

The Intermediate Function of Sustainable Dynamic Capabilities in the Association between Social Customer Relationship Management and Sustainable Competitive Advantage

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ABSTRACT

This study aims at investigating the mediating role of sustainable dynamic capabilities in the effect of social customer relationship management on sustainable competitive advantage using data gathered from a convenience sample consisted of 243 managers of SMEs in Nigeria via an electronic questionnaire. Using structural equation modeling by SmartPLS3.0, the study pointed out social customer relationship management is positively related to both sustainable competitive advantage and sustainable dynamic capabilities. The latter is positively associated to sustainable competitive advantage and hence, significantly mediated the effect of social customer relationship management on sustainable competitive advantage. The study contributes to the literature through filling a research gap as research on the relationship between s-CRM and dynamic capabilities in Nigeria is still scarce, confirming the importance of social customer relationship management in sustaining both dynamic capabilities and competitive advantage. SMEs are required to invest in CRM and build sustainable resources and capabilities to elevate sustainable competitive advantage.

KEYWORDS: social customer relationship management; sustainable dynamic capabilities; sustainable competitive advantage; SMEs

1.0 INTRODUCTION

Sustainability is the way by which people and firms reserve resources for future generations. Business firms, large, medium, or small, are not excluded. These firms are responsible for not only sustaining external resources but also their internal resources. On the basis of the resource-based view (RBV), internal resources are crucial factors for firms' competitiveness, which depends on how firms enhance their strategic resources, such as social customer relationship management (s-CRM), upon which firms' dynamic capabilities are created. Hence this study is designed to shed light on the interactions between s-CRM, firms' sustainable dynamic capabilities, and firms' sustainable competitive advantage. Recent works on sustainable competitive advantage highlights the importance of sustainable dynamic capabilities, relational social commerce capabilities, technological capabilities, as well as social and technological challenges like corporate social responsibility, beliefs, and information technology trust and implementation success for companies to create a sustainable competitive advantage. Research on the effects of CRM, particularly s-CRM, encompass works that explored CRM nature in enterprises from different sizes, works that looked at the impacts of CRM on business outcomes such as performance, competitive advantage, and business sustainability, and works that investigated the impact of CRM on customer outcomes such as customer satisfaction, customer involvement, customer loyalty, and customer empowerment [1-7]. However, little research has been carried out to investigate the impact of s-CRM on sustainable competitive advantage, principally, in small and medium-sized business enterprises in developing countries. On the other hand, as a key driver of corporate sustainability, sustainable dynamic capability can be developed through addressing the challenges of internal stakeholders such as employees and external stakeholders such as customers to create sustainable competitive advantage. Ensuring sustainable business performance requires not only the traditional components of business success such as quality, tangible assets, and cost control but also the dynamic capabilities, i.e., sensing opportunities and threats, seizing opportunities, and reconfiguring assets, that are required to advance business models, cultivate new products, and modify according to customer changing demands. Research on the relationship between s-CRM and dynamic

capabilities is still rare [8-16]. Yet, such a relationship can be established based on some previous works who found that the dynamic capabilities (sensing skills, alliance management capacity, reconfiguration capability, learning capability, coordinating capability, and integrating capability) play a significant mediating role between entrepreneurial business networks (interactions of suppliers, customers, and business competitors) and sustainable performance, and such capabilities help companies shaping market demand, obtaining new resources, and improving customer relationship management. Furthermore, previous works highlight the importance of dynamic capabilities sensing capability, technological flexibility, organizational flexibility, and reconfiguring capability in creating competitive advantage [17-29]. In fact, the current study is drawn by a key question on the mediating role of sustainable dynamic capabilities in the effect of social customer relationship management on sustainable competitive advantage. Consequently, this study aims at investigating the impact of s-CRM on sustainable competitive advantage through sustainable dynamic capabilities. The importance of carrying out such a study lies in its contribution to both scholars and managers of SMEs in developing countries. It was noted that small size firms use social media to communicate with customers more than large firms. In Nigeria, SMEs' contribution to the gross domestic product (GDP) is relatively about 33%, which initiates a significant call for a study on the impact of using social media platforms in SMEs to develop and manage effective relationships with customers. The study fulfills a considerable research gap on the impact of s-CRM on sustainable competitive advantage and the mediating part of sustainable dynamic capabilities between these two constructs. Moreover, the study instructs the managers of SMEs how to direct s-CRM to gain a sustained competitive advantage [30-43].

2.0 LITERATURE REVIEW

CRM refers to one-way method used by firms to communicate with their customers while s-CRM is a two-way approach employed to boost strong relationships with customers using social media networks, hence, s-CRM represents an integration between CRM and social media. Definitions of s-CRM accentuate elements such as social media platforms (e.g., Facebook, YouTube, LinkedIn, Twitter), information, ideas, photos, and news sharing, customer cooperative conversations, real-time sensing of customer perspectives, firms' connection to new customers, and firms' efforts to retain current customers. Benefits of using s-CRM encompass boosting brand visibility, customer loyalty, firm performance, firm image and reputation, customer engagement, innovation through customer involvement. Measurements of s-CRM cover issues such as information generation, information dissemination, and responsiveness. Examples of these items include using social media to accomplish market research, detect changes in customer preferences, discussions of customer future requirements, assessment of customer satisfaction, track customer changing needs. Moreover, s-CRM can be evaluated based on factors such as customer social media data, customer-oriented relationships, and customer communications. Research on s-CRM comprises numerous industries to achieve different objectives such as determining its effect on customer satisfaction and retention, customer loyalty and empowerment, the actual use of s-CRM in firms, s-CRM adoption in SMEs. In Nigeria, the majority of previous works are interested in CRM rather than s-CRM. Examples of studies on CRM take in critical success factors of implementing CRM, CRM adoption, the impact of CRM on hospitals performance, and on s-CRM embrace investigating the relevance of s-CRM for business processes in tourism industry, exploring the effect of s-CRM on customer purchase intention, as well as s-CRM adoption [1-13].

Organizational capabilities can be divided into two types: ordinary capabilities and dynamic capabilities. The first type refers to capabilities that enable a firm to carry out its current operations, while the second one, which changes the first one, refers to capabilities that enable a firm to change through sensing and seizing new business opportunities. Dynamic capabilities have been defined as "the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments". It was also defined as "the capacity of an organization to purposefully create, extend, and modify its resource base. The resource base includes the tangible, intangible, and human assets or resources, as well as capabilities which the organization owns, controls, or has access to on a preferential basis". In terms of dynamic capabilities measurements, these dynamic capabilities can be measured using four types of data related to managers' evaluations, financial data, a firm's experience, actions, and performance, as well as managers and employees' experience, actions, and performance. Sustainable dynamic capability has been defined as "the set of sustainability-focused

capabilities sufficiently dynamic to renew, revise, and adapt according to the requirements of the ever business environment". Such capabilities refer to those used to adjust the business environment or help firms to adapt to unexpected changes. Sustainable dynamic capabilities are created if these capabilities meet at least one of these two conditions, i.e., to origin change or to support the firm to adapt to unexpected changes. These sustainable capabilities are measured based on items related to five factors: (1) cross-functional integration among functional departments to share information on competitors' movements, customer needs, (2) employees shared vision on how to gain and use organizational resources to create sustainable practices, (3) technology sensing to be aware of technology advancements, (4) organizational learning in terms of information acquiring, processing, and using on issues such as changing customer requirements, and (6) relationship building with customers, suppliers and other stakeholders [14-29].

Attainment of competitive advantage as a fundamental goal of strategic management refers to exceeding competitors in terms of decisions on resources and capabilities allocation to achieve the intended goals. Maintaining such an advantage for a long time renders it into sustained competitive advantage. Sustainable competitive advantage has been measured using numerous items related to a firm's superior quality, its differentiated and advanced services and products, value offered to customers in comparison with competitors. Other studies assessed sustainable competitive advantage using items on availability of the required resources, and firms' ability to develop inimitable resources, and items on collecting market information to deal with high-risk problems and to develop new projects, in addition to gathering customer information to improve products or market strategy, or items related to employee creativity, flexibility, and concern for quality. Sustainable competitive advantage has been conceptualized in terms of responsiveness to customer needs, efficiency, and superiority in quality and innovation. Research on sustainable competitive advantage was largely concerned with investigating the factors that exert significant effects on such a construct. Examples of prior works include the effect of social and technological challenges, high-performance work practices, market innovation, technological capabilities, green innovation strategy, and strategic human resource practices, big data capability, human resource strategies on sustainable competitive advantage. On the other hand, some studies explored how firms can achieve a competitive advantage through CRM, CRM as a source of sustainable competitive advantage, the role of CRM and innovation in improving a firm competitive advantage. However, there is a need to examine the effect of s-CRM on sustainable competitive advantage [30-43].

3.0 RESEARCH METHODOLOGY

In line with the assumptions of the RBV, tangible and intangible resources are critical factors to achieve sustainable competitive advantage. These resources should be VARIN, i.e., valuable, rare, inimitable, and non-substitutable. The RBV explains how firms transform their unique resources and capabilities into new functions that will assist firms to develop SCA. Firms' relational capital (e.g., social capital) has been deemed as a pivotal resource in gaining a sustainable competitive advantage. In this regard, the researchers defined social capital as social relationships with customers, firms, and other stakeholders. Hence, s-CRM represents a crucial factor for firms to form sustainable competitive advantage. Despite these results, further investigations are required to clarify how firms can form sustainable competitive advantage through relational capital. That is why the following hypothesis was proposed: Hypothesis 1 (H1). S-CRM significantly predicts sustainable competitive advantage.

A key point from which one can initiate a link between s-CRM and sustainable dynamic capabilities is the intersection where these two constructs are met. On the one hand, the presence of sustainable dynamic capabilities in a firm can be assessed on the basis of the ability to use its resources and capabilities to change its current status quo or to cope with changing environments or in other words to adapt to unexpected changes. These arguments are in line with the current assumption of the RBV, in other words, the dynamic resource-based view. A firm shows such an ability through building relationships with its stakeholders such as customers, learning how to collect, process, and use customers' information to address their changing requirements, as well as using its resources in a sustainable fashion. On the other hand, s-CRM assists firms with the help of social media platforms and data to detect changes in customer present needs and explore their future preferences. Hence, it is noted that s-CRM supports a firm's ability to develop its own sustainable dynamic capabilities, which are, according to the resource-based view, critical factors required to facilitate SMEs success. In order

to investigate the effect of s-CRM on sustainable dynamic capabilities using the current research data, it was hypothesized that: Hypothesis 2 (H2). S-CRM significantly predicts of sustainable dynamic capabilities.

The dynamic capabilities framework developed which consists of three key elements: resources, capabilities, and strategies. Resources that are critical for creating sustainable competitive advantage should be VARIN resources, i.e., valuable, rare, imperfectly imitable, and non-substitutable. The RBV assumes that firms' resources and capabilities are pivotal foundations for firms' competitive advantage. A significant vein of the literature regarded these sustainable dynamic capabilities as a direct source of firm competitive advantage while another vein argues that such capabilities have an indirect effect on competitive advantage through other capabilities such as capabilities of research and development, and capabilities of making strategic decisions. The dominant vein is the first one in which sustainable dynamic capabilities were positively linked to sustainable competitive advantage. Sustainable dynamic capabilities enable firms to respond to customer changing demands and, therefore, improve their sustainable performance, as firms can benefit from their dynamic capabilities to create a competitive advantage. Thus, it was deduced that: Hypothesis 3 (H3). Sustainable dynamic capabilities significantly predict sustainable competitive advantage.

The key benefits of s-CRM such as building strong relationships with customers and elevating a firm's performance in line with the core functions of SDCs such as enabling firms to adapt to the requirements of business environment, lift firms' SCA in terms of their competencies to provide differentiated products and services. In this regard, SDCs work as a bridge between s-CRM and SCA, that is, s-CRM equips SDCs with the required information to sense and seize business opportunities and SDCs enable the firms to add value to their customers. On the basis of the RBV, both s-CRM and SDCs are integrated to produce new capabilities. Therefore, it was expected that SDCs play an intervening part in the relationship between s-CRM and SCA. Scholars indicate that s-CRM strengthens the firm's ability to track, detect, and meet customer needs, which means that s-CRM supports the formation of sustainable dynamic capabilities, which in turn results in sustainable competitive advantage. So, it was thought that the effect of s-CRM on SDA is mediated by SDCs as stated in the following hypothesis: Hypothesis 4 (H4). Sustainable dynamic capabilities significantly mediate the effect of s-CRM on sustainable competitive advantage.

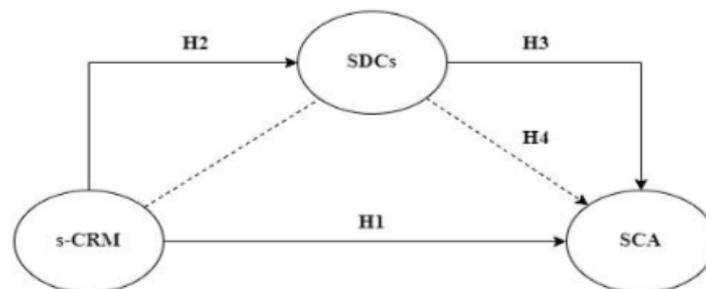


Figure 1. Research conceptual model

4.0 RESULT

A scalable measure based on Likert's 5-point design was developed to measure re- search variables. First, s-CRM was evaluated using six items following. Sustainable dynamic capabilities were measured by four items adopted from previous works. Moreover, five items were adapted from prior studies to assess sustainable competitive Smart PLS 3.0 software was used to analyze research data. According to, PLS-SEM does not need normally distributed data and has a higher statistical power. Validity was measured based on convergent validity; discriminant validity was measured using factor loadings (FL); the average variance extracted (AVE) was measured to assess convergent validity; and the Heterotrait–Monotrait (HTMT) ratio was measured to test discriminant validity. AVE values should be higher than 0.50 and HTMT values should be less than 0.85. On the other hand, reliability was evaluated on the basis of Cronbach's alpha coefficients (α) and composite reliability (CR). The values of these two

indices should be higher than 0.70. The results in Table 1 show acceptable values of both validity and reliability indices, i.e., factor loadings are higher than 0.50, AVE value are above 0.60, HTMT values are below 0.85, alpha coefficients and CR value are more than 0.70.

Table 1. Results of validity and reliability.

Variables	Items	Convergent Validity		Discriminant Validity (HTMT)			Reliability	
		FL	AVE	s-CRM	SDCs	SCA	α	CR
s-CRM	SCRM1	0.886	0.675	-	-	-	0.90	0.93
	SCRM2	0.862						
	SCRM3	0.800						
	SCRM4	0.813						
	SCRM5	0.784						
	SCRM6	0.778						
SDCs	SDC1	0.867	0.794	0.274	-	-	0.91	0.94
	SDC2	0.890						
	SDC3	0.900						
	SDC4	0.905						
SCA	SCA1	0.878	0.682	0.302	0.300	-	0.89	0.91
	SCA2	0.866						
	SCA3	0.698						
	SCA4	0.841						
	SCA5	0.834						

Four indices were used as indicators of the structural model fit. These indices are: The standardized root mean square residual (SRMR), squared Euclidean distance (d_ULS) and Geodesic distance (d_G) d_ULS, d_G, and the normed fit index (NFI). The recommended cut-off values of these indices are: SRMR should be less than 0.1, values of d_ULS and d_G should be more than 0.05, and NFI value should be higher than 0.80 [75]. The results in Table 2 display acceptable values of model fit indices.

Table 2. Results of structural model fit.

Criteria	SRMR	d_ULS	d_G	NFI
Recommended value	Less than 0.10	Higher than 0.05	Higher than 0.05	Higher than 0.80
Estimated value	0.070	0.595	0.381	0.789

Figure 2 depicts the structural model that was used to test research hypotheses. It shows in line with the results in Table 3 that s-CRM is a significant predictor of sustainable competitive advantage ($\beta = 0.224, p = 0.003$), and is also a significant predictor of sustainable dynamic capabilities ($\beta = 0.254, p = 0.004$), which in turn exerts a significant effect on sustainable competitive advantage ($\beta = 0.234, p = 0.006$).

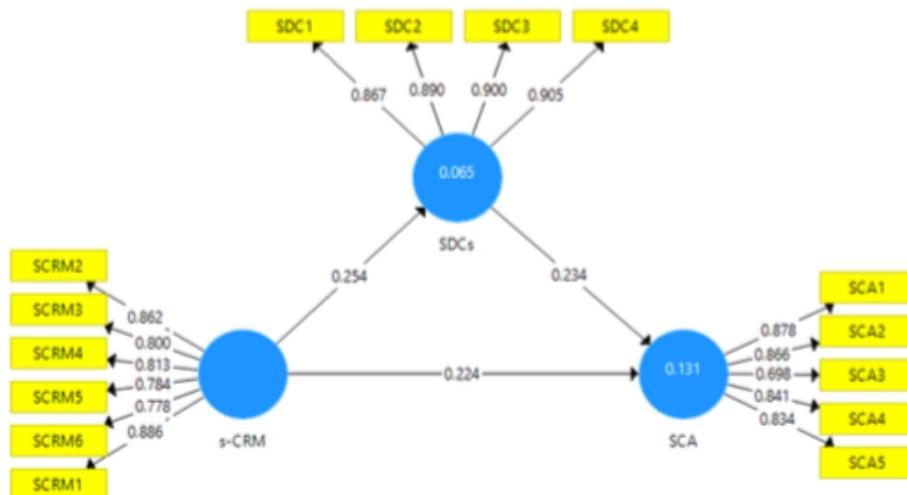


Figure 2. research structural model

Table 3. Result of hypothesis

Research Hypotheses				f Square	Direct Effects		Indirect Effects		Confidence Intervals			
					β	<i>p</i>	β	<i>p</i>	2.5%	97.5%		
H1	s-CRM	→	SCA	0.054	0.224	0.003	-	-	0.058	0.398		
H2	s-CRM	→	SDCs	0.069	0.254	0.004	-	-	0.087	0.435		
H3	SDCs	→	SCA	0.059	0.234	0.006	-	-	0.079	0.384		
H4	s-CRM	→	SDCs	→	SCA	-	-	-	0.059	0.040	0.012	0.117

R-square (SCA) = 0.131, R-square (SDCs) = 0.065.

5.0 CONCLUSION

The current study investigated the mediating role of sustainable dynamic capabilities in the effect of s-CRM on sustainable competitive advantage and confirmed such a mediating role. Based on this result it was concluded that firms can form and sustain their competitive advantage through using social customer relationship management and building their own sustainable dynamic capabilities, which means that sustainability can be achieved using both tangible and intangible assets. For the current study, intangible assets such as social capital and dynamic capabilities are important resources for sustainability. Theoretically, this study has three theoretical implications. First, the study investigated the effect of s-CRM on both sustainable dynamic capabilities and hence fills a research gap in this context. No previous works were found on the effect of s-CRM on sustainable dynamic capacities. Second, the study provided empirical evidence on the importance of s-CRM in sustaining both dynamic capabilities and competitive advantage. Third, the study elaborates the importance of the integration between firms' sustainable dynamic capabilities and s-CRM to develop sustainable competitive advantage. Therefore, the study adds empirical evidence to the assumptions of the RBV about the integration of firms' resources and dynamic capabilities to foster competitiveness. These results call researchers for further investigations. Empirically, the study highlights the importance of s-CRM in sustaining a firm's competitive advantage as well as the importance of sustainable dynamic capabilities to achieve the same goal. Therefore, managers of SMEs in Nigeria are informed that taking a significant position in a competitive market requires sustainable resources and capabilities such as social customer relationship management as a key ingredient of the firm's social capital, as well as sustainable dynamic capabilities such as the ability to sense and seize business opportunities and threats. It should be noted that s-CRM and sustainable dynamic capabilities can be used as major resources to develop sustainable competitive advantage. Furthermore, managers of SMEs in other adjacent countries can benefit from sustainability as a comprehensive system to develop sustainable inputs such as sustainable capabilities to produce sustainable outputs such as sustainable competitive advantage. Along with the lines of the RBV, SMEs should increase their investments in CRM.

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