

An Examination of Customer Relationship Management and Business Sustainability in Small and Medium Enterprises

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ABSTRACT

The aim of this paper was to investigate the impact of customer relationship management (CRM) dimensions on business sustainability in small and medium enterprises (SMEs). A quantitative research approach was employed for data collection and fulfilling the objective of this study. In particular, the data was gathered through a survey instrument from 183 employees of SMEs in Saudi Arabia. The obtained responses were analyzed using the partial least square approach (PLS-SEM). The outcomes showed that customer orientation and CRM organization have significant positive effects on business sustainability. The results also verified that CRM technology and knowledge management play important roles in affecting business sustainability. These findings confirm the importance of customer relationship management and its dimensions in enabling firms to sustain their businesses and thrive in today's changing business environment.

KEYWORDS

Business Sustainability, CRM Organization, Customer Orientation, Customer Relationship Management, Knowledge Management, Technology-Based CRM

1. INTRODUCTION

The growing competition among organizations has urged them to create successful relationships with their customers in an attempt to reach their desired objectives and sustain themselves on the long term. CRM has been viewed as a key strategy for acquiring and maintaining profitable customers. It focuses on fostering strong relationships with them by delivering the desired value that meets or exceeds their expectations (Hanaysha & Al-Shaikh, 2021). It was conceptualized by Grönroos (2007) as a process of managing the entire relationships between a company and its customers through numerous communication platforms and channels. The primary aim of CRM involves focusing on the right group of customers by offering them the desired products or services via traditional as well as digital marketing channels (Swift, 2001); and obtaining loyalty from them in return (AlQershi et al., 2020; Ryals & Payne, 2001). CRM is mainly directed towards connecting with customers

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through various means by updating them about the offerings of a company from time to time and communicating the benefits of selecting their brands over those of rivals (Sigala, 2018). It is also employed by several firms for improving the share of less profitable customers by offering them various marketing incentives (Marino & Presti, 2018). The rationale of CRM is built upon the fact that creating good relationships with customers represents the right approach for maintaining and growing a business. Zeithaml et al. (1996) indicated that customers who are loyal to a company or a brand tend to be more profitable than non-loyal ones.

Earlier studies (Dewnarain et al., 2019; Gholami et al., 2020; Gil-Gomez et al., 2020; Rapp et al., 2010) considered CRM as one of the most significant tools to obtain a long-term competitive advantage. CRM strengthens the capabilities of marketers by providing them with valuable information about existing and potential customers, which are necessary for both employees and their managers to attain particular marketing objectives in an effective manner (Mohammed et al., 2017). Thus, establishing robust relationships with key customers and managing them persistently has become the main focus for several organizations. Khosravifar et al. (2012) specified that the effective implementation of CRM depends on collecting important customer information before making marketing decisions. They added that this process requires continuous engagement with different types of customers and motivating them to share their experiences and expectations about a company's offerings and service efficiency to solve any existing issues and increase their satisfaction. Furthermore, efficient CRM implementation occurs through understanding customers' needs and meeting them better than the competitors (Lambert, 2010). The key challenge in CRM appears through the ability to detect and track customers who are profitable, besides satisfying and retaining them on the long term (Boulding et al., 2005; Marino & Presti, 2018). This argument was supported by Chen and Popovich (2003) who outlined that sustaining customer relationships represents a key challenge for businesses and requires the service providers to continuously deliver superior customer value.

Gil-Gomez et al. (2020) revealed that using CRM can improve the process of sustainability implementation within a firm. Moreover, the involvement in sustainable practices improves consumers' perceptions about the brand (Vesal et al., 2020). The concepts of sustainability and sustainable development are based on adopting practices and strategies that aim to address environmental, economic, and social factors for business development. These factors have been recognized as the 'three pillars of sustainability' or in other words, the 'triple bottom line' (Caldicott et al., 2020; Dhahri and Omri, 2018; Anvari and Turkay, 2017). In the environmental approach, sustainability is achieved by small and medium-sized enterprises (SMEs) when they adopt informal approaches that signify waste management and focus on development programmes (Siegel et al., 2019). Additionally, the social approach emphasizes on community engagement programs that create a positive impact on the organisation's success in implementing social practices (Theyel and Hofmann, 2012; Welcomer, 2011). Firms can also achieve sustainability objectives when they keep worthy economic relations among other enterprises, and focus on collaborations that matter to businesses survival (Moore and Manring, 2009).

However, the current literature portrays that the empirical studies on customer relationship management have mainly focused on examining its effect on firm performance and consumer behavior. It is rare to find an empirical study that explored the linkages between the dimensions of CRM and business sustainability. This was confirmed by Müller (2014) who indicated that there is a scarce empirical research on customer relationship management and business sustainability. Moreover, Abbas and Sağsan (2019) stated that there is insufficient attention been paid to verifying the role of knowledge management (a dimensions of CRM) in determining business sustainability. Besides that, little research exists on CRM and business sustainability in the Middle East region. In relation to the above gaps in the empirical literature on this topic, this research focuses on testing the impact CRM dimensions on business sustainability in SMEs in Saudi Arabia. It is expected that the outcomes of this paper would provide a prime help to the SMEs in different industry contexts in Saudi Arabia for finding appropriate solutions to withstand and proliferates their businesses. The following sections

present the literature review on CRM dimensions and business sustainability, methodology employed for data collection, results, discussion and conclusion, and finally the limitations and directions for future research are presented.

2. LITERATURE REVIEW

2.1 Business Sustainability

The significance of sustainability for the advancement of a society urges firms to put extra efforts that enable them to continue with their boundless struggles to retain or reinforce their competitive advantages and, in the meantime to be responsible for the enhancement of environmental as well as social wellbeing (Rao, 2000). According to the World Commission on Environment and Development (1987), sustainability can be conceptualized as the development that fulfills the needs of current generations without compromising the future generations' abilities to fulfill their specific needs. Business sustainability was also defined by Svensson et al. (2016) as the activities of a firm that focus on managing the impact of its business on the life and eco-systems of the earth and its entire network of business. Overall, business sustainability refers to the ability of a firm to manage and fulfil social, economic, and environmental demands and interests of business stakeholders for the purpose of ensuring ethical, responsible, and enduring success. Savitz (2013) added that sustainability provides various benefits for business stakeholders, enhance a society's quality of life, and ensures continuous environmental protection. Moreover, Hult (2011) considered sustainability as a strategic resource that allows firms to obtain competitive advantages and improve their performance.

Sustainability was generally viewed in the prior literature as the ability of a business to survive and maintain its growth on the long term (Starik & Rands, 1995). In today's environment which is characterized by globalization and growing rivalry, firms cannot merely focus on economic aspects for maximizing profit margins, but they should also consider the impact of their business activities on environmental and social facets as well (Fischer et al., 2020). This is because fulfilling the social, environmental and economic objectives tends to provide a firm with several benefits and a competitive advantage (Kwarteng et al., 2016). Firms which focus on sustainable business practices put higher priorities to the application of environmental values and ensure their social responsibility in the entire decision making process (Hanaysha, Al-Shaikh, Joghee, & Alzoubi, 2021). Overall, the ability to meet economic, social, and environmental goals represents the key foundation of corporate sustainability (Kristensen & Mosgaard, 2020; Svensson & Wagner, 2015).

Different dimensions of business sustainability were identified in the prior studies. However, there is a general agreement that environmental, social and the economic dimensions can be used to comprehensively measure and assess business sustainability (Khan & Quaddus, 2015). This study also relies on the aforementioned dimensions to measure business sustainability. Hill (2001) described economic sustainability as a firm's ability to make profits, increase its sales and minimize the costs of operations. On the other hand, Dyllick and Hockerts (2002) referred social sustainability to the ability of a firm to make some contributions to the society. Guerrero-Villegas et al. (2018) also indicated that social sustainability focuses on enriching the relationship between the firm and the society in which it operates, in addition to promoting human welfare through knowing their distinct needs. Moreover, environmental sustainability as defined by Melville (2010) exists when a firm takes into consideration the preservation of natural resources during its operational activities. The environmental dimension of sustainability emphasizes on conserving the natural environment, avoiding air and water pollutions, consuming less natural resources (especially the non-renewable ones), producing recyclable and environmental-friendly goods, and minimizing liquid emissions and dangerous gases (Lucas, 2010). A truly sustainable business concurrently considers all of these three aspects (Sivarajah et al., 2020). In effect, several firms undertake sustainability practices in an attempt to satisfy economic, social, and environmental needs, and to safeguard their long-term success.

2.2 Customer Relationship Management

CRM can be seen as a strategic tool that enables a firm to clearly understand the needs and expectations of its customers through their historical purchases and brand preferences which can therefore be used as a means in facilitating organizational plans for the long term (Ullah & Narain, 2020). CRM strategy was described by Parvatiyar and Sheth (2001) as the process of obtaining, maintaining, and collaborating with profitable customers to create greater value for them and to the firm. It focuses on integrating various marketing activities (e.g. sales and customer service) with the organization's functions of supply chain to attain better efficiencies and effectiveness in the delivery process of customer value. CRM was also defined by Reinhold and Alt (2012) as a technology-based process that allows the service providers to obtain important customers' information regarding their needs and then fulfill them in an attempt to cultivate successful relationships. Moreover, CRM was emphasized in the literature as a philosophy which is grounded on the assumptions that creating a long term relationship with key customers represents the foundation for brand loyalty and customer satisfaction (Moudud-Ul-Huq et al., 2021; Minami & Dawson, 2008). Hence, the service providers must clearly comprehend the diverse needs and expectations of business customers in order to offer them the right products, service and information via different communication channels (Soltani & Navimipour, 2016).

Based on the theoretical perspective of resource based view (RBV), focusing on customers in CRM strategy permits organizations to sustain their competitive advantages through establishing successful customer relationships. Prior researches confirmed that building strong relationships with customers can improve their lifetime values (Chae & Ko, 2016); brand satisfaction (Mithas et al., 2005; Santouridis & Veraki, 2017), and behavioural loyalty on the long-term (Nyadzayo, & Khajehzadeh, 2016). Through effective CRM implementation, firms tend to have better capabilities to react to the external business environment, including opportunities and emerging competition (Buttle, & Maklan, 2019; Roggeveen & Beitelspacher, 2019). Such improvement in the capabilities enables firms to learn about underlying customer needs, which would as a result allow them to reduce costs, augment service delivery, and strengthen the success of new products (Lim et al., 2017; Yang et al., 2020). According to Müller (2014), effective management of CRM represents the basis for sustainable business growth and enables a company to survive and prosper in times characterized by uncertainty. Moreover, Tollin et al. (2015) considered CRM as the main prerequisite for achieving business sustainability, because it connects the firm with its stakeholders and enable it to communicate sustainability efforts. Consequently, protecting and investing in customers has been acknowledged as the foundation for business sustainability.

The marketing literature showed that CRM effectiveness can be assessed based on a set of dimensions. However, most of the previous studies integrated four comprehensive behavioural dimensions for testing CRM. The dimensions include: customer orientation, CRM organization, technology-based CRM, and knowledge management. Sin et al. (2006) stated that these dimensions should be integrated systematically in order to ensure continuous improvement in business performance. For that reason, consistent with the current literature, this study focuses on the above stated dimensions to measure CRM in small and medium enterprises. These elements are mainly linked to people, process and strategy, and technology which together can be used to measure CRM effectiveness (Mohammed et al., 2013). In the next sections, the literature review for each dimensions and its association with business sustainability based on previous research findings is presented.

2.2.1 Customer Orientation

Customer orientation has received a noteworthy attention in prior studies. It posits that a firm's success depends on its ability in understanding and anticipating customers' requirements and needs, and then acting upon them accordingly (Hanaysha & Mehmood, 2022). Cai (2009) defined customer orientation as a set of organizational activities, attitudes, and behaviours which put higher priority on meeting the needs and desires of customers' and constantly delivering greater value for them over rivals. It is mainly directed towards prioritizing customers' interests and focusing on them in

formulating business strategies (Chen & Popovich, 2003; Lambert, 2010; McEachern & Warranty, 2005). According to Kim (2008), the ineffective implementation of CRM is reflected through the inability to exhibit customer orientation. As organizations experience stiff competition in today's business environment, it has been acknowledged that fostering strong customer relationships is the cornerstone for the sustainability of revenue growth and profit maximization. Therefore, customer orientation should be maintained throughout the CRM system in order to stay up to market expectations and respond to the changing needs in a timely manner (Lin et al., 2006; Ryals & Payne, 2001). Firms can connect with customers through social media sites and internet technologies to interact and engage with them for learning about their purchase behaviors and resolving existing issues. By displaying a customer-oriented culture among employees in the organization and serving customers in the best way via a unified system, firms can engender customer value and face emerging challenges (Soltani & Navimipour, 2016).

For several organizations, interacting with customers represents an important source of knowledge (Rowley & Moldoveanu, 2003). By understanding and fulfilling the needs of customers, firms are not merely meeting their profitability goals, but also the social ones (Gelhard & von Delft, 2016). Consequently, the orientation towards customers in target markets by considering them as the external stakeholders of the firm has a considerable impact on business sustainability and growth (Gelhard & von Delft, 2016). Lee et al. (2020) demonstrated that through obtaining important insights about external environment and being customer oriented, firms can secure competitive advantages and fulfill corporate sustainability objectives. Moreover, Banker et al. (2014) confirmed that the financial performance of a firm can be sustained when its process and resources constantly create value for customers. These views were supported by Lee and Kim (2019) who verified that market orientation was positively associated with business sustainability. Based on the presented literature review, the first hypothesis is projected:

H1: Customer orientation has a positive impact on business sustainability.

2.2.2 Knowledge Management

Knowledge management can be defined as the process of identifying, arranging, maintaining and disseminating employees' experiences and knowledge within a firm. The key purpose of knowledge management is to increase the firm's efficiency by storing the knowledge within its system. According to Halljin and Marnburg (2008), the competitive advantage can be built by a firm when it explores the knowledge about customers through utilizing sophisticated technologies and then disseminating this knowledge to the concerned employees. Previous studies revealed that customers' knowledge and information enable the service providers to cultivate cooperative relationships with customers which would ultimately enhance business performance outcomes (Liao & Chen, 2004; Sofi et al., 2020; Tseng & Wu, 2014). Moreover, through effective knowledge management, firms can match their offerings with market needs on the basis of customer data (Sigala, 2005) to develop reciprocal relationships on the long term (Fan & Ku, 2010). Nambisan and Baron (2007) stated that customers' database can be obtained through continuous engagement with them using various communication platforms within the firm. Accordingly, effective knowledge management can enable a firm to successfully create healthier customer relationships which will eventually lead to favourable business performance.

Knowledge is one of most valuable organizational intangible assets and has a significant impact on the failure or success of any business (Abbas & Sağsan, 2019). The usage of knowledge management can promote sustainability via its main activities and processes. Martins et al. (2019) indicated that knowledge management can be used by firms for ensuring sustainable development practices. The primary purpose of knowledge management is directed towards constructing and using knowledge assets in a sustainable way by considering the social, economic, and environmental facets (Lim et al., 2017). Above all, learning organizations emphasize on integrating the strategies of knowledge

management with overall business strategies in an attempt to achieve the three aspects of sustainability (Abbas & Sağsan, 2019). Shahzad et al., (2020) found that organizational knowledge had a positive influence on environmental performance. They added that knowledge management can reinforce corporate sustainability with the help of knowledge staffs. These views were verified by Posch, Scholz, and Steiner (2006) who indicated that continuous training and learning, and ability to apply the knowledge had significant impacts on organizational sustainable development. Moreover, Yusoff et al. (2019) regarded human capital as an important factor for achieving sustainability. In particular, an enriched knowledge about customers' needs and expectation carries significant implications for improving business process and brand loyalty, which represent fundamental priorities for the competitiveness of a firm (Easa, 2019; Lambert, 2010). In accordance with the discussion presented herein, the second hypothesis is suggested as follows:

H2: Knowledge management has a positive effect on business sustainability.

2.2.3 CRM Organization

The strategy of CRM organization is directed towards collecting, searching, storing consumer data in the firm's database system, and sharing them with the entire departments for ultimately using them to establish a customized customer experience and favourable brand impression (Yim et al., 2013; Sigala & Connolly, 2004). Through effective CRM implementation in all organizational units, firms can increase their performance and eventually safeguard the survival of their businesses on the long-term (Wu & Li, 2011). According to Rahimi (2017), a customer centric approach should be maintained across different industry contexts and implemented in all organizational department to ensure consistency of purpose and meeting expected outcomes. Prior researches showed that creating an appropriate work environment, using contemporary equipment and tools, and installing a tracking system represent the foundation for business efficiency and continued growth (Sofi et al., 2020; Mechinda & Patterson, 2011). Sheth et al. (2011) also stated that maintaining a customer-oriented culture among the service providers of an organization requires creating an adequate work environment, rewarding employees and motivating them to be empathetic to customers during the service delivery, using the modern technology and tools, eliciting inspirational leadership, and establishing systems for managing customers' complaints (Ma, 2004). For that reason, the role of employees has increasingly been viewed to be vital for CRM organization and successful implementation of CRM (Payne & Frow, 2006; Sofi et al., 2004). Nevertheless, in the prior literature, it is hard to find empirical studies which investigated the linkages between the CRM organization and business sustainability. Hence, the third hypothesis for this study is suggested as follows:

H3: CRM organization has a positive effect on business sustainability.

2.2.4 Technology-Based CRM

The capability of CRM technology signifies effective utilization of IT infrastructure and different information technology solutions for supporting customer relationships through managing and automating internal business operations in marketing, sales and service fields (Coltman, 2007; Dubey & Sangle, 2019; Swift, 2001). Most of the firms rely on a technology software for enhancing customer interactions and obtaining the desired information. A customer-centric approach aided by service instruments that has advanced technology can stimulate greater customer satisfaction and superior profits (Sheth et al., 2011; Pozza et al., 2018). The ultimate success of CRM technology depends prominently on the ability to master technological capabilities properly and making effective use of technology through bringing customers into the organizational system (Swift, 2001). Generally, the purpose of CRM systems is mainly centered on bringing IT into business processes in an attempt to allow the firm to easily attract new customers, maintain existing ones, and improve their loyalty

to safeguard business success on the long-term (Santouridis & Veraki, 2017). Buttle and Maklan (2019) stated that the effective implementation of CRM strategy is governed by the proper utilization of information technology to reach and satisfy customers. Thus, using the technology in marketing a company's products and services and interacting with customers has been deemed important to acquire the needed data about brand perceptions and then make appropriate decisions (Cao & Tian, 2020; Chang et al., 2010; Rapp et al., 2010).

Prior literature showed that the innovative usage of technology for organizational communications represents as an important mechanism for improving the efficiency and reducing operational costs. For instance, utilizing web technologies such as social media sites enable businesses to easily interact, engage, and work closely with their stakeholders in a timely manner (Sivarajah et al., 2020). Gil-Gomez et al. (2020) added that CRM technology should help the service providers to save time, lessen work effort, and minimize the usage of papers besides all types of resources to ensure their commitment to environmentally sustainable business practices. CRM technology seems to be a fundamental solution to lessen the environmental effect of business practices assuming that it can reduce the usage of papers and protect the planet (McKenzie & Liersch, 2011). Through CRM technology, firms can come up with new products or improve the current process that aid in saving the raw material, resources and energy, and create a harmony among the process of production, environment, and economic aspects (Fernando et al., 2019). Therefore, CRM technology has been viewed as a key driver for digital transformation and innovation of sustainable business models. Prior studies added that attaining a sustainable competitive advantage requires sufficient investment in technology because it represents the foremost important resource in any firm (Kaur & Kaur, 2016; Nam et al., 2019; Sheth et al., 2011), and it is a prerequisite element for a successful execution of CRM (Dubey & Sangle, 2019). Thus, the last hypothesis is suggested as follows:

H4: Technology-based CRM has a positive effect on business sustainability.

3. METHODOLOGY

The key objective of this research focuses on exploring CRM and business sustainability in SMEs' context. In general, this study employed a cross-sectional approach in which the data were collected using a structured quantitative survey to measure and verify the effect of CRM dimensions on business sustainability in small and medium enterprises. The population of the study included the employees of several SMEs in the Kingdom of Saudi Arabia from different industry contexts. Specifically, the SMEs which were selected to conduct this study included firms that are involved in different business sectors, for instance manufacturing, services, restaurants, wholesale, and retail. For ease of interpretation, they were classified into three categories; manufacturing, services, and trade. Before collecting required data, the targeted respondents were provided with a brief introduction about the objective of the research and assured of the confidentiality of their responses. To determine the appropriate sample size for the given population, the suggestions of Krejcie and Morgan (1970) were taken into consideration. Additionally, the analysis of data can be conducted using the partial least square approach (PLS-SEM) when the sample size of completed surveys reaches at least 100 (Reinartz et al., 2009). Overall, a total of 183 individuals agreed to participate in this research and returned the filled survey within the data collection period. Therefore, the stated assumptions were fulfilled because the valid responses as stated above are comprised of 183 samples from the managers and owners of several SMEs in Saudi Arabia.

The questionnaire for this research was designed by using simplified words in order to make it easy for respondents to comprehend it and motivate them for participation in data collection. The measurement items of all constructs were adapted from prior literature with minimal amendment to ensure their suitability for the SMEs' context. In detail, business sustainability which is comprised of three dimensions was measured based on a 12 items' scale that was previously tested by Khan

and Quaddus (2015). Specifically, environmental sustainability was measured by four items, and also economic sustainability was measured by four items. Additionally, social sustainability was measured through four items. The environmental sustainability dimension deals with the waste and operational emissions issues concerning the natural habitat. Moreover, the economic sustainability dimension focuses on the means of growing the firm’s revenue by minimizing the costs of input. Finally, the social sustainability dimension embodies the safety and health of the community along with initiatives towards local community.

Furthermore, the four dimensions of CRM were evaluated through a 20 items’ scale. Specifically, customer orientation was measured via five items, whereas knowledge management was measured through five items. Finally, CRM organization was measured by five items, and technology-based CRM was also measured via five items. These items were together taken from prior researches which validate and ensured adequate reliability for them (Akroush et al., 2011; Mohammad et al., 2013). A five-point Likert scale (ranging from “1-strongly disagree” to “5-strongly agree”) was employed for measuring respondents’ perceptions on business sustainability and CRM dimensions. To establish content validity and ensure the readability as well as clarity of questions, the designed questionnaire was presented to three academic experts and business practitioners. According to their suggestions, few amendments were incorporated in the final questionnaire. The obtained data was then analyzed using PLS-SEM in order to calculate the reliability and validity of measurement scales and test the proposed hypotheses.

4. ANALYSIS OF RESULTS

A total 183 surveys were filled and obtained from the respondents who agreed to take part in this research. The descriptive results as presented in Table 1 indicate that males represented 57.4 percent, while females accounted for 42.6 percent. It also shows that 43.7 percent of the participants were aged from 18 to 30 years, 38.8 percent were aged between 31 and 40 years, 14.2 percent came in

Table 1. Respondents' Profile

Category		Percent
Gender	Male	57.4
	Female	42.6
Age	18 to 30 years	43.7
	31 to 40 years	38.8
	41 to 50 years	14.2
	Greater than 50 years	3.3
Qualification	High School	9.8
	Diploma	27.3
	Undergraduate	56.8
	Postgraduate	6.1
Size of the Firm	Small	61.7
	Medium	38.3
Industry Classification	Manufacturing	12
	Services	42.6
	Trade	45.4

the age category of 41 to 50 years, and the rest (3.3 percent) were aged from 51 years and above. About 9.8 percent of the participants had a high school certificate, 27.3 percent had a diploma qualification, 56.8 had an undergraduate qualification, while only 6.1 had postgraduate certificate. Besides, the descriptive results indicated that the majority of the respondents are from small firms (61.7 percent), while 38.3 percent are from medium enterprises. Finally, manufacturing firms represented 12 percent of the total sample, while firms in service sector and trade represented 42.6 percent and 45.4 percent respectively.

In order to verify whether the common-method bias exists amongst the constructs, Harman's (1960) single factor along with CFA and collinearity test which was proposed by Kock and Lynn's (2012) were estimated. According to these authors, when the measurement items of a variable are forced for loading on a single factor, and the overall variance that is explained by that latent variable is registered at less than 50%, it provides an indication that the estimated model does not have a common method bias. Moreover, the VIFs concerning all items were recorded at lower than 3.4, which signifies that there is no evidence of pathological collinearity among the measurement scales (Podsakoff et al., 2003).

Reliability as well as validity analyses across all items were verified via the measurement model in PLS software. Table 2 displays that the values of Cronbach's alpha across the measurement items exceeded the threshold of 0.6, and this provides an indication that all scales met the reliability assumptions (Nunnally, 1978). In addition to that, the composite reliability for each of the dimensions of CRM and business sustainability constructs are greater than 0.7 (Hair et al., 2011), which provides further evidence of reliability among the items; therefore, the construct reliability is confirmed. However, to determine the convergent validity, average variance extracted (AVE) was estimated. According to Hair et al. (2011), AVE can be established when the values of each construct exceed 0.50. As it can be seen in Table 2, the values of AVE for all of the CRM dimensions and business sustainability are greater than 0.5, and this indicates that the convergent validity assumptions are confirmed. Finally, the redundancy among items was determined by testing the multicollinearity assumptions via the calculation of variance inflation factor (VIF). The analysis showed that the values of VIF for all constructs did not exceed 5, and this signifies that there is no multicollinearity issues among the variables (Hair et al., 2011).

In order to estimate the measurement model which includes the items of all constructs, the factor loadings were calculated using PLS algorithm. According to Hair et al. (2010), the acceptable value of factor loadings concerning each item in the measurement model is 0.5. Based on the analysis, certain items were eliminated from the model because their factor loading values were less than 0.5. Specifically, one item that measures the dependent variable (business sustainability) was removed owing to lower loading value. Correspondingly, two items that measure the CRM organization were also deleted because of lower loadings, while three items were retained. Moreover, one of the measurement items of customer orientation and another item of knowledge management were eliminated. Consequently, all of the residual items in the model attained satisfactory factor loadings values (Hair et al., 2010).

Furthermore, the procedure for evaluating the discriminant validity among constructs was done based on the suggestions of Fornell and Larcker (1981). This method necessitates that the AVE values for all constructs should be higher than the highest squared correlation with any other construct (Hair et al., 2014). As shown in Table 3, all of the CRM dimensions and business sustainability fulfilled this criterion. Another estimate of the validity among constructs was performed through the heterotrait–monotrait Ratio (HTMT), which parallels the disattenuated construct score creation. Using the threshold value (0.9), the findings verified that the assumptions of discriminant validity are not violated, and all the constructs met the stated criteria.

To test the hypothesis, the measurement model as well as structural model were estimated using Smart PLS-SEM. This was possible after achieving a good fit for the items in the estimated models. As displayed in Table 4, all of the hypotheses of this study are supported. Specifically, the

Table 2. CFA Analysis

Construct	Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Customer Relationship Management					
Customer Orientation	CO1	0.815	0.818	0.879	0.646
	CO2	0.798			
	CO3	0.784			
	CO4	0.817			
Knowledge Management	KM1	0.752	0.819	0.877	0.640
	KM2	0.765			
	KM3	0.823			
	KM4	0.856			
CRM Organization	CRMO1	0.673	0.645	0.790	0.559
	CRMO3	0.729			
	CRMO4	0.832			
Technology Based CRM	TBCRM1	0.788	0.85	0.891	0.620
	TBCRM2	0.773			
	TBCRM3	0.811			
	TBCRM4	0.784			
	TBCRM4	0.774			
Business Sustainability	ECS1	0.610	0.901	0.919	0.513
	ECS2	0.690			
	ECS3	0.500			
	ECS4	0.827			
	SS1	0.580			
	SS2	0.741			
	SS3	0.603			
	SS4	0.784			
	ENS1	0.858			
	ENS2	0.729			
	ENS3	0.854			

Table 3. Discriminant Validity

Construct	Business Sustainability	CRM Organization	Customer Orientation	Knowledge Management	Technology Based CRM
Business Sustainability	0.716				
CRM Organization	0.725	0.747			
Customer Orientation	0.559	0.507	0.803		
Knowledge Management	0.639	0.660	0.281	0.800	
Technology Based CRM	0.579	0.522	0.491	0.239	0.787

Table 4. Results of Hypotheses

	Hypothesis			Path Coeff.	Std. Dev.	t-value	P-Value
H1	Customer Orientation	→	Business Sustainability	0.203	0.087	2.339	0.020
H2	Knowledge Management	→	Business Sustainability	0.354	0.117	3.030	0.003
H3	CRM Organization	→	Business Sustainability	0.250	0.124	2.018	0.044
H4	Technology-Based CRM	→	Business Sustainability	0.265	0.090	2.938	0.003

results showed that customer orientation ($\beta = 0.203$, $t = 2.339$, $p < 0.05$) has a significant positive impact on business sustainability; therefore, H1 is supported. The statistical results also indicated that CRM organization ($\beta = 0.250$, $t = 2.014$, $p < 0.05$) has a significant positive impact on business sustainability; hence, H2 is confirmed. Moreover, the findings reveal that knowledge management exerts a significant positive impact ($\beta = 0.354$, $t = 3.030$, $p < 0.05$) on business sustainability, thus, H3 is accepted. Finally, the effect of technology-based CRM on business sustainability is positive and significant ($\beta = 0.265$, $t = 2.938$, $p < 0.05$), consequently, H4 is supported. On whole, all of the CRM dimensions collectively explain 67.5% of total variance in business sustainability.

5. DISCUSSION AND CONCLUSION

This study was conducted in an attempt to examine the direct effect of customer relationship management dimensions on business sustainability. The findings confirmed that customer orientation has a positive impact on business sustainability. The result was supported by Gross-Gołacka et al. (2020) who reported that achieving business sustainability necessitates firms to meet the requirements and expectations of stakeholders, including customers, suppliers, and the society at large. Gelhard and von Delft (2016) also confirmed that the orientation towards customers had a considerable impact on corporate sustainability. It is therefore suggested that firms should direct their resources towards satisfying the different needs and expectation of targeted group of customers in order to sustain their businesses and improve the social well-being. According to Fan and Ku (2010), successful organizations train and encourage their employees to deliver superior customer service in an attempt to improve their brand images and achieve greater performance results. Firms which put sufficient emphases on customers, conduct marketing research regularly in order to clearly comprehend their needs prior to producing any product or service. Additionally, customers nowadays are more empowered than before and tend to search carefully for products or services before purchasing them, compare between different brands, and select from those which provide them with greater values. As a result, customer oriented firms tend to achieve better performance outcomes.

Moreover, the finding indicated that knowledge management has a positive influence on business sustainability and it was confirmed by prior studies (Akram et al., 2018) which concluded that knowledge management is positively associated with corporate sustainability. Davenport et al. (2018) also stated that a learning organization places emphasis on integrating knowledge management strategies with the overall business strategies in an attempt to achieve all sustainability aspects. Greater support was seen in the study of Lopes et al. (2017) who outlined that companies should concentrate their efforts on innovation and knowledge management to create business sustainability. Rather than focusing mainly on providing customers with distinct benefits, service providers should also emphasize on understanding the different needs and expectation of their clients through marketing research and using this data for making better decisions (Kim et al., 2004). Therefore, the result of this research confirm the importance of knowledge management in determining business sustainability in small and medium enterprises. Additionally, business managers may employ knowledge management for

managing their operations and ensuring internal quality control as it may allow them to circulate valuable data about their target market which would assist them in making effective decisions (Fugate et al., 2009).

The findings of this study also verified that CRM organization acts as a critical source of business sustainability. Yim et al. (2004) contended that when a greater emphasis on important customers is embedded in the CRM system of a firm, the whole firm should be structured in a way that can ensure the cultivation of valuable customer relationships. Mohammad et al. (2013) added that in order to implement CRM successfully in an organization, organizational structure and process should be redesigned and aligned, all staff members should participate in the CRM process and the change needs to be planned accordingly. For instance, forming a group of teams for managing CRM practices might be fostered via effective coordination amongst organizational departments to collectively deliver consistent customer value. Each teams could represent various departments and include group of employees who focus on serving customers in the best way (Akroush et al., 2011; Cooper et al, 2008). Generally, the findings reveal that the key rationale for successfully organizing the entire company around CRM necessitates significant considerations of organizational structure, high commitment of organizational resources, and effective management of human resources to ensure the firm's commitment to sustainability.

Finally, the findings verified that technology-based CRM has a positive influence on business sustainability. Gil-Gomez et al. (2020); Shukla and Pattnaik (2019) stated that CRM technology plays an imperative role in increasing brand loyalty, which is considered as a key priority for ensuring a sustainable business model. According to Rapp et al. (2010), firms which successfully adopt CRM technology in their business operations are likely to have stronger marketing capabilities and maintain higher performance than their rivals. Moreover, using an up-to-date IT software and technological infrastructure enable service providers to achieve better economic performance (Bharadwaj, 2000; Santhanam & Hartono, 2003). The finding was supported by Sivarajah et al. (2020) who acknowledged that using the technology in an innovative way for communicating with business stakeholders represents an important means for improving organizational efficiency and reducing operational costs, which are important parameters for ensuring business sustainability. Through effective utilization of information technology, firms can automate customers' touch-points in order to get important data about them and interpret it for making the right decisions. In accordance with the above results, marketing managers in SMEs are recommended to use information technology to manage customer relationship and respond to growing rivalry.

6. LIMITATIONS AND FUTURE RESEARCH

Although this paper provided a significant contribution to theory and practice on CRM and business sustainability, there are some limitations that should be addressed in the future studies. Firstly, the main focus of this paper was only on SMEs sustainability in Saudi Arabia; thus, similar researches can be conducted independently into SMEs' sub-categories (small and medium enterprises) in an attempt to comprehend their relationships with each of the CRM dimensions. Secondly, the effect of CRM components on each of the business sustainability dimensions could be tested separately to obtain better insights about which sustainability element could be largely affected by the dimensions of CRM. Thirdly, this paper has investigated the selected variables in SMEs in general; therefore, future research can examine the current research model in other contexts. Moreover, this study followed the quantitative research design; consequently, future researches on this topic can rely on a qualitative approach or mixed method to obtain a greater understanding about the role of CRM dimensions in affecting business sustainability. Finally, the present research was conducted in one country (Saudi Arabia) and the findings may not be generalized to other regions. Therefore, the research model can be replicated in other countries to confirm the results and add to the body of literature on this topic.

7. IMPLICATIONS

This research contributes to the theoretical literature on CRM implementation in a developing market as most of the prior studies were conducted in western cultures. Moreover, it addressed the existing gaps in empirical studies on CRM and business sustainability in small and medium firms. The paper has specifically discussed the effect of four key elements of CRM, namely: customer orientation, technology-based CRM, CRM organization, and knowledge management on overall business sustainability. The results showed that these dimensions exert significant positive effects on SME sustainability. By exploring existing literature, it is hard to find empirical studies that examined the effect of the stated CRM dimensions on business sustainability. The findings also suggest that business practitioners in SMEs should employ CRM strategies in their business operations to obtain greater insights about their customers and be able to meet their needs and expectations better than competition. Through effective CRM implementation, it is believed that the decision makers in an organization can learn about emerging trends in target markets and would have better abilities to sustain their businesses on the long term. This process can be facilitated by putting customers' emphasis in the top priorities, using efficient system for knowledge management, disseminating and sharing organizational information among employees in all organizational units, and capitalizing on the technology to provide greater service value. The findings of this research carry significant implications for policy makers in small and medium and enterprises and recommend them to focus on CRM practices in order to sustain their businesses on the long term and achieve the desired objectives.

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REFERENCES

- Abbas, J., & Sağsan, M. (2019). Impact of knowledge management practices on green innovation and corporate sustainable development: A structural analysis. *Journal of Cleaner Production*, 229, 611–620. doi:10.1016/j.jclepro.2019.05.024
- Akram, M. S., Goraya, M., Malik, A., & Aljarallah, A. M. (2018). Organizational performance and sustainability: Exploring the roles of IT capabilities and knowledge management capabilities. *Sustainability*, 10(10), 1–20. doi:10.3390/su10103816
- Akroush, M. N., Dahiyat, S. E., Gharaibeh, H. S., & Abu-Lail, B. N. (2011). Customer relationship management implementation. *International Journal of Commerce and Management*, 21(2), 158–191. doi:10.1108/10569211111144355
- AlQershi, N. A., Mokhtar, S. S. M., & Abas, Z. B. (2020). CRM dimensions and performance of SMEs in Yemen: The moderating role of human capital. *Journal of Intellectual Capital*.
- Alt, R., & Reinhold, O. (2012). Social customer relationship management (Social CRM). *Business & Information Systems Engineering*, 4(5), 287–291. doi:10.1007/s12599-012-0225-5
- Anvari, S., & Turkay, M. (2017). The facility location problem from the perspective of triple bottom line accounting of sustainability. *International Journal of Production Research*, 55(21), 6266–6287. doi:10.1080/00207543.2017.1341064
- Banker, R. D., Mashruwala, R., & Tripathy, A. (2014). Does a differentiation strategy lead to more sustainable financial performance than a cost leadership strategy? *Management Decision*, 52(5), 872–896. doi:10.1108/MD-05-2013-0282
- Bharadwaj, A. S. (2000). A Resource-Based Perspective on Information Technology Capability and Firm Performance: An Empirical Investigation. *Management Information Systems Quarterly*, 24(1), 169–196. doi:10.2307/3250983
- Boulding, W., Staelin, R., Ehret, M., & Johnston, W. J. (2005). A customer relationship management roadmap: What is known, potential pitfalls, and where to go. *Journal of Marketing*, 69(4), 155–166. doi:10.1509/jmkg.2005.69.4.155
- Buttle, F., & Maklan, S. (2019). *Customer relationship management: concepts and technologies* (4th ed.). Routledge. doi:10.4324/9781351016551
- Cai, S. (2009). The importance of customer focus for organizational performance: A study of Chinese companies. *International Journal of Quality & Reliability Management*, 26(4), 369–379. doi:10.1108/02656710910950351
- Caldicott, R. W., von der Heidt, T., Scherrer, P., Muschter, S., & Canosa, A. (2020). Airbnb—exploring triple bottom line impacts on community. *International Journal of Culture, Tourism and Hospitality Research*, 14(2), 205–223. doi:10.1108/IJCTHR-07-2019-0134
- Cao, G., & Tian, N. (2020). Enhancing customer-linking marketing capabilities using marketing analytics. *Journal of Business and Industrial Marketing*, 35(7), 1189–1199. doi:10.1108/JBIM-09-2019-0407
- Chae, H., & Ko, E. (2016). Customer social participation in the social networking services and its impact upon the customer equity of global fashion brands. *Journal of Business Research*, 69(9), 3804–3812. doi:10.1016/j.jbusres.2015.12.072
- Chang, W., Park, J. E., & Chaib, S. (2010). How does CRM technology transform into organizational performance? A mediating role of marketing capability. *Journal of Business Research*, 63(8), 849–855. doi:10.1016/j.jbusres.2009.07.003
- Chen, I. J., & Popovich, K. (2003). Understanding customer relationship management (CRM). *Business Process Management Journal*, 9(5), 672–688. doi:10.1108/14637150310496758
- Coltman, T. (2007). Why build a customer relationship management capability? *The Journal of Strategic Information Systems*, 16(3), 301–320. doi:10.1016/j.jsis.2007.05.001

- Davenport, M., Delpont, M., Blignaut, J. N., Hichert, T., & Van der Burgh, G. (2019). Combining theory and wisdom in pragmatic, scenario-based decision support for sustainable development. *Journal of Environmental Planning and Management*, 62(4), 692–716. doi:10.1080/09640568.2018.1428185
- Dewnarain, S., Ramkissoon, H., & Mavondo, F. (2019). Social customer relationship management: An integrated conceptual framework. *Journal of Hospitality Marketing & Management*, 28(2), 172–188. doi:10.1080/19368623.2018.1516588
- Dhahri, S., & Omri, A. (2018). Entrepreneurship contribution to the three pillars of sustainable development: What does the evidence really say? *World Development*, 106, 64–77. doi:10.1016/j.worlddev.2018.01.008
- Dubey, N. K., & Sangle, P. (2019). Customer perception of CRM implementation in banking context. *Journal of Advances in Management Research*, 16(1), 38–63. doi:10.1108/JAMR-12-2017-0118
- Dyllick, T., & Hockerts, K. (2002). Beyond the business case for corporate sustainability. *Business Strategy and the Environment*, 11(2), 130–141. doi:10.1002/bse.323
- Easa, N. F. (2019). Knowledge management at banking industry: A review of the literature and further guidelines. *International Journal of Customer Relationship Marketing and Management*, 10(2), 21–34. doi:10.4018/IJCRMM.2019040102
- Fan, Y. W., & Ku, E. (2010). Customer focus, service process fit and customer relationship management profitability: The effect of knowledge sharing. *Service Industries Journal*, 30(2), 203–223. doi:10.1080/02642060802120141
- Fernando, Y., Jabbour, C. J. C., & Wah, W. X. (2019). Pursuing green growth in technology firms through the connections between environmental innovation and sustainable business performance: Does service capability matter? *Resources, Conservation and Recycling*, 141, 8–20. doi:10.1016/j.resconrec.2018.09.031
- Fischer, D., Brettel, M., & Mauer, R. (2020). The three dimensions of sustainability: A delicate balancing act for entrepreneurs made more complex by stakeholder expectations. *Journal of Business Ethics*, 163(1), 87–106. doi:10.1007/s10551-018-4012-1
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *JMR, Journal of Marketing Research*, 18(1), 39–50. doi:10.1177/002224378101800104
- Fugate, B. S., Stank, T. P., & Mentzer, J. T. (2009). Linking improved knowledge management to operational and organizational performance. *Journal of Operations Management*, 27(3), 247–264. doi:10.1016/j.jom.2008.09.003
- Gelhard, C., & Von Delft, S. (2016). The role of organizational capabilities in achieving superior sustainability performance. *Journal of Business Research*, 69(10), 4632–4642. doi:10.1016/j.jbusres.2016.03.053
- Gholami, H., Zakuan, N., Saman, M. Z. M., Sharif, S., & Kohar, U. H. A. (2020). Conceptualizing and operationalizing the student relationship management strategy: Towards a more sustainable-based platform. *Journal of Cleaner Production*, 244, 118707. doi:10.1016/j.jclepro.2019.118707
- Gil-Gomez, H., Guerola-Navarro, V., Oltra-Badenes, R., & Lozano-Quilis, J. A. (2020). Customer relationship management: Digital transformation and sustainable business model innovation. *Economic Research-Ekonomska Istraživanja*, 1-18.
- Grönroos, C. (2007). *Service management and marketing: customer management in service competition*. John Wiley & Sons.
- Gross-Gołacka, E., Kusterka-Jefmańska, M., & Jefmański, B. (2020). Can Elements of Intellectual Capital Improve Business Sustainability?—The Perspective of Managers of SMEs in Poland. *Sustainability*, 12(4), 1–23. doi:10.3390/su12041545
- Guerrero-Villegas, J., Sierra-García, L., & Palacios-Florencio, B. (2018). The role of sustainable development and innovation on firm performance. *Corporate Social Responsibility and Environmental Management*, 25(6), 1350–1362. doi:10.1002/csr.1644
- Hair, J. F. Jr, Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis* (7th ed.). Pearson Prentice Hall.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139–152. doi:10.2753/MTP1069-6679190202

- Hair, J. F. Jr, Sarstedt, M., Hopkins, L., & Kuppelwieser, V. G. (2014). Partial least squares structural equation modeling (PLS-SEM). *European Business Review*, 26(2), 106–121. doi:10.1108/EBR-10-2013-0128
- Hallin, C. A., & Marnburg, E. (2008). Knowledge management in the hospitality industry: A review of empirical research. *Tourism Management*, 29(2), 366–381. doi:10.1016/j.tourman.2007.02.019
- Hanaysha, J. R., & Al-Shaikh, M. E. (2021). An examination of customer relationship management dimensions and employee-based brand equity: A study on ride-hailing industry in Saudi Arabia. *Research in Transportation Business & Management*, 100719. Advance online publication. doi:10.1016/j.rtbm.2021.100719
- Hanaysha, J. R., Al-Shaikh, M. E., Joghee, S., & Alzoubi, H. M. (2021). *Impact of innovation capabilities on business sustainability in small and medium enterprises*. FIIB Business Review. doi:10.1177/23197145211042232.
- Hanaysha, J. R., & Mehmood, K. K. (2022). An Exploration of the Effect of Customer Relationship Management on Organizational Performance in the Banking Sector. *International Journal of Customer Relationship Marketing and Management*, 13(1), 1–16. doi:10.4018/IJCRMM.2022010101
- Harman, H. H. (1960). *Modern factor analysis*. University of Chicago Press.
- Hill, J. (2001). Thinking about a more sustainable business—An Indicators approach. *Corporate Environmental Strategy*, 8(1), 30–38. doi:10.1016/S1066-7938(00)00097-X
- Hult, G. T. M. (2011). Market-focused sustainability: Market orientation plus! *Journal of the Academy of Marketing Science*, 39(1), 1–6. doi:10.1007/s11747-010-0223-4
- Kaur, J., & Kaur, B. (2016). The Influence of e-CRM Competitive Advantage on e-CRM Performance in the Indian Banking Industry. *Strategic Change*, 25(5), 537–550. doi:10.1002/jsc.2079
- Khan, E. A., & Quaddus, M. (2015). Development and validation of a scale for measuring sustainability factors of informal microenterprises—A qualitative and quantitative approach. *Entrepreneurship Research Journal*, 5(4), 347–372. doi:10.1515/erj-2014-0017
- Khosravifar, B., Bentahar, J., Gomrokchi, M., & Alam, R. (2012). CRM: An efficient trust and reputation model for agent computing. *Knowledge-Based Systems*, 30, 1–16. doi:10.1016/j.knosys.2011.01.004
- Kim, B. Y. (2008). Mediated effects of customer orientation on customer relationship management performance. *International Journal of Hospitality & Tourism Administration*, 9(2), 192–218. doi:10.1080/15256480801909089
- Kim, J. W., Choi, J., Qualls, W., & Park, J. (2004). The impact of CRM on firm-and relationship-level performance in distributed networks. *Communications of the Association for Information Systems*, 14(1), 30. doi:10.17705/1CAIS.01430
- Kock, N., & Lynn, G. S. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7), 546–580. doi:10.17705/1jais.00302
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610. doi:10.1177/001316447003000308
- Kristensen, H. S., & Mosgaard, M. A. (2020). A review of micro level indicators for a circular economy—moving away from the three dimensions of sustainability? *Journal of Cleaner Production*, 243, 118531. doi:10.1016/j.jclepro.2019.118531
- Kwarteng, A., Dadzie, S. A., & Famiyeh, S. (2016). Sustainability and competitive advantage from a developing economy. *Journal of Global Responsibility*, 7(1), 110–125. doi:10.1108/JGR-02-2016-0003
- Lambert, D. M. (2010). Customer relationship management as a business process. *Journal of Business and Industrial Marketing*, 25(1), 4–17. doi:10.1108/08858621011009119
- Lee, C. M. J., Che-Ha, N., & Alwi, S. F. S. (2020). Service customer orientation and social sustainability: The case of small medium enterprises. *Journal of Business Research*.
- Lee, W., & Kim, B. (2019). Business Sustainability of Start-Ups Based on Government Support: An Empirical Study of Korean Start-Ups. *Sustainability*, 11(18), 4851. doi:10.3390/su11184851

- Liao, S. H., & Chen, Y. J. (2004). Mining customer knowledge for electronic catalog marketing. *Expert Systems with Applications*, 27(4), 521–532. doi:10.1016/j.eswa.2004.05.013
- Lim, J. S., Darley, W. K., & Marion, D. (2017). Market orientation, innovation commercialization capability and firm performance relationships: The moderating role of supply chain influence. *Journal of Business and Industrial Marketing*, 32(7), 913–927. doi:10.1108/JBIM-10-2016-0238
- Lin, Y., Su, H. Y., & Chien, S. (2006). A knowledge-enabled procedure for customer relationship management. *Industrial Marketing Management*, 35(4), 446–456. doi:10.1016/j.indmarman.2005.04.002
- Lopes, C. M., Scavarda, A., Hofmeister, L. F., Thomé, A. M. T., & Vaccaro, G. L. R. (2017). An analysis of the interplay between organizational sustainability, knowledge management, and open innovation. *Journal of Cleaner Production*, 142, 476–488. doi:10.1016/j.jclepro.2016.10.083
- Lucas, M. T. (2010). Understanding environmental management practices: Integrating views from strategic management and ecological economics. *Business Strategy and the Environment*, 19(8), 543–556. doi:10.1002/bse.662
- Ma, H. (2004). Toward global competitive advantage. *Management Decision*, 42(7), 907–924. doi:10.1108/00251740410550961
- Marino, V., & Presti, L. L. (2018). Engagement, satisfaction and customer behavior-based CRM performance. *Journal of Service Theory and Practice*, 28(5).
- Martins, V. W. B., Rampasso, I. S., Anholon, R., Quelhas, O. L. G., & Leal Filho, W. (2019). Knowledge management in the context of sustainability: Literature review and opportunities for future research. *Journal of Cleaner Production*, 229, 489–500. doi:10.1016/j.jclepro.2019.04.354
- McEachern, M., & Warnaby, G. G. (2005). Improving customer orientation within the fresh meat supply chain: A focus on assurance schemes. *Journal of Marketing Management*, 21(1-2), 89–115. doi:10.1362/0267257053166802
- McKenzie, C. R., & Liersch, M. J. (2011). Misunderstanding savings growth: Implications for retirement savings behavior. *Journal of Marketing Research*, 48(SPL), S1-S13.
- Mechinda, P., & Patterson, P. G. (2011). The impact of service climate and service provider personality on employees' customer-oriented behavior in a high-contact setting. *Journal of Services Marketing*, 25(2), 101–113. doi:10.1108/08876041111119822
- Melville, N. P. (2010). Information systems innovation for environmental sustainability. *Management Information Systems Quarterly*, 34(1), 1–21. doi:10.2307/20721412
- Minami, C., & Dawson, J. (2008). The CRM process in retail and service sector firms in Japan: Loyalty development and financial return. *Journal of Retailing and Consumer Services*, 15(5), 375–385. doi:10.1016/j.jretconser.2007.09.001
- Mithas, S., Krishnan, M. S., & Fornell, C. (2005). Why do customer relationship management applications affect customer satisfaction? *Journal of Marketing*, 69(4), 201–209. doi:10.1509/jmkg.2005.69.4.201
- Mohammad, A. A., Rashid, B. B., & Tahir, S. B. (2013). Assessing the influence of customer relationship management (CRM) dimensions on organization performance: An empirical study in the hotel industry. *Journal of Hospitality and Tourism Technology*, 4(3), 228–247. doi:10.1108/JHTT-01-2013-0002
- Mohammed, A. A., Rashid, B. B., & Tahir, S. B. (2017). Customer relationship management and hotel performance: The mediating influence of marketing capabilities—evidence from the Malaysian hotel industry. *Information Technology & Tourism*, 17(3), 335–361. doi:10.1007/s40558-017-0085-4
- Moore, S. B., & Manring, S. L. (2009). Strategy development in small and medium sized enterprises for sustainability and increased value creation. *Journal of Cleaner Production*, 17(2), 276–282. doi:10.1016/j.jclepro.2008.06.004
- Moudud-Ul-Huq, S., Akter, R., Mahmud, M. S., & Hasan, N. (2021). Impact of Customer Relationship Management on Tourist Satisfaction, Loyalty, and Retention: Saint Martin's Island. *International Journal of Customer Relationship Marketing and Management*, 12(3), 20–37. doi:10.4018/IJCRMM.2021070102

- Müller, A. L. (2014). Sustainability and customer relationship management: Current state of research and future research opportunities. *Management Review Quarterly*, 64(4), 201–224. doi:10.1007/s11301-014-0104-x
- Nam, D., Lee, J., & Lee, H. (2019). Business analytics use in CRM: A nomological net from IT competence to CRM performance. *International Journal of Information Management*, 45, 233–245. doi:10.1016/j.ijinfomgt.2018.01.005
- Nambisan, S., & Baron, R. A. (2007). Interactions in virtual customer environments: Implications for product support and customer relationship management. *Journal of Interactive Marketing*, 21(2), 42–62. doi:10.1002/dir.20077
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
- Nyadzayo, M. W., & Khajehzadeh, S. (2016). The antecedents of customer loyalty: A moderated mediation model of customer relationship management quality and brand image. *Journal of Retailing and Consumer Services*, 30, 262–270. doi:10.1016/j.jretconser.2016.02.002
- Parvatiyar, A., & Sheth, J. N. (2001). *Conceptual framework of customer relationship management*. Tata McGraw-Hill.
- Payne, A., & Frow, P. (2006). Customer relationship management: From strategy to implementation. *Journal of Marketing Management*, 22(1-2), 135–168. doi:10.1362/026725706776022272
- Podsakoff, P., MacKenzie, S., Lee, J., & Podsakoff, N. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *The Journal of Applied Psychology*, 88(5), 879–903. doi:10.1037/0021-9010.88.5.879 PMID:14516251
- Posch, A., Scholz, R., & Steiner, G. (2006). Integrating research and teaching on innovation for sustainable development. *International Journal of Sustainability in Higher Education*, 7(3), 276–292. doi:10.1108/14676370610677847
- Pozza, I. D., Goetz, O., & Sahut, J. M. (2018). Implementation effects in the relationship between CRM and its performance. *Journal of Business Research*, 89, 391–403. doi:10.1016/j.jbusres.2018.02.004
- Rahimi, R. (2017). Organizational culture and customer relationship management: A simple linear regression analysis. *Journal of Hospitality Marketing & Management*, 26(4), 443–449. doi:10.1080/19368623.2017.1254579
- Rao, P. K. (2000). *Sustainable development: economics and policy*. Blackwell Publishers.
- Rapp, A., Trainor, K. J., & Agnihotri, R. (2010). Performance implications of customer-linking capabilities: Examining the complementary role of customer orientation and CRM technology. *Journal of Business Research*, 63(11), 1229–1236. doi:10.1016/j.jbusres.2009.11.002
- Reinartz, W., Haenlein, M., & Henseler, J. (2009). An empirical comparison of the efficacy of covariance-based and variance-based SEM. *International Journal of Research in Marketing*, 26(4), 332–344. doi:10.1016/j.jresmar.2009.08.001
- Roggeveen, A. L., & Beitelspacher, L. (2019). Understanding and implementing CRM initiatives in international markets. *International Marketing Review*, 37(4), 735–746. doi:10.1108/IMR-04-2019-0121
- Rowley, T. I., & Moldoveanu, M. (2003). When will stakeholder groups act? An interest-and identity-based model of stakeholder group mobilization. *Academy of Management Review*, 28(2), 204–219. doi:10.5465/amr.2003.9416080
- Ryals, L., & Payne, A. (2001). Customer relationship management in financial services: Towards information-enabled relationship marketing. *Journal of Strategic Marketing*, 9(1), 3–27. doi:10.1080/713775725
- Santhanam, R., & Hartono, E. (2003). Issues in Linking IT Capability to Firm Performance. *Management Information Systems Quarterly*, 27(1), 125–153. doi:10.2307/30036521
- Savitz, A. (2013). *The triple bottom line: How today's best-run companies are achieving economic, social and environmental success-and how you can too*. John Wiley & Sons.

- Shahzad, M., Qu, Y., Ur Rehman, S., Zafar, A. U., Ding, X., & Abbas, J. (2020). Impact of knowledge absorptive capacity on corporate sustainability with mediating role of CSR: Analysis from the Asian context. *Journal of Environmental Planning and Management*, 63(2), 148–174. doi:10.1080/09640568.2019.1575799
- Sheth, J. N., Sethia, N. K., & Srinivas, S. (2011). Mindful consumption: A customer-centric approach to sustainability. *Journal of the Academy of Marketing Science*, 39(1), 21–39. doi:10.1007/s11747-010-0216-3
- Shukla, M. K., & Pattnaik, P. N. (2019). Managing customer relations in a modern business environment: Towards an ecosystem-based sustainable CRM model. *Journal of Relationship Marketing*, 18(1), 17–33. doi:10.1080/15332667.2018.1534057
- Sigala, M. (2005). Integrating customer relationship management in hotel operations: Managerial and operational implications. *International Journal of Hospitality Management*, 24(3), 391–413. doi:10.1016/j.ijhm.2004.08.008
- Sigala, M. (2018). Implementing social customer relationship management. *International Journal of Contemporary Hospitality Management*, 30(7), 2698–2726. doi:10.1108/IJCHM-10-2015-0536
- Sigala, M., & Connolly, D. (2004). In search of the next big thing: IT issues and trends facing the hospitality industry. *Tourism Management*, 6(25), 807–809. doi:10.1016/j.tourman.2003.08.009
- Sivarajah, U., Irani, Z., Gupta, S., & Mahroof, K. (2020). Role of big data and social media analytics for business to business sustainability: A participatory web context. *Industrial Marketing Management*, 86, 163–179. doi:10.1016/j.indmarman.2019.04.005
- Sofi, M. R., Bashir, I., Parry, M. A., & Dar, A. (2020). The effect of customer relationship management (CRM) dimensions on hotel customer's satisfaction in Kashmir. *International Journal of Tourism Cities*, 6(3), 601–620. doi:10.1108/IJTC-06-2019-0075
- Soltani, Z., & Navimipour, N. J. (2016). Customer relationship management mechanisms: A systematic review of the state of the art literature and recommendations for future research. *Computers in Human Behavior*, 61, 667–688. doi:10.1016/j.chb.2016.03.008
- Starik, M., & Rands, G. P. (1995). Weaving an integrated web: Multilevel and multisystem perspectives of ecologically sustainable organizations. *Academy of Management Review*, 20(4), 908–935. doi:10.2307/258960
- Svensson, G., Høgevoid, N., Ferro, C., Varela, J. C. S., Padin, C., & Wagner, B. (2016). A triple bottom line dominant logic for business sustainability: Framework and empirical findings. *Journal of Business-To-Business Marketing*, 23(2), 153–188. doi:10.1080/1051712X.2016.1169119
- Svensson, G., & Wagner, B. (2015). Implementing and managing economic, social and environmental efforts of business sustainability. *Management of Environmental Quality*, 26(2), 195–113. doi:10.1108/MEQ-09-2013-0099
- Swift, R. S. (2001). *Accelerating customer relationships: Using CRM and relationship technologies*. Prentice Hall Professional.
- Theyel, G., & Hofmann, K. (2012). Stakeholder relations and sustainability practices of US small and medium-sized manufacturers. *Management Research Review*, 35(12), 1120–1135. doi:10.1108/01409171211281255
- Tollin, K., Christensen, L. B., & Wilke, R. (2015). Sustainability in business from a marketing perspective. *Journal of Strategic Marketing*, 23(6), 471–496. doi:10.1080/0965254X.2014.991348
- Tseng, S. M., & Wu, P. H. (2014). The impact of customer knowledge and customer relationship management on service quality. *International Journal of Quality and Service Sciences*, 6(1), 77–96. doi:10.1108/IJQSS-08-2012-0014
- Ullah, I., & Narain, R. (2020). The impact of customer relationship management and organizational culture on mass customization capability and firm performance. *International Journal of Customer Relationship Marketing and Management*, 11(3), 60–81. doi:10.4018/IJCRMM.2020070104
- Vesal, M., Siahtiri, V., & O'Cass, A. (2020). Strengthening B2B brands by signalling environmental sustainability and managing customer relationships. *Industrial Marketing Management*.
- Welcomer, S. A. (2010). Reinventing vs. restoring sustainability in the Maine woods: Narratives of progress and decline. *Organization & Environment*, 23(1), 55–75. doi:10.1177/1086026609358967

World Commission on Environment and Development. (1987). *Our common future*. Oxford University Press.

Wu, S. I., & Li, P. C. (2011). The relationships between CRM, RQ, and CLV based on different hotel preferences. *International Journal of Hospitality Management*, 30(2), 262–271. doi:10.1016/j.ijhm.2010.09.011

Yan, J., Zheng, Y., Bao, J., Lu, C., Jiang, Y., Yang, Z., & Feng, C. (2020). How to improve new product performance through customer relationship management and product development management: Evidence from China. *Journal of Business and Industrial Marketing*.

Yim, H.-K. F., Anderson, R. E., & Swaminathan, S. (2004). Customer relationship management: Its dimensions and effect on customer outcomes. *Journal of Personal Selling & Sales Management*, 24(4), 263–278.

Yusoff, Y. M., Omar, M. K., Zaman, M. D. K., & Samad, S. (2019). Do all elements of green intellectual capital contribute toward business sustainability? Evidence from the Malaysian context using the Partial Least Squares method. *Journal of Cleaner Production*, 234, 626–637. doi:10.1016/j.jclepro.2019.06.153

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