Auh, Bell, McLeod, & Shih, 2007). Engagement capability therefore serves as the needed internal firm capacity that facilitates customer connection and learning to enhance their contribution to the value delivery (Hibbert, Winklhofer, & Temerak, 2012). Hence, this study makes an empirical contribution to the customer collaboration and relational capabilities literature. We do so from an African context in which the need for customer collaborations has been found to be high (Anning-Dorson, 2018a). Emerging markets such as those in African context have been found to be more embedded and collectivist (Anning-Dorson, 2018b; Burgess & Steenkamp, 2006) and are more likely to appreciate and reward firms that are able to engage customers better (Anning-Dorson, 2018a).

Additionally, although engagement capability may enhance value creation opportunities and firm performance especially in collectivist and embedded contexts such as emerging African market, there may be conditions that may alter the direct effect such capability may have on the firm performance. Studies such as Anning-Dorson (2019) have called for the contextual factor examination to explain the boundary conditions under which relational capabilities such as CEC produce opportunities for competitive advantage creation. This study argues that, granted that customer engagement has the potential to improve on value creation opportunities such as innovation and firm performance (Janssen, Castaldi, & Alexiev, 2016), the complexity of the marketplace may distort this linear effect. A key question is, what would the effect of engagement capability on firm performance be in different levels of market competition? The need to understand this gives credence to calls to investigate the market conditions under which such capabilities are more positively related to firms' bottom-lines (Anning-Dorson, 2016).

Based on the above, the study sets two main objectives. First, the study seeks to assess the relationship between the engagement capability in a firm and firms' innovation and service firm performance in Ghana, where collectivism and embeddedness are thought to be high (see Hofstede, 1984). Hoyer, Chandy, Dorotic, Krafft, and Singh (2010) state that it is unclear how engagement capability contributes to overall firm performance, as

studies in the service area have largely concentrated on customer-level analysis and outcomes (see Gallan, Jarvis, Brown, & Bitner, 2013). What appears to be missing in the discourse is the firm-level capability for engagement to be more beneficial to the firm. This lack of attention does not offer an explicit route through which firms can influence their innovation activities and their overall performance through engagement capability development. This current study empirically assesses service firms' capability for customer engagement to create innovation advantages and enhance firm performance. Within the value co-creation theory upon which customer engagement is built, Gronroos (2011) emphasizes that the process is the responsibility of the firm and that firms ought to play the role of value facilitator. In the same vein, service firms must have the capacity to facilitate the engagement process. This study addresses service firm competence and empirically tests how their engagement capability creates advantages in terms of service innovation and enhanced firm performance. The context within which the study is carried out helps clarify the effect of customer engagement on innovation and firm performance as previous findings have been mixed.

Secondly, we explore an important market condition–competition–as a moderating boundary condition for the relationship between CEC and service firm performance. The effect of CEC on performance is inconclusive; some studies, such as Mahr, Lievens, and Blazevic (2014) have found a positive effect on product outcomes, while other studies have found no or a negative effect on innovation and performance (e.g. Jansen, Van Den Bosch, & Volberda, 2006). An important factor that explains the distortion in linear relationships between capabilities and performance outcomes is the complexity of the marketplace (Anning-Dorson, 2016). Understanding when to intensify the development of a particular capability may explain the overall effect on firm performance. The market conditions have been found to exert a moderating effect on the capability–performance relationship (Lin & Wu, 2014). Damanpour (2010) and Wu (2012) both found a significant moderating effect of market competition on innovation outcomes. We consider the competitive intensity within a market to influence the effect that CEC will have on firm performance.

This study responds to calls by other scholars to assess service management from different ecosystems to enable a better understanding of service complexity. Hence, we look at service firm operations in an emerging economy with a growing services sector. There is paucity of customer engagement research in service sectors of emerging and developing economies (Anning-Dorson, 2016). This may be due to the lack of growth in the service sectors in such economies. However, in recent years, the service sector of an emerging economy – Ghana has been growing and now accounts for more than half of the country's GDP (Anning-Dorson, 2017). Drazin and Schoonhoven (1996) question the generalizability of such findings from only developed contexts to other economies, while Hoskisson, Eden, Lau, and Wright (2000) argue that studying emerging economies offers new theoretical development approaches and aid firms in making strategic choices. We contribute to the customer engagement and service innovation literature with data from service firms operating in Ghana and also explain how firms in such a less-developed context can benefit from customer engagement.

The next sections of this paper discuss the conceptual background of our research, and the hypotheses tested, the methodology used, the implications of our findings and our conclusions.

Conceptual background and hypotheses

The role of every business is to evolve from relationship marketing to engaging customers in all possible ways. Customers make contributions to firms that may come in the form of purchases, referrals, social media conversations about the brand, feedback to the company, and suggestions (Kumar et al., 2010; Tweneboah-Koduah, Anning-Dorson, & Nyamekye, 2020). Investigating from the customers' perspective, Pansari and Kumar (2017) define customer engagement as the mechanics of a customer's value addition to the firm either through direct and/or indirect contribution. Studies such as Vivek, Beatty, and Morgan (2012) have discussed customer engagement as an outcome of firm activities. This suggests that for effective engagement to take place the firm must have the capacity for this to be realized. Roberts-Lombard and Du Plessis (2012), in studying how South African firms can retain their customers, emphasized that firms need to build their capacity to effectively manage their customer relationships. This makes firm capacity an important variable in ensuring that the firm gets the best out of their customers.

Customer engagement capability explains how connected the firm is to the customer such that the firm is able to bring the customer into the value creation process to influence the value delivered (Zhang, Guo, Hu, & Liu, 2017). The desired output of the engagement capability is to enhance the customer collaboration in the value co-creation through continuous engagement (Hollebeek, 2019). An interesting fact is that in the literature there is a dominant focus on analysis from the customers' perspective in which definitions and conceptualizations have looked at customers' motivation to participate in the value delivery process. While the efforts from researchers over the years are commendable, an important aspect seems to have been sidelined in the customer engagement discourse, especially in the empirical literature. There is little attention to analyzing the firms' perspective, that is, analysis that assesses the capacity of firms to make the customers' engagement more worthwhile in terms of value creation for both the customer and the firm. Concentrating only on customers' perspective offers little managerial significance to service firms in their quest to engage customers more in the value creation process. In the customer engagement (CE) literature, the firm must first invite the customer to make the value co-creation possible (Grönroos & Voima, 2013); this is fundamental to the service logic (Vargo & Lusch, 2004). Though the customer is seen as a proactive co-creator rather than a passive receiver of value in the service logic (Chan, Yim, & Lam, 2010), the firm must have the needed capacity to engage the customer in the value co-creation. The firm, therefore, becomes a value facilitator rather than a producer of standardized value (Payne, Storbacka, & Frow, 2008). This presupposes that firms have the needed capability for making the engagement rewarding for both the customer and the firm. This conceptualization resonates with the call by Dadzie, Dadzie, and Winston (2019) who advocate for a more customer-centric marketing for African emerging markets firms to be successful. Engagement capability allows firms in such context to ask the key questions around the 4As – affordability, accessibility, acceptability and awareness. CEC builds the innovation capability of firms which facilitates the delivery of the 4As.

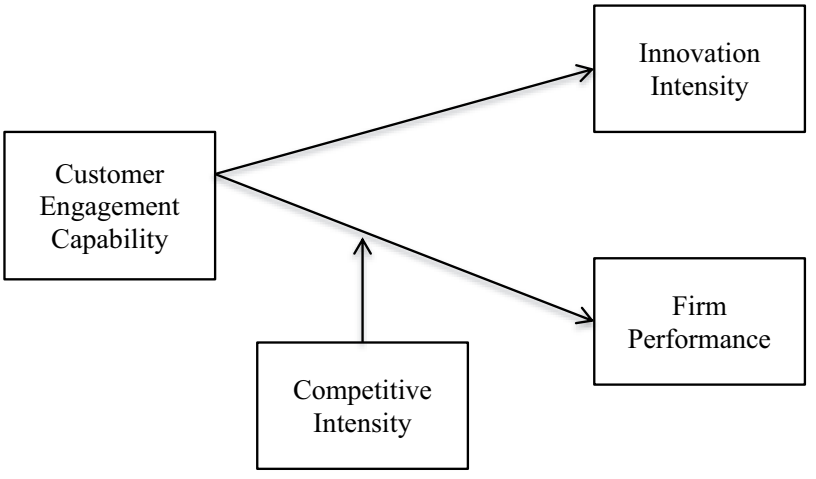

Figure 1. Conceptual Framework

We theorize that firms that possess a high level of . . . or have the ability to develop customer engagement capabilities to enhance their value delivery process that creates innovation success and improves their firm performance. This study further theorizes that the positive effect may not be consistent under all market conditions and that the level of market competition may moderate this positive effect. Figure 1 depicts the relationships that are assessed in this study.

CEC and service innovation

Desouza et al. (2008) remark that firms are increasingly recognizing the need to innovate – in partnership with their customers – to enjoy a competitive advantage. Nambisan (2002) also asserts that firms are changing their innovation strategies from "innovating for customers" to "innovating with customers." According to Heinonen et al. (2010) there is an increasing acceptance among marketing and strategic management scholars and practitioners that value is created by and for customers. Gronroos (2011) also asserts that firms have opportunities to support value-creating processes by providing resources that customers can deploy independently or during interactions with service providers; Arnould, Price, and Malshe (2006) argue that customers regard firms as sources of resources available to draw upon to achieve their goals. This confirms the assertion made by the postmodernists that customers participate in service production to customize their own world (Chan et al., 2010), and that it is the firm that creates the production platform for the customization. The firm must, therefore, have the competence to make value creation possible and to enable the customer to function effectively and efficiently.

Customer engagement capability by a firm becomes important if the firm can create innovation with the customer as expressed by Nambisan (2002). CEC facilitates customer relationship building (Orr, Bush, & Vorhies, 2011). This helps to integrate all activities across the firm, linking these activities to both firm and customer value (Boulding, Staelin, Ehret, & Johnston, 2005). CEC enables service firms to utilize their relational

assets so they are able to develop an intimate relationship with customers. This may be relatively rare and difficult for rivals to replicate. Customers normally provide market trends/direction and technical support in the process, which leads to the firms having better understanding of their customers' future demands (Sin et. al., 2006). CEC helps firms to tap into the operant resources of customers and facilitate the creation of service innovations. Ngo and O'cass (2013) have opined that the level of customer engagement that service firms may have with their customers explains the difference between success and failure in service innovation. Having the necessary engagement capability becomes an important success factor for innovation intensity within the services sector (Abramovici & Bancel-Charensol, 2004). This study explains service innovation intensity by examining the number of new product introductions a service firm pursues as a competitive measure. This study proposes that having or developing CEC will increase service innovation intensity in service firms and, therefore, hypothesizes that;

H1: Customer engagement capability relates positively to service innovation intensity.

CEC and firm performance

Barney (1991) explains that organizational performance is built through the deployment and use of idiosyncratic, valuable and inimitable resources and capabilities that might be heterogeneously distributed across an organization. In doing so, the firm embarks on two activities: resource picking and capability building (Makadok, 2001). We believe that CEC is an important capability and that when it is developed and deployed it enhances firm performance. In an increasingly dynamic business environment, firms are realizing the importance of developing collaborative capabilities for creating and sustaining competitive advantage (Sawhney, Verona, & Prandelli, 2005). In recent studies, scholars in the fields of strategy and marketing have focused on collaboration with the customer to improve firm performance (Kumar & Pansari, 2016).

Customer engagement is considered to be the anchor that is shifting the focus from goods-centered to service-centered logic for marketing (Vargo & Lusch, 2004). Customer engagement has become a major frontier for competitive advantage (Bendapudi & Leone, 2003) as firms that develop and deploy CEC produce better customer and employee satisfaction levels than those with no such capabilities (Chen, Chen, & Lin, 2015). Bendapudi and Leone (2003) found that firms that have the capacity to bring customers into the value process produce a higher firm performance. CEC should be seen as an important marketing capability that enhances the delivery of better value for customers and creates a competitive advantage for firms (Cui & Wu, 2016). CEC facilitates the building of customer relationships which allow customer integration into service production and delivery. CECs are developed out of the firms' relational asset – the customer's trust and dependency on the firm – that allows a close relationship with customers. According to Srivastava, Fahey, and Christensen (2001), relational assets are market-based assets that are difficult to replicate by competitors and, therefore, create competitive advantages that can positively enhance a firm's performance. CEC, therefore, becomes a necessary capability to exploit this market-based resource to create

a competitive advantage and enhance a firm's performance. This study suggests that CEC creates enhanced firm performance and hypothesizes that:

H2: Customer engagement capability relates positively to firm performance.

Moderating role of competitive intensity

The nature and characteristics of services lend themselves to the heightened competition witnessed in service markets. The special features of services lead to significant differences in the processes of production, sales and consumption of services (Karmarkar & Pitbladdo, 1995). These have implications for market structure, demand patterns and competition due to the dynamism in customer behavior. Ostrom, Parasuraman, Bowen, Patricio, and Voss (2015) state that the context in which a service is delivered and experienced has, in many respects, fundamentally changed. This is attributed to advances in information technology, which is bringing revolutionary services into the marketplace and changing the competitive landscape. A major challenge facing service firms is competition in terms of their strategic choices and overall firm performance (Anning-Dorson, 2016). Competition and its level of intensity have long been regarded as a major contributor to hostility in the marketplace (Zahra & Covin, 1995). The level of competition (competitive intensity) has a direct effect on firms' performance. Auh and Menguc (2005) explained competitive intensity as the fierce competition among firms due to the number of competitors and opportunities for growth. Anning-Dorson (2016) asserts that competitive intensity measures the level of inter-firm rivalry, promotional wars, competitive moves, and the matching of competitive offers within a particular market. We argue that despite the possible positive effect of CEC on firm performance, a key market condition such as competitive intensity may moderate this relationship.

Chan, He, Chan, and Wang (2012) explain that in periods of low competition there is little effect on performance even if firms do not pay enough attention to customer requirements. They do, however, point out that in highly competitive periods customers become much freer to switch to other service providers and that firms must better understand customer requirements. In order to be market responsive, as advocated by Murray, Gao, and Kotabe (2011), service firms must align their CEC development with the competitive trends to positively influence their performance. Considering the consumers' power in the competitive landscape, Banerjee, Iyer, and Kashyap (2003) assert that firms must collaborate with their customers to improve the firm's performance. Given the fact that customers freely change their service providers in highly competitive markets (Chan et al., 2012), service firms that are better able to develop and deploy CEC are likely to significantly boost their performance (e.g. in terms of increased sales). Such firms are able to meet customer requirements due to their capability to engage customers in their production and delivery process (Cadogan, Cui, & Li, 2003). We propose that there is a positive moderating effect of competitive intensity on the relationship between CEC and firm performance, thus:

H3: In highly competitive periods customer engagement capability is more positively related to firm performance than during low competitive periods.

Methodology

Sample and data collection

In testing the hypotheses, we relied on an online database called the Ghana Business Directory (GBD) (ghanaweb.com) as there were no accurate and updated lists of service firms for the different sub-sectors of the broader service sector. A similar database has been used in a similar innovation study (Anning-Dorson, 2016). We contacted 1,881 service firms with an active office(s) located in at least one of the three largest cities of Ghana – Accra, Kumasi and Takoradi. An e-mail was sent to all of the firms seeking their consent to be part of this study. Those firms that responded affirmatively were later emailed questionnaires with a specific instruction that a top management member in charge of marketing, client services, business development, operations, or any related portfolio must complete the questionnaires. A further instruction was that questions about firm performance, that is, financial performance, were to be completed by the accountant/finance manager/finance officer. After two reminders and follow-ups, we received a total of 408 questionnaires. After excluding those firms who did not complete significant portions of the questionnaire, the final number of useful questionnaires was 344. These 344 questionnaires were used for our analysis. Of the 344 questionnaires, 108 were from banking institutions, 48 were from insurance companies, 24 were from consulting firms, 61 were from media and communication firms and 52 and 51 were from hospitality and retailing services, respectively.

Measures

Service innovation intensity was measured using a single phrase: "Our company has introduced more innovative products during the past five years than at any other time in our history." Our measurement of Customer Engagement Capability followed the works of Anning-Dorson (2016) and Berthon and John (2006). Firm performance was measured in financial performance terms by adopting the measures used by Jaworski and Kohli (1993). All the results were measured on a 7-point Likert scale ranging from 1 = strongly disagree to 7 = strongly agree. We controlled for firm size, type of service (specific subsector effect), firm age, the number of firm owners and the form of ownership as having potential impacts on the performance of service firms.

Common method bias

The study conducted two tests to show that common method bias was not a problem in this study. Following Lindell and Whitney (2001) test for avoiding common method variance in cross-sectional research, the marker variable approach was used. A Harman one-factor test was subsequently conducted through exploratory factor analysis to confirm the test results achieved by Lindell and Whitney (2001) methodology. Both approaches showed that common method bias was not a problem in this study.

Analyzes

Assessment of measures

This study initially assessed the reliability and validity of our proposed system of measurement before estimating the hypothetical model. To test the reliability and validity of the measures, the study used Amos 20 and the maximum likelihood estimation procedure to examine all the scales using a confirmatory factor analysis (CFA). The exact model fit was assessed using a chi-square (χ^2) test. Following Bagozzi and Yi's work (2012), a number of approximate fit heuristics were also examined to provide additional information on model fit; the indices ranged from good to very good. A six-factor confirmatory factor analysis model fits the data well, with the indices meeting the respective criteria (χ^2 (386) = 1055.259; TLI =.94; CFI = .95; RMSEA = .071). All factor loadings were positive and significant as shown in Table 1. This study inspected the internal consistency values and loadings of the items on their corresponding constructs. The values were good and above the minimum threshold of 0.70 (Bagozzi & Yi, 2012) and ranged from 0.70 to 0.84 (Table 1). The study followed Fornell and Larcker (1981) recommended test to assess discriminant validity. On the basis of this test, the study found that the correlation between any pair of main constructs was not larger than the respective square root of the average variance extracted for each of the constructs in support of discriminant validity. The positive and significant loadings confirm convergent validity of the measures. Table 1 shows that the composite reliability and discriminant validity of the variables are acceptable with the indices exceeding a minimum cutoff point of 0.60 and .05, respectively (Bagozzi & Yi, 2012). The measures also showed satisfactory discriminant validity by showing a larger average variance extracted for all constructs over and above the inter-construct-squared correlations.

Table 1. Measurement Model.

Constructs/Measurement Items	Factor loading	t-value
Customer Engagement Capability CR = 0.90; AVE = 0.65		
We engage customers in order for them to direct the interaction during service delivery at all times	0.860	Fixed
We always engage our customers to help us in the production and delivery of quality service	0.820	5.521
Our customer engagements generally help us to co-design and co-produce most of our products	0.750	6.922
We continuously engage our customers so as to share their experiences with prospective customers	0.792	6.662
We frequently provide incentives to foster engagement in new product/service development	0.819	5.618
Competitive Intensity CR = 0.88; AVE = 0.66		
One hears of a new competitive move almost every day in our market	0.888	Fixed
Anything that one competitor can offer others can match readily	0.810	7.212
There are many promotion wars in our sub-sector	0.786	7.738
Competition in our market is cutthroat	0.749	8.587
Financial performance CR = 0.95; AVE = 0.81		
Better cash flow	0.929	Fixed
Better return on investment	0.919	9.040
Better market share	0.880	9.305
Better return on investment	0.885	9.260
Better cash flow	0.874	9.430
Service Innovation Intensity		
Our company has introduced more innovative products during the past five years than any other in our industry		

Hypotheses testing

To test our hypotheses we conducted hierarchical regression analysis with Stata 13 data analysis software. To assess the three hypotheses, five different regression models were specified with robust standard errors. Model 1 (see Table 2) specifies only the controls on service innovation intensity as a dependent variable. In Model 2, H1 is tested with customer engagement capability included in the model to assess the direct effect on service innovation intensity. There was a significant increase in the R^2 (see Table 2) suggesting that model 2 explained the model better. A significant and positive relationship is found ($\beta = .270$, $p < 0.001$), confirming the hypothesis that CEC has a positive and significant effect on service innovation intensity.

In Model 3, the firm characteristics as controls are specified for firm performance as the dependent variable, while in Model 4 CEC was added to test hypothesis 2. The direct effect of CEC on service firm performance is found to be positive and significant ($\beta = .255$, $p < 0.001$), thus confirming the hypothesis that CEC has a positive effect on firm performance. In assessing hypothesis 3, the moderating effect of competitive intensity on CEC and firm performance, the multiplication approach was used. In this approach, Ping (1995) advises the creation of a single indicant term through multiplicative interaction to reduce model complexity. This approach is further recommended by Little et al. (2007), who state that adopting the mean-centering approach can reduce the possible effect of multicollinearity problems. Both CEC and competitive intensity were mean-centered before embarking on the creation of the single indicant. The

Table 2. Hierarchical Regression Results.

	Model 1	Model 2	Model 3	Model 4	Model 5
Variables	SI Intensity	SI Intensity	Firm Performance	Firm Performance	Firm Performance
Constant	3.511***	1.492*	5.426***	3.524***	0.222
	(0.831)	(0.863)	(0.678)	(0.695)	(0.858)
Controls Effect					
Firm age	0.0595	0.0804	0.0971	0.117*	0.0603
	(0.0897)	(0.0865)	(0.0732)	(0.0697)	(0.0820)
Firm Size	0.0713	0.0773	0.0931	0.0989	0.0167
	(0.108)	(0.104)	(0.0884)	(0.0840)	(0.0996)
Service Type	0.0787**	0.0728**	0.233***	0.228***	0.0766***
	(0.0318)	(0.0306)	(0.0259)	(0.0247)	(0.0288)
Foreign/Local	0.0880	0.141	−0.0656	−0.0152	0.190
	(0.148)	(0.143)	(0.121)	(0.115)	(0.136)
No. of Owners	0.0188	0.0896	−0.0597	0.00706	−0.00476
	(0.135)	(0.131)	(0.110)	(0.105)	(0.123)
Form of Ownership	0.120	0.425	−0.734***	−0.446*	0.355
	(0.310)	(0.303)	(0.253)	(0.244)	(0.288)
Direct Effect					
H1 & H2: CEC		0.270***		0.255***	0.200***
		(0.0429)		(0.0346)	(0.0412)
Competitive Intensity					−0.291***
					(0.0542)
Moderation Effect					
H3: CEC*Competitive Intensity					0.121**
					(0.0480)
Observations	344	344	344	344	344
R-squared	0.016	0.218	0.171	0.252	0.228

Robust standard errors in parentheses.
*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

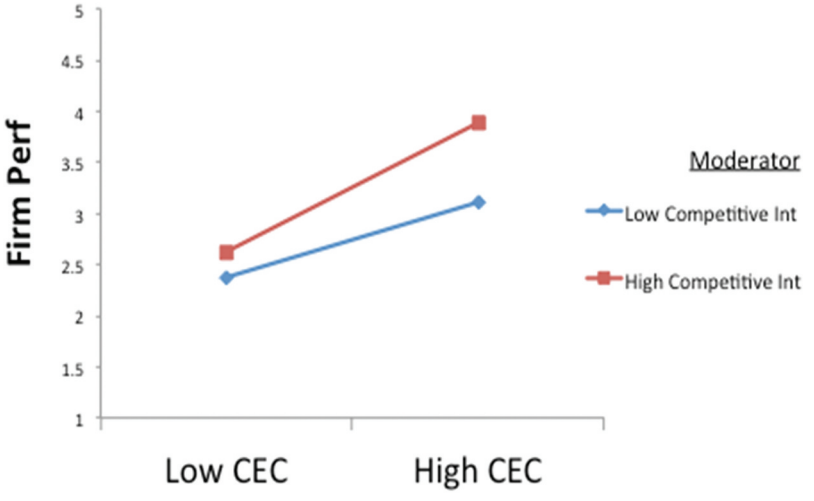

Figure 2. Moderation effect of Competitive Intensity on CEC and Firm Performance

interaction term was then included in Model 5 coupled with the individual variables. The results indicate that competitive intensity strengthens the positive relationship between CEC and firm performance ($b = .121$; $p < 0.01$). This confirms the hypothesis (H3) that in highly competitive periods, CEC is more positively related to firm performance than in low competitive periods.

To better understand the nature and magnitude of the effect of competitive intensity on the relationship between CEC and firm performance, the study followed Aiken, West and Reno (1991) to plot the interaction effects using sub-group analysis. CEC is plotted against firm performance outcomes for both high and low values of competitive intensity. As Figure 2 indicates, higher firm performance is associated with high values of CEC. This finding suggests that firm performance is greater when service firms align high levels of CEC with high competitive intensity.

Implication and conclusions

This study sought to achieve two main objectives. The first was to find out the effect that the firm's engagement capability has on both innovation intensity and firm performance. The findings in this regard show that the firm's customer engagement capability has a positive and significant relationship with the firms' innovation intensity and financial performance. This suggests that the ability of firms to engage in value creation opportunities through customer engagement is dependent on the firms' capacity to engage. This reinforces the fact that though customers may want to customize their value through participation in the value process, it is the firm that must make this possible. Our findings agree with the assertion of Grönroos and Voima (2013) that the firm must play the role of value facilitator. The positive relationship between customer engagement capability and innovation intensity can be explained by the fact that firms with such capabilities have a strong relational capacity. This capacity enables them to bond with the customer,

understand customers' needs better, and be more responsive to meeting customer needs. Customers are a great source of innovation (Makanyeza & Dzvuke, 2015). Füller, Matzler, and Hoppe (2008) found that through brand communities, customers provide the best source of innovation. They further suggest that firms that are able to use their relational assets well build brand communities to create new products and services.

The calls for increasing customer engagement and participation in the value delivery process have the potential to generate enhanced corporate performance including sales growth, superior competitive advantage and profitability (Brodie, Hollebeek, Jurić, & Ilić, 2011). Nevertheless, it is equally critical for firms to have the capacity to engage with their customers. Customers are an external resource available to all competing firms; and firms with the capacity to meet their customers' requirements for effective collaboration have a chance to enjoy the benefits of CE. Chan et al. (2012) explain that firms that pay attention to customer requirements enjoy a competitive advantage over those with no or less capacity to meet the customers' requirements and that in line with the findings from this study, service firms that are able to develop their engagement capabilities are able to meet their customers' engagement requirements in the value co-creation activity. Our findings are also consistent with Bendapudi and Leone (2003), who found that firms that have the capacity to engage with customers produce higher firm performance.

The second objective of the study sought to assess the effect of competitive intensity on the relationship between engagement capability and firm performance. The rationale was that while engagement capability may have a positive linear relationship with firm performance, this might not be the case during different market conditions. The study argued that during low competitive periods engagement capability would have little effect on firms' performance even if firms did not pay enough attention to customer requirements. We also posited that in highly competitive periods customers are offered variety through multiple competing firms (Anning-Dorson, Hinson, & Amidu, 2015); they become much freer to switch service providers, and that firms must better understand customer requirements. We therefore hypothesized that there would be a positive moderating effect of competitive intensity on the engagement-firm performance relationship. Our finding was that competitive intensity moderated the linear relationship between engagement capability and firm performance. This suggests that firms are able to enjoy a lot more performance benefits by developing their engagement capability in more competitive periods than in low competitive periods. The finding also implies that customer engagement can serve as a tool for establishing or increasing competitive advantage in high competitive periods. Per our findings, firms should seek to develop their engagement capability in high competitive periods. Firms that are in closer contact with their customers and relate well to them are able to develop and retain their customers, developing customer loyalty. Customer loyalty has been found to have a positive relationship with firm performance (Watson, Beck, Henderson, & Palmatier, 2015).

This study has shown that engagement capability is able to offer value creation opportunities in terms of innovation and enhanced firm performance. This study has brought into perspective the necessary organizational mechanisms needed to optimize customer engagement benefits in order to enhance value delivery and firm performance, which has previously received little attention in the literature. This study has responded to the call for more empirical study into firms' capacity to engage with customers and its effect on innovation and performance. In utilizing data from an emerging market where the cultural context is

more embedded and collectivist, we have shown that customers will appreciate and reward firms that are able to better engage with them. Additionally, this study has shown that the relationship between engagement capability and performance has constraints that may explain the magnitude of effects. In a competitive market, we found that increasing the development and deployment of firms' capacity to engage with customers brings higher returns than in less competitive conditions. We have also shown that developing CEC increases both innovation intensity and firm performance even in competitive market conditions, thereby contributing to the understanding of customer engagement, service innovation and firm performance as well as the boundary conditions in which CEC is most effective.

The generalizability of our findings is a concern for research of this nature, especially regarding the importance of moderating effects of market conditions in different contexts. To further broaden our understanding of the issues in customer engagement, innovation and performance on one hand, and the moderating role of environmental factors such as competition on the other hand, we encourage future research to test this study's model in different contexts. Additionally, cultural contexts that may explain how firms and customers relate to each other could be explored to determine whether engagement capability will always have a direct and positive effect on firm performance.

Disclosure statement

No potential conflict of interest was reported by the authors.

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Appendix A
Conceptual Framework

Appendix B
Moderation effect of Competitive Intensity on CEC and Firm Performance