Effect of Customer Relationship Management on Firm Performance: A Moderating Effect Market Turbulence amongst Multinational Banks in Africa

Article history: *Revised format: 20th Sept 2024, Available online: 31st Dec 2024*

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Abstract:

Purpose: *The main purpose of the paper was to determine the moderating effect of market turbulence on the relationship between customer relationship management and firm performance among Multinational banks in Africa. The paper was anchored on Social Exchange Theory and Relationship marketing theory.*

Material/methods: *The study employed positivism paradigm, therefore, both cross sectional design and explanatory causal research design were adopted around testing of the stated hypothesis. The target population is comprised of 1507 top employees drawn from 24 multinational banks in Africa. Stratified and simple random was used to select a sample of 306 as calculated using MaCorr formula. A Structured questionnaire was used to collect data.*

Findings: *The findings from multiple regression model showed that customer focused and CRM technology had a significant effect on the financial performance among international firms in Africa. In addition, results from, Hierarchical multiple regression analysis revealed market turbulence had antagonistic negative moderating effect on relationship between customer focused and financial performance and relationship between CRM technology and and firm performance among Multinational banks in Africa.*

Conclusion*: The findings imply that creating a customer relationship management that entirely focuses on customer needs and implementation of modern technology will improve financial performance. However, with high market turbulence, customer focus and CRM technology only, are not adequate in improving the financial performance of multinational banks.*

Keywords*: Technology, Customer Focused, Financial Performance, Market Turbulence, Customer Relationship Management***,** *banks, multinational*

Paper Type: *Research Article*

Recommended citation: Kajogu, D. M. (2024). Effect of customer relationship management on firm performance: A moderating effect of market turbulence amongst multinational banks in Africa. *Journal of Economics, Management Sciences and Procurement*, *3*(2), 178–193.

1. Introduction

Firm performance is also viewed in terms of "effectiveness" in achieving firm mission, purpose or goals (Muduenyi et al., 2015). In today's world, establishments are frequently looking for ways of enhancing firm performance and maintaining

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competitive edge through successful disposition of assets and business protocols Faizal, 2015). To enhance firm performance, companies need functional customer associations. CRM gradually turned into an essential component of the business blueprint to boost the proceeds and earnings for firms by meeting the requirements of clients in a bid to achieve customer loyalty and turn fulfilled clients into promoters of business. As attested by (Nguyen et al., 2007), CRM is a comprehensive business strategy to tackle the volatile economic grounds enhancing competition (Baran et al., 2018), propagating client loyalty to discern the client's requirements and partiality(Ling and Yen, 2011).

The endorsement of Customer Relationship Management (CRM) is perceived widely as a way of gaining cut-throat approaches in the service providing firms. Nonetheless, progress in the generation and sustenance of these associations is a role of customer relationship manager (CRM) operations in these companies (Abdullateef et al., 2013). Based on (Ngai, 2005; Zablah et al., 2004),commercial establishments, despite the size, in general are spending billions of dollars annually on CRM structure or platforms. The CRM garnered popularity as a business instrument from various CRM endeavors effectively enacted on the onset of the 90s'. Nonetheless, as attested by (Richard et al., 2007) close to 70% of the CRM ventures caused losses or no fundamental progress. Furthermore, several scholarly and corporate reviews have indicated discouraging outcomes on CRM itself (Cheng & Dogan, 2008; Richard et al., 2007; Rigby et al., 2002; Zablah et al., 2004), probably setting the premise for the reasons that CRM is an upcoming trend in analysis as attested by Richards & Jones, (2008). To fix the situation, this research will be centered on establishing the root cause of this issue and as (Baird, 2017) observed the effect of CRM on bank performance is not well understood, which the study will also be trying to explore.

Lakhani and Smith (2007) brought forward that retail banks struggle with a huge problem of providing a superior level of service that is currently required while concurrently enhancing their lucrativeness and market share. Consequently, bank managers have minimal direction on where to concentrate their CRM efforts. Thus, it is paramount for studies to evaluate which CRMs are vital for performance of banks. In addition, intentional Banking has heightened the competitive pressure in the banking sector with more merchant banks venturing into retail banking and subjecting operating margins to severe stress. These factors re-echoed the need for banks to create more value-added services that would guarantee some competitive leverage. Thus, Banks with a view of survival can no longer rely on their "efficient person capabilities with appropriate systems and structures in order to wade the storm of competition, survive the tide of changing customer needs and take advantage of emerging technology; shifting several old economy business practices towards organizing by customer segments (rather than by products),focusing on customer lifetime value (instead of transactions alone), focusing on stakeholders (and not through Advertising alone), focusing on customer Accusation, Retention and Satisfaction

Therefore, CRM could provide a fix to this conundrum by delivering a customer management system that integrates all operational sectors of the organization. Most banks lose about 20% annually by failing to attend to customer relationships (Jeske et al., 2015). Thus, to survive in the banking industry and to ensure a continued increase in their profitability, Banks in Africa must make changes to their structures, operations and in the strategies used to meet customers'" needs and demands. The strength of multinational banks in Africa significantly depends on the relationship with customers especially in the high competitive market environment.

Several empirical studies have reported inconclusive findings regarding the relationship between CRM and Firm performance (Reimann et al., 2010). In a wide variety of industry settings, some studies demonstrate a positive influence of CRM on performance (Boulding et al., 2015; Payne and Frow, 2015; Peppers et al., 2014; Elkordy, 2014; Kuo-Chung and Chin-Shan, 2012); others have identified insignificant relations (Fan & Ku, 2010; Wu & Lu, 2012; Basman Al Dalayeen, 2017; Sumaira Aslam, 2014). Still swith others having indicated no bottom-line improvements or negative relationships (Awasthi and Sangle, 2013). Noteworthy, the emphasis of these studies are selectively on sectors such as hotel (Akroush et al., 2014, Ng`ang`a, et al., 2016), telecommunication (Beldi et al., 2013), healthcare (Bunthuwun et al., 2014) and contact center (Abdullateef et al., 2014). Subsequently, there seem to be noticeable minimal research on CRM in the multinational banks especially in the emerging economies. Despite the numerous studies on CRM and performance, there seems to be relatively few empirical studies that have examined CRM dimensions in the context of international banks operations. The general objective of the study will be to determine the moderating effect of market turbulence on the relationship between customer relationship management and firm performance among Multinational banks in Africa.

2. Theoretical and Literature Review

The research was conducted on the basis of Blau's , (1964) Social Exchange Theory and Relationship marketing theory was brought forward in the service marketing sector by Leonard Berry in 1933. The Social Exchange theory looks at interpersonal networking from a cost-effective outlook, much similar to an economic shift save from the fact that a social exchange involves the exchange of nonconcrete social costs and revenues (caring, honor, friendship and respect) and is not controlled by direct laws and provisions. The significance of the theory to the research emanates from the ideal that, the theory suggests that human exchanges are solely reasonable processes that grows and results in economic thrive where the customer as well as the establishment both gain. The philosophy supports transparency as it was formed in the 1970s when concepts of transparency and freedom were championed. The theory proposes that the main objective of a relationship is intimacy. The variable client orientation draws from this thinking since the theory is definitely built on intimacy on social cost benefit of each client. Relationship marketing theory entails fostering sustainable interactive associations, more so with clients, which is the most crucial gain for the companies that have taken up this idea (Webster, 1992). This is highlighted by Gronroos (1991) who posits that the aim of relationship marketing is to establish, foster and nurture relationships with clients and other investors. Furthermore, a good example of relationship marketing according to Álvarez et al., (2011) demands the availability of great internal marketing. The goal of relationship marketing is to grow the clients' commitment to the company through the process of rendering better value consistently at a minimized expense. This can be attained partially internally and partly externaly through alliances with suppliers as well as competing parties. The estimate of success is the expansion of the client's firm and its lucrativeness Parvatiyar & Sheth, (2002). As declared by Wu and Lu (2012) relationship marketing bears a definitive impact on the four elements of organizational performance in services, they are internal process financial, learning and growth and customer.

2.1. Hypotheses Development

Padmavathy et al. (2012) have insisted that an embedded customer-centered approach within the cross-functional groups is fundamental in rendering a fulfilling experience to the company's clientele. Mithas et al. (2005) have claimed this in their inquiry carried out in US companies to deduce the execution of CRM application Extant marketing research studying other CRM elements shows that customer-centric (Rust, Moorman, and Bhalla 2010) improve relational and financial outcomes definitively linked to the enhancement of client knowledge and customer fulfilment.

Enhancing a cutthroat environment and reducing customer loyalty have resulted in the rise of ideals that are centered on the fostering of relationships to clients(Gebert et al., 2002). Stone (2000) contends that CRM enables companies to grow a strong targeting and enquiry management procedure and this aids enhance new establishments in a significant way. Peppers and Rogers (1993) also assert that the expense of finding new clients is six times higher than maintaining the old ones. One of the most effective and outright way of attaining this is through an empirically sound marketing and customer retention approach the customer-centered approach entails the relationship establishment between client demands (Donaldson & O' Toole, 2002; Sousa, 2003), customer fulfilment (Gebert et al., 2002; Sousa, 2003) and customer retention and loyalty. This will motivates clients to stick around for long, purchase frequently, thus raising organization's sustained value to the establishment. According to Drienhart and Gregoire (1993) as staff job fulfilment, participation and security improve so does customer focus. Nonetheless, customer linkages are centered in fostering the association between the firm and its present customer base as a way to prosperity (Gebert et al., 2002)

Yacob (2014) did a study on the influence of customer focus on organizational performance, functioning on the ideal that customer satisfaction is an end product of other significsnt performance indicators such as employee cost benefits, satisfaction and innovation. Information was gathered from, 205 supervisors within the public service industry, all of which were explicitly played a part in the customer focus procedure. The outcomes of this inquiry demonstrated that customer focus is a crucial determinant of employee satisfaction, innovation and retention. The structural framework formulated also revealed that there is an implicit linkage between customer focus and customer satisfaction, as indicated by employee contentment. Furthermore, this framework suggests that the execution of customer focus may allow public institutes to raise their performance levels.

Ng'ang'a et al, (2016) did a study on mitigating impact of combative intensity on the propinquity between performance of restaurants in Kenya and customer orientation. Resource-Based View theory anchored the research. the research used explanatory research design and appraised 330 volunteers from a target demography of close to 30 superintendents in 210 restaurants, enlisted in the Kenya Association of Hotelkeepers and Caterers (KAHC). Participants were identified using group sampling integrated with random sampling. Raw data was gathered using surveys. Data was assessed using

Statistical Package for Social Sciences (SPSS 22.0). Stepwise regression was incorporated in checking the study hypotheses. The outcomes demonstrated that customer orientation is explicitly linked with the performance of restaurants and bears consequential impact on the correlation.

H_{01}: Customer-focused structure has no significant effect on firm performance in international banks

Customer relation management techniques is a strategy employed by companies to help them highlight and attract clients that are feasibly lucrative. Companies are currently looking for auxiliary and successful liaison endeavors in order to raise the value of their customer links by enhancing the stature of the alliance or rendering optimum relationship gains (Safari et al., 2016, Usman et al., 2012). Firms gain from customer relationship management tools through enhanced client loyalty and fulfilment, online procurement as well as website support. An effective customer relationship management tool demands captivation and preservation of economically expedient customers I a way that is able to retain highly esteemed and economically expedient customers too.

Based on past researches, customer relationship management technology is the fostering of conventional customer relationship management through enacting its techniques in online markets (Navimipour & Sultani, 2016, Sistar & Sadeghi, 2016, Safari et al., 2015). In order to fulfil and even surpass customer's demands, a comprehensive outlook of the client. This required customer management technology execution framework that incorporates the core constructs of people,Business protocol, and technology with regards to a business—wide customer-centered, technology-integrated, cross-operational company. Every aspect demonstrates crucial setbacks, however it is the capacity to incorporate all three that builds or destroys a customer relationship management structure (Safari et al., 2016, Rigo et al., 2016, Azila & Noor, 2011).

CRM system abilities elucidate employment of ICT in the oversight of customer relationships. In the CRM setting, according to Brady et al.,(2002), ICT enables a resourceful computing of client info, a vast territorial reach (Javalgi and Ramsey, 2001) and for profitable forms of relation between the firm and its customers(Schroder and Madeja, 2004; Kim and Umanath, 2005). The montage of ICT and internet-based technologies offers companies two CRM technology capacities: the ability to direct customer data as attested by Jayachandran et al., (2005); Kim et al., (2006); Padmanabhan et al., (2006) and according to Brady et al., (2002); Tan et al., (2002); Day and Hubbard, (2003) the ability to correspond with customers . the customer data management capacity is centered on the potential pf ICT to help in the control, storage and computing of customer data. CR, technologies are employed in recording and merging customer info (Bradshaw and Brash, 2001; Padmanabhan and Tuzhilin, 2003). Instruments and frameworks that supply companies with this kind pf an data handling capacity and widely viewed in a CRM tech setting involve customer databases and information warehouses. Other scholars resort to these instruments as support or meticulous CRM tools (Ang and Buttle, 2006). The interactive capacity elucidates the ability of ICT to mitigate the relation between the company and its clients. A variety of tools offer resourceful and economical ways to interact with clients. Provisions and automations that are frequently outlined for their capacity to support the CRM goals entail employing email communication(Tan et al., 2002),chatrooms (Romano and Fjermestad, 2003) websites(Geiger and Martin, 1999). Further, more polished interaction provisions entail automated feedback engine for web-based questions or developed call-center software(Boulding et al., 2005). As contended by Ang and Buttle, (2006) several scholars define such provisions as front- office or functional CRM fixtures. Customer data management and customer communication elucidate the ICT empowered capacities are delivered through common fixtures enlisted above or through resolute CRM software packaged for instance Onyx Customer Center, Goldmine Front Office or Siebel (Tan et al., 2002).

H_{02}: CRM based technology has no significant effect on firm performance in international banks

(Subramanian et al., 2009) contends that in situations where market turbulence is reduced, companies can focus on combative edge by centering on customer fulfilment. However, Slater & Narver, (1998) declare that as market turbulence rises, companies are forced to shift from current customer demands and take on fulfilling immanent demands to sustain a competitive edge. Situational variables can mitigate the impact of administrative approaches as conferred by Atuahene-Gima, (1996). According to Slater & Narver, (1994); Slater & Narver, (1995) market turbulence is also considered to mitigate the association between an organization's traditions and performance in the marketing sector. Market turbulence in the corporate world have been demonstrated to relate considerably with primary variables in marketing research analyzing customer relationship and corporate performance (Pelham, 2000; Pulendran et al., 2003), although in rare cases (Kohli et al., 1993; Subramanian & Gopalakrishna, 2001). For instance, a company whose clientele have promptly shifting partiality may demand a superior degree of customer linkage (i.e., the demand to be more diligence in sustainable establishments) for the purpose of achieving prosperity

Sorescu et al. (2003) claims that market turbulence experiences an adaptive market where customer preferences volatile and shift abruptly while there is intricacy in distinguishing of customers ‘diverse needs, as well as gradual are questionable to fulfil them. The organizations that experience market turbulence could turn into a more ingenuity centered to deliver offerings that guide customer requirements and generate demand by modifying customer tendencies. In addition, Donaldson (2001) states on the basis of Contingency theory it is the match between an approach and the corporate setting, instead of only the approach itself that postulates business performance. Furthermore, Ottesen & Grønhaug (2004) analysis on market orientation claims that situational turbulence may have three kibnds; competitive intensity, turbulence and market turbulence. As mentioned by Slater & Narver (1994), Technological turbulence can be explained as the constant pace and the sum of volatility of shifts in technology in a particular field; as well as competitive intensity means the severity of contention a company experiences within a sector (Chan et al., 2012; Paladino, 2007); Hanvanich et al. (2006) and Kohli & Jaworski (1990) define market turbulence as the level and irregularity of shifts in the tendencies, partiality and disposition of customers. In the same way, Atuahene- Gima, Li, & De Luca (2006) claims that a turbulent market can be explained as the extremely fast-paced and hard to speculate or foresee shifts in product inclination and customer requirements, in good and production mechanizations, and in the combative setting. Jap (2001) in his research discovered that firms make an arduous to identify shifts in market tendencies and crop up with renewed goods in a turbulent markets. Due to this, companies are vigilant in seeking lucrative concepts from various buddies, which may materialize in alliances. However, Santos-Vijande & Álvarez-Gonzålez (2007) investigation examined the market turbulence as a theory that strives to simultaneously assess the shift that the organizations experience from a group of customers and contenders (market dynamism) and the controversy to make the organization ready to tackle the new combative settings (market uncertainty)

H_{03}: Market turbulence has no moderating effect on relationship between customer relationship management practices (customer-focused structure and CRM based technology) and firm performance in international banks

3. Material and methods

The study employed Positivism paradigm **in c**ross sectional design and explanatory causal research design that is built around testing of the stated hypothesis (Hair *et al.,* 2013; Neuman, 2011). The target population will comprise of 507 top employees drawn from 14 multinational banks in Africa. A sample size of 106 computed based on Borg and Gall (2014) formula was selected using stratified random technique. A Structured questionnaire was used to collect the data. In line with the studies of Vagias (2006), responses to the statements in the closed ended questionnaire will be anchored on a five point likert scale. This will enable the researcher to assess the respondent's level of agreement or disagreement with the individual research question items for various constructs and variables. The scale will be graded as follows; 1 – "Strongly disagree", 2 – "Disagree", 3 – "I am not sure", 4 – "Agree", and 5 – "Strongly agree".

Validity and Reliability of the variable measurement

Study variables were operationalized and measured using already established study items from existing literature and where necessary, adaptations was made to fit the uniqueness of the study by making them context-specific. The antecedents of the aspects that analyse the CRM techniques in the study framework are fourfold. A variety of these items are sourced from past studies (see e.g. Das et al., 2009; Jaworski & Kohli, 1993; SantosVijande & Álvarez-Gonzålez, 2007; Sin et al., 2005). Hofman (2010) introduced Market Turbulence. The scales entailed three items. These are assessed using a seven-point Likert scale (slightly agree, moderately agree, strongly agree) strongly disagree, moderately disagree, slightly disagree) It estimates the level of ambiguity in the surroundings. A higher score on the market turbulence scale denotes that the surrounding is more ambiguous. Organizational performance will be measured using Financial performance (adopted from Li et al., 2006 and Neill & Rose, 2006), Customer loyalty (adapted from Richard et al., 2007), Customer satisfaction (adapted from Richard et al., 2007), Customer retention (adapted from Richard et al., 2007), Perceived performance (adapted from Richard et al., 2007) From the results generated, the Cronbach alpha for each variable based on the average of inter-item correlation was above 0.70. Therefore, any

Cronbach alpha value higher than 0.70 is seen as a definitive estimate for the concept in question. Therefore, the outcomes saw to the expected margin for further assessment as shown in Table 1. The primary component analysis with Varimax rotation was carried out to highlight the elementary attributes of service quality of medical services in Kenya. The outcomes demonstrated that the optimum factor loading scores depicted that all items elucidated CRM strategies and financial performance of international banks and were all above the minimum recommended value of 0.50 (Hair *et al.*, 2014. The EFA extracted all factor with cumulative extracted variance of more than 50% thus, indicating that all items were appropriate to explain the variables. Moreover, from the Table 1 below, Bartlett's Test of Sphericity generated a critical Chi-Square (χ^2) (ρ<.05) and Kaiser – Meyer – Olkin estimate of sampling adequacy was higher than the required value of .50 (Field, 2005), demonstrating that it was pertinent to subject data for factor analysis on this variable of standards of healthcare provisions. (Leech *et al.*, 2013).

Table 1: Measurement, reliability and validity of Variables

	N of Items	Reliability Statistics Cronbach's Alpha	Explanatory Analysis loadings	KMO	Factor %CV	AVE	CR
Customer focus	10	0.92	0.5>	0.83	72.67	0.52	0.77
CRM technology	11	0.92	0.5>	0.87	75.28	0.57	0.89
Market turbulence	8	0.90	0.5>	0.86	73.01	0.55	0.70
Financial performance	18	0.95	0.5>	0.92	64.43	0.51	0.85

Model specification

Data analysis was guided by the research objectives and research hypothesis of the study. In order to achieve objectives 1 and 2, being direct effects, linear regression models was tested for purposes of *$H_0$1 and $H_0$2.* The effects will be statistically processed using the specified linear equation (1) to (5) as shown below;

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \varepsilon \text{ ....} \quad (1)$$

Where;

X_1: Represents customer-focused structure

X_2: Represents CRM based technology

Y: Represents the dependent variable (firm performance)

Y: Represent the respective Y intercept

'β_1' to 'β2': Represent the effect of slope coefficients denoting the influence of the associated independent variables over the dependent variable.

'ε_1' ': Represent the error terms

In line with the recommendations of Baron and Kenny (1986) and Hayes (2012), Hierarchical multiple regression analysis was used to test the moderating effect of market turbulence on CRM and financial performance . This will provide evidence on whether to support or reject H_03. .The paths giving rise to the moderation equation below are also statistically depicted by the following equstions.

$$Y = \beta_0 + \beta_1 c_1 + \beta_2 c_2 + \beta_3 c_3 + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \quad (2)$$

$$Y = \beta_0 + \beta_1 c_1 + \beta_2 c_2 + \beta_3 c_3 + \beta_4 x_1 + \beta_5 x_2 + \varepsilon \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots. \quad (3)$$

$$Y = \beta_0 + \beta_1 c_1 + \beta_2 c_2 + \beta_3 c_3 + \beta_4 x_1 + \beta_5 x_2 + \beta_6 m + \varepsilon \ldots\ldots\ldots\ldots \quad (4)$$

$$Y = \beta_0 + \beta_1 c_1 + \beta_2 c_2 + \beta_3 c_3 + \beta_4 x_1 + \beta_5 x_2 + \beta_6 m + \beta_7 x_1 * m + \varepsilon \ldots\ldots \quad (5)$$

$$Y = \beta_0 + \beta_1 c_1 + \beta_2 c_2 + \beta_3 c_3 + \beta_4 x_1 + \beta_5 x_2 + \beta_6 m + \beta_7 x_1 * m + \beta_8 x_2 * m\, \varepsilon \ldots \quad (6)$$

$X_{1:}$ Represents customer-focused structure

$X_{2:}$ Represents CRM based technology

Y: Represents the dependent variable (firm performance)

m: Represents the Moderator variable, ‘ε_{40}’: Represents the error terms

$\beta_{0,:}$ Is a constant representing the Y intercept

‘C_1, C_2, C_3’represents the effect of slope coefficients denoting the influence of the associated predictor variables over the dependent variable

4. Findings and Discussion

In this section, the various mean scores (M) and standard deviations (SD) summarized for all the measurement items or statements related to financial performance, customer focused and market turbulence were computed and analyzed for estimating the extent of financial performance perceived by the respondents of the international financial institutions. The results are displayed in table 4.3. International financial institutions are usually creative in their approaches to financial operations (*M* =3.760 , *SD* = .431). The results suggest that it could be that the senior staff individuals with varied skills and knowledge who may have brought valuable insights on how to optimize financial operations in their institutions. Firms try also to improve their customer services by being focused on ways customer desire to be served to fill satisfied (M= 3.880, SD=0.492). In addition, it is evident from the results that the financial institutions are mostly at the forefront of using advanced technology for their products and services (*M* = 3.898, *SD* = .438). Furthermore, it is also evident from the results that the financial institutions are mostly at the forefront of the market using new financial products and services (*M* = 3.651, *SD* = .601) Correlation analysis forms a basis for regression analysis, thus, it is appropriate to analyze in research. From the results, there is a positive and significant correlation between the independent variables and financial performance. Notably, the correlation results revealed that customer focused has a positive and significant moderate relationship with financial performance ($r=.522$, $\rho<.01$). CRM technology positively correlate with financial performance ($r =.621$, ρ<.01). Moreover, results indicate that a Market turbulence positively relates to financial performance (r =.431, ρ<.01).

Table 2 Descriptive Statistics And Correlation Results

	Mean	**Std. Dev**	**financial performance**	**Customer Focused Structure**	**CRM technology**	**Market turbulence**
Financial performance	3.760	0.431	1			
Customer Focused	3.880	0.492	.522**	1		
CRM technology	3.898	0.438	.621**	.450**	1	.
Market turbulence	3.651	0.601	.431**	.490**	.277**	1

** Correlation is significant at the 0.01 level (2-tailed).

Testing hypothesis

A test to ascertain the effects of control variables on the firm performance was performed using multiple linear regression model. There was a moderately strong positive relationship between customer focused, CRM technology and firm performance (f = 96.16, *p*-value < .00) which gave ground for performing regression analysis. This was informed by the fact that regression is one of the pertinent and commonly used statistical methods in research as a platform for examining causal-effect relationships among variables of interest in a study. One of its advantages is the ease in quantifying the effect of changes in the response variable as a result of changes in predictor variables (Darlington & Hayes, 2016; Mills & Tosic, 2011; Hair *et al.*, 2010). Therefore, regression analysis was performed to test the model fit and to establish the predictive power of the model in the response variable.

From table 4.4 shows that customer focused and CRM technology had a significant effect on the financial performance among international firms in Africa. However, findings in this study as displayed in table 4.4 below showed that customer focused has a significant effect on (β=0.27, p =0.000). Results shows a significant effect by CRM technology (β= 0.48, p = 0.000). Both p-values are below α (= 0.05) and are significant and therefore should be retained in the equation. The null hypothesis was rejected on the basis of the significant β_1. This indicated that for each unit increase in customer focused and CRM technology, there was 0.27 and 0.48 units increase in the level of firm performance respectively. Furthermore, the effect of customer focused and CRM technology was stated by the t-test value = 5.57 and 8.84 respectively which implied that the standard error associated with the parameter was less than the effect of the parameter. Also the R Square score indicated that customer focused and CRM technology explained 46.0% variation in of firm. Further, the coefficient of determination was significant as evidenced by a F ratio of 96.16 with p value 0.000 <0.05 (level of significance). The collinearity statistics indicated that value inflation factor (VIF) and the tolerance values for all the control variables as displayed in Table

4.4 were all within the recommended values of less than 10 (Stevens, 2009) for VIF and above 0.2 for tolerance (Kutner *et al.*, 2005). This implied that the problem of multicollinearity was not an issue in the study.

Table 3 Multiple regression model

	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
	B	Std. Error	Beta	T	Sig.	Tolerance	VIF
(Constant)	0.87	0.21		4.14	0.00		
Customer Focused	0.27	0.05	0.31	5.57	0.00	0.80	1.25
CRM technology	0.48	0.05	0.48	8.84	0.00	0.80	1.25
Model summary							
R Square	0.46						
Adjusted R Square	0.46						
F	96.16						
Sig.	0.00						

Assumption of regression model		
Autocorrelation	Durbin-Watson	1.614
Normality	Kolmogorov-Smirnov	0.213
	Sig.	.200*
	Shapiro-Wilk	0.802
	Sig.	0.337
Heteroscedasticity Test	Levene Statistic	0.911
	Sig.	0.301

a Dependent Variable: financial performance

Table 4.5 presents results on the moderating effect of market turbulence. It can be seen from the table that there is a negative and significant moderating effect of market turbulence on the relationship customer focused and financial performance ($\beta = -0.25$, $\rho<.08$). With market turbulence, the effect of customer focused on financial performance is decreased.

In addition, there is also a negative significant moderating effect of market turbulence on the relationship between CRM technology and financial performance ($\beta = -2.58$, $\rho<.75$). As such, market turbulence impacts positively on the CRM technology which in turn improves financial performance.

Table 4 hierarchical regression Model

	1	2	3	4
	B(se)	B(se)	B(se)	B(se)
(Constant)	0.00(.05)	0.00(.05)	0.00(.05)	0.00(.05)
Zscore(Customer Focused	0.31(.06)**	0.22(.06)**	0.30(.06)**	0.34(.06)**
Zscore(CRM technology)	0.48(.06)**	0.47(.05)**	0.45(.05)**	1.73(.38)**
Zscore(market turbulence)		0.20(.06)**	0.36(.08)**	2.31(.57)**
Zscore(CF_MT)			(-0.25)(.08)**	(-0.32)**
Zscore(CT_MT)				(-2.58)(.75)**
Model Summary				
R	0.68	0.70	0.71	0.73
R Square	0.46	0.49	0.51	0.53
Adjusted R Square	0.46	0.48	0.50	0.52
Std. Error of the Estimate	0.74	0.72	0.71	0.69
Change Statistics				
R Square Change	0.46	0.03	0.02	0.03
F Change	96.16	12.60	9.19	11.82
df1	2.00	1.00	1.00	1.00
df2	226.00	225.00	224.00	223.00
Sig. F Change	0.00	0.00	0.00	0.00

5. Conclusion and Recommendations

Basing on findings the study concludes that implementing CRM which is customer focus improves financial performance of international banks. Thus, for international banks to improve on their revenue through increase in market share, profit margin, sales and customer satisfaction, there must strives to constantly surprise and delight key customers while treating them with a lot of care great care. In addition, banks need provides customized products and services to customers and customers give us feedback on quality and delivery performance. For high market share banks need to do co-branding programs to provide increased value to customers.

Study findings also showed that integrating more technologies in customer relationship management improves banks profitability. Therefore, banks need to have computerized databases or data warehouse which provides a full picture of individual customer histories, purchasing activity and problems. Banks need to have website which allows customer gives feed bank as well as reviewing their services. Further having systematic process for assessing the value of past customers with whom banks no longer have a relationship and system for determining the costs of reestablishing a relationship with inactive customers will enhance banks profitability. Also, banks need to uses phone calls, e-mails, and personnel visits to communicate with customers.

However, moderating results showed that despite customer focus and CRM technology improving financial performance, under high level of market turbulence, the two CRM dimensions reduces financial performance. Thus, infers that customer's preferences are constantly changing, new market entrants and high rate of change of its competitors, customer focus and technologies are not adequate to improve firms' financial performance. Thus, managers need to looks for more CRM practices such as customer orientation, electronic customer relationship management among others.

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