

The Moderating Effect Of Decision-Maker On The Relationship Between Strategy And Organizational Structure

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Abstract: The purpose of this study was to establish the influence of the decision maker on the relationship between strategy and organization structure. The study was informed by the apparent dearth of empirical evidence about the said relationships. Whereas the relationship between strategy and structure is rich in empirical data, the role of the decision-maker in the process of structuring organizations has largely been underscored in theory that the process is neither necessarily logical nor objective. The main objective of the study was to establish the influence of the decision-maker on the relationship between strategy and organizational structure. The study was based on the cross-sectional survey targeting all manufacturing firms in Nairobi and its surrounding. Data was initially analysed by exploratory and confirmatory factor analysis tests, however, the final analysis was done using structural equation modelling. The findings established significant influence of strategy on organization structure. Further, the findings provided evidence that the decision maker has significant moderating effect on the relationship between strategy and organization structure in the manufacturing firms in Kenya. The study has thus yielded a high empirical validity for its theoretical model that was to establish; the moderating effect of the decision-maker in the relationship between strategy and organization structures. Accordingly, the assumption held within the structure-contingency model that the linkage between strategy and structure is logical and direct is no longer tenable.

Keywords: Decision-Maker, Strategy and Organizational Structure

I. INTRODUCTION

Studies in organization design have been ongoing in the field of management for many decades. All this while, there has been very little change in the structural contingency theory underpinning these studies (Burton & Obel, 2004). The interest in these studies is sustained by the significant contribution that organization structures make to organizational performance. The organization structure influences amongst other functions how power, roles and responsibilities are distributed, controlled, goals are achieved and how information flows throughout the organization. Thus, an appropriate organization structure is that which facilitates while an inappropriate one impedes the attainment of the desired results (Robbin & DeCenzo, 2005). Since strategic

planning involves determination of goals and objectives, it is easy to perceive why organization structure is often conceived after the strategy has been selected and the motivation behind sustained studies in strategy-structure relationship.

The role of the decision-maker in the process of structuring organizations has been presumed by the proponents of the structural-contingency framework. Contingency variables such as strategy are all the important determinants of organization structure (Oliveira & Takahasi, 2012; Greenberg, 2011; Cole, 2004; Donaldson, 2001). Thus, the structural contingency framework assumes that the organization structure directly and logically responds to the demands of the strategy as one of the contingency factors thereby failing to take into account the role of the decision makers. But factors do not by themselves choose organization

structures, people do. The strategic choice approach which argues that the process of structuring an organization is fundamentally a political one which is why decision makers play an important role. Since most major corporate decisions involve multiple decision makers, Child (1997; Child et al., 2003) discusses them in plural as those who have the power to direct organizations. The argument goes that it is the perceptions and preferences of decision-makers that eventually influence the choice of organization structure having considered the interplay amongst the contingency factors. Indeed this is what strategic choice is about, selection. Those who have the power to direct organizations are largely defined as either; a leading coalition group within an organization, executive manager or owners with executive authority. Such decision-makers are not homogeneous in their outlook and capability. It is the intervention of the decision-makers between contingency factors and the resultant structures that explain the existence of different organization structures even though the contingency factors may be the same, a reality contingency framework can hardly explain.

Since structure is subject to the decision-makers' choice, some researchers and theorists have argued that structure results from a decision problem (Powell, 2008; Child et al., 2003). Choice is hardly objective for it is a result of perceptions and preferences be they managerial or otherwise. Decision-makers' perceptions and preferences are nurtured by their (i) cognitive orientation, (ii) bounded rationality, and (iii) motivational orientation, (Currie, 2012; Mackinnon & Powell, 2008; Beach & Connolly, 2005; Bubnicki, 2003). Bounded rationality holds that the ability of decision makers to perceive the totality of their situation is limited by their worldview. Cognitive orientation relates to the information processing ability of the decision maker. It holds that decision-makers with different information processing ability may have different perceptions of the same objective phenomena. Motivation orientation refers to system of values and evaluation in the process of individual or group choice. For example, choices may be made on the basis of personal criteria or organizational criteria. When applied to the organization structure, the decision-maker may choose a structure guided by personal criteria, organizational criteria or a concession of both which is why it may explain variances that exist in organization structures. Through their wish to adhere to industry success factors decision makers often comply in spite of their reading of contingency factors. As a result, the firms in an industry tend to configure look-a-like structures. Ultimately the emergence of new thinking demands of managers to authenticate their interpretation of the contingency factors (Childe et al., 2003).

Strategy is variously defined by different authors but there is unanimity on what the essentials are. Cooper & Schinder (2006) define it simply as the general approach that an organization follows to achieve its goals. Pearce and Robinson (2012) consider strategy as the determination of the long-term goals and objectives of an organization and adoption of courses of action and the allocation of resources necessary for carrying out these goals. An organization structure is part of the organizing function that creates the mechanism that coordinates activities for the achievement of the planned goals and objectives. It is logical that such a mechanism is created

after the goals and objectives are known. This could be why the classic works by Chandler (1962, 2003) contending that structure follows strategy generated a lot of interest resulting in numerous research studies around the world, Robbins (2004). Many of such studies augmented Chandler's proposition (Hall & Tolbert, 2009; Miles et al., 2011). Many writers argue that organizational structure has to change based on the strategies that are being pursued.

Although a lot of emphasis is given to strategy as one of the key determinants of structure, it is difficult to provide practical advice based on this understanding given the pace of change that is characteristic of modern times (Achaoucaou et al., 2009). It is this challenge that has sustained interest in the research strategy's influence on organization structure. The present study addressed this issue by examining the position of the decision-maker in the process of determining the organization structure.

OBJECTIVE OF THE STUDY

The main objective of the study is to establish the influence of the decision maker on the relationship between strategy and organizational structure

II. LITERATURE REVIEW

The study was guided by structure-contingency framework and strategic choice approach. The determination of organization structure based on structural contingency theory rests on two fundamental premises namely that; (i) there is no optimal organizational form for all situations, and (ii) the alignment between organizational design and strategy leads to the most appropriate organization structure. On the other hand, the rationale behind the strategic choice approach is that factors do not choose but people do which is the process of choice can hardly be objective. Choices of strategy and structure by leadership of organizations are often laced with interests.

A. THE CONCEPT OF ORGANIZATION STRUCTURE

There are many concepts and opinions on organization structure. To some structure is a sum total of the ways in which division of labour is achieved in an organization (Mintzberg, 2009). Others see the structure in the role that it plays in the attainment of set organizational goals (Robbin & DeCenzo, 2005). Contributing to the same concept, Mullins (2007) states that organisation structure defines tasks and responsibilities, work role and relationships and channel of communication. All these definitions point to the fact that, organisation structure entails the grouping of activities and the people that perform them into units that consolidate effort to better achieve respective organizational objectives. Writers on organization design reveal the presence of various dimensions or components of structure that have to be conceived which are namely the degree of; complexity, formalization and centralization (Robbins, 2004; Cole, 2004). Complexity refers to the level and extent of differentiation in terms of departments and the chain of command, work specialization,

product and market range. Formalization refers to the extent to which jobs are standardized and employees exercise discretion on how to perform their jobs and conduct themselves. It is the degree of how rules, policies and procedures regulate the people's behaviour in the organization. Centralization refers to the degree to which authority and decision-making is concentrated at the top (Quangyen & Yezhuang, 2013; Ugbonmhe, et al., 2011; Stoner, et al., 2004). These dimensions need to blend for the organization to work as effectively as possible. A combination of these dimensions would produce a web of relationships that make up organization structural classifications that range from a continuum of mechanistic to organic structures (Lunenburg, 2012; Cole, 2004). A mechanistic structure is highly formal, relies on authority and a well-defined hierarchy to facilitate coordination. Its essence is to maximise efficiency and production. The organic structure on the other end is low on complexity and formalization and enhances participation in decision-making (Greenberg, 2011).

B. THE STRUCTURAL CONTINGENCY THEORY

Structural contingency theory holds that there is no one best organization structure or structural type that is best for all organizations. Instead, the structure that is most effective is the one that fits certain factors, called contingencies. These factors are to be found within (internal) and without (external) organization (Forte et al., 2000; Pettigrew et al., 2000; Donaldson, 2001; Meilich, 2006). A variety of contingency factors can explain variations in the forms of organization structures. The most prevalent set of internal factors to be found in the literature is strategy (Chandler 1962, 2003; Robbins, 2004; Cooper & Schindler, 2006). It is argued that strategy demands a structure that facilitates its implementation. Thus, depending on which strategy that is chosen then only particular forms of organizational structure that bear specific set of features would be selected. Thus, the effectiveness of an organization structure depends on the extent to which it fits the strategy. The structural contingency theory which is the basis of this reasoning has triggered a series of studies over the years. The works of Burns and Stalker (1961), Child (1972), Chandler (1966), Mintzberg (1984), Lorsch (1977) and more recently Hollenbeck (2000), Nasrallah et al. (2009), Quangyen and Yezhuang (2013), Kariuki (2015) emphasize the need to study the influence of contingencies on organization structures. That as it may, structural contingency theory does not explain the process of selection.

C. STRATEGIC CHOICE APPROACH

Strategic choice approach borrows from social action approach within sociology and strategic management theory to advance the argument that leadership action can impact upon organizations and its performance (Child et al., 2003). An established notion in strategic management is that managers cope with changes in their firm's external environment through the choice of strategies and corresponding structures. The range of actions available to organization leadership is broad. For instance, there is an array of strategies and

structural typologies that leadership can select from. Proponents of strategic choice take the view that organization structure is a function of managerial choice. They argue that decision makers come between the contingency factors and structure. Rather than treat structural differences as the result of a clear contingency factor influence, such differences have to be viewed as the outcome of a process related to those with the power to structure organizations. The key strategic decision makers in organizations have been found to be mostly executive managers and/or owners (Child et al., 2003; Child 1997).

D. EMPIRICAL REVIEW

Several studies have found that the co-alignment between strategy, structure and environment is a necessary condition for firm performance (Chathoth, 2002; Chiyoge, 2009; Krishna & Shubhabrata, 2015). A study on effects of organization structure on strategy implementation of manufacturing firms in Nakuru, Kenya found strong correlation of division of tasks and formalization on strategy implementation (Karani, 2013). Thus, strategy-structure match is an important relationship. When a company diversifies, there is a decline in the performance if a suitable structure is not adopted. Such decline in performance forces the management to adopt an appropriate structure suitable to its strategy. Performance is enhanced when a match is finally restored between strategy and structure. This is a common understanding amongst researchers.

The underlying issue here is that strategy plays a major role in determining organizational form or structure, and that this interaction has greatly influenced configuration literature. Even greater is the realization that although strategy is the driving force, it is the interaction of strategy and structure - fit or configuration-that often truly makes the difference (Burton & Obel, 2004). Karani (2013) found that divisions of tasks and level of formalization, which, are some of the dimensions of organization structure significantly, affected how strategy is implemented.

On the other hand, some studies have shown that the aspects of organization structure that impact control function such as the degree of centralization, standardization and differentiation are the most influenced by the decision makers (Hollenbeck, 2002; Jabnoun, 2005; Auh & Mengue, 2007). There is also an observation that centralization is one of the most broadly studied aspects of organization structure (Hollenbeck, 2000). Decision-maker's choice tends to be important because this is the aspect of a vertical structure that affect the extent to which decision making authority and responsibility for coordination resides at the top of the organization as opposed to being distributed throughout the lower levels.

Similarly, it is argued that the decision-maker tends to choose organization structures that support their view of operational efficiency or interests (Jabnoun, 2005). The study by Jabnoun (2005) identified that decision-maker who sort organization structures that supported the implementation of customer oriented total quality management, preferred structural dimensions of process network and organic structures. On the other hand, decision-makers who tended to

be relatively more risk averse preferred mechanistic structures. This finding resonates with what other studies found (Hongyan et al., 2015; Delios et al., 2008; Douma et al., 2006).

Other studies, though not purely focused on organization structure confirm that ownership type influence overall strategic decisions and therefore organizational performance. For incidence, it is typically believed that private owned firms are more well-organized than state owned firms, while mixed owned firms fall in the between (Shaomi & Jun, 2008; Douma et al., 2006). It has also been established by some authors that sometimes mixed owned firms perform better than a unitary owned firm where market imperfection is significant (Zhixiang & Kim, 2013; Sing, 2009).

Evidently, strategy and structure relationships have been extensively researched and written about. Not so, the process of how nor who takes the decision of how strategy should influence structure. The assumption is typically made that a type of organization structure is more favourable for a given strategy to achieve alignment. This study sort to test the veracity of this assumption.

III. METHOD

This study adopted a cross-sectional survey research design because it facilitated the collection of data from many different firms in a variety of industries but in one sector at one point in time (Kerlinger, 2007). The population of the study consisted of all manufacturing firms in Nairobi and its surrounding, which are members of Kenya Association of Manufactures. The choice of the manufacturing sector was informed by the evidence from the past studies that; (i) the manufacturing sector is sensitive to contingency factors and, (ii) significant number of past studies on environment, strategy and structure were mostly based on the manufacturing firms (Zsolt, 2012; Quangyen & Yezhuang, 2013; Busienei et al., 2013; Karani, 2013; Kariuki, 2015; Chindia & Pokhariyal, 2015). There are a total of five hundred and nine (509) of such firms in thirteen industries according to the Kenya Association of Manufacturers (2015). The entire population of five hundred and nine (509) manufacturing firms were involved because the population of the study was fairly small and assurance was needed to obtain adequate number of responses required for the structural equation modelling (SEM) analysis. Structural equation modelling requires a large sample (Kline, 2011).

A. SAMPLE SIZE

According to Zikmund et al., (2010), a sample size should be sufficiently large as to allow high statistical efficiency of the method of analysis adopted for the study. For this study a rule of thumb concerning the ratio of sample size to model parameters developed by Jackson (2003) was used to determine the sample size. This rule is applicable when the estimation method is maximum likelihood. In maximum likelihood estimation, Jackson (2003) suggested that researchers think about minimum sample size in terms of the ratio of cases (N) to the number of model parameters that

require statistical estimates (q). An ideal sample size-to-parameters ratio would be 20:1. Less ideal would be an N: q ratio of 10:1. As the N: q ratio decreases below 10:1 (e.g. 5:1), so does the trustworthiness of the results.

The model parameters for this study were 34 (14+14+3+2+1) while the response rate was 78.4% of the manufacturing firms (509). Thus, the sample size for this study was 399 manufacturing firms. The ration of sample size to model parameters ratio was 11.7:1. Hence, this sample size was adequate for structural equation modelling analysis.

B. RELIABILITY AND VALIDITY

Since the research instruments of this study was a likert scale, this study applied Cronbach-Alpha to test the reliability of the research instruments. The Cronbach-Alpha coefficients of greater than 70% indicated that the research instruments used were reliable (Kline, 2011). The results in table 4.3 shows that the research instrument had significant reliability.

The validity of this study was measured using convergent and discriminant validity. The convergent validity was tested using lambda (factor loading), t-ratio, p-value, square multiple corrections, communalities, average variance extraction, and composite reliability. The results in tables 4.6 and 4.7 revealed that convergent validity was established. Furthermore, discriminant validity was tested using correlations between the constructs, factor correlation matrix and comparison between correlations square (r^2) and average variance extraction. The results in table 4.6 indicates that discriminant validity was also established.

C. DATA ANALYSIS PROCEDURE

The data was initially analysed using exploratory and confirmatory factor analyses. Thereafter, data analysis was done using SEM. SEM analysis was deemed the best analyses that would address the research objective under the study because the concepts were measured by more than one manifest variables (Kline, 2011). Hence, this study applied SEM and the equations that addressed the research objective were:

$$\begin{aligned} \eta_{i(m \times 1)} &= \Gamma_{(m \times n)} \epsilon_{j(n \times 1)} + \zeta_i \dots\dots\dots 1 \\ \mathbf{Y}_{i(p \times 1)} &= \Lambda_{y(p \times m)} \eta_{i(m \times 1)} + \epsilon_i \text{ (p} \times 1) \dots\dots\dots 2 \\ \mathbf{X}_{i(q \times 1)} &= \Lambda_{x(q \times n)} \epsilon_{j(n \times 1)} + \delta_i \text{ (q} \times 1) \dots\dots\dots 3 \end{aligned}$$

D. VARIABLES

The set of sixteen (16) manifest variables included in this study were derived from the extant literature on strategy, organization structure and organizational decision makers. These variables appear in table 4.1 having been subjected to the normality test as follows; strategy was measured by six manifest variables (X1 – X6), decision maker was measured by five manifest variables (X7-X11) and organization structure was measured by five manifest variables (Y1 – Y5). Both the empirical and theoretical literature on structure provides a wide spectrum of latent forms of structure. This study takes three dimensions identified in the literature as crucial; formalization, centralization and complexity

(Quangyen & Yezhuang, 2013; Greenberg, 2012; Ugbohmhe, 2011).

Y4 – Written rules	.854	399	.132
Y5 – ways of communication	.949	399	.092

Table 4.1: Normality test

IV. RESULTS

A. RESPONSE RATE

The questionnaire was administered to each of the five hundred and nine (509) manufacturing firms in Kenya situated within Nairobi and its surroundings. Out of these, three hundred and ninety nine (399) questionnaires were returned which makes up to 78.4% response rate. The data was collected from the chief executive officers, managing directors, chairmen of the boards, and general managers. According to Jackson (2003) SEM’s sample size formula ($N: q$ which is $399/34 = 11.7:1$), the sample size was adequate to analyse the data using SEM. Furthermore, the Kaiser-Meyer-Olkin Measure of sampling adequacy in table 4.3 is 0.858, which is greater than the threshold (50%). Therefore, the response rate of 78.4% was adequate for SEM.

B. PRELIMINARY ANALYSIS

Prior to application of SEM analysis, the data was subjected to diagnostic analysis to ascertain the appropriateness of its underlying parametric characteristics for this statistical application. This entailed the parametric tests of normality, exploratory factor analysis, and confirmatory factor analysis.

The study carried out normality test to ensure that the data was normally distributed to assure valid research outcome. This is applied when the estimation method is maximum likelihood method as it was applied in this study. The normality test of this study was carried out objectively using Shapiro-Wilk test as presented in table 4.1. On the basis of this test, all of the P-values in table 4.1 are greater than 0.092. Therefore, on the basis of this test, the data was normally distributed because the P-values of the manifest variables were above the threshold, which is 0.05.

Variables	Shapiro-Wilk		
	Statistic	Df	Sig.
X1 – Product breadth	.870	399	.200
X2 – Market Scope	.870	399	.197
X3 – Focus on specific customer	.870	399	.199
X4 – Core Business	.862	399	.210
X5 – vision statement	.858	399	.211
X6 – strategic objectives	.838	399	.210
X7 – CEO/MD	.827	399	.149
X8 – Top Executive manager(s)	.832	399	.177
X9 – Management Team	.827	399	.171
X10 – Board of directors	.873	399	.195
X11 – owner manager	.858	399	.211
Y1 – Level of hierarchy	.852	399	.164
Y2 – operational decision maker	.848	399	.162
Y3 – geographical spread	.891	399	.087

Further to normality test, exploratory factor analysis is required to test which manifest variable load to which construct and to assess the number of constructs the study should handle. In addition, it helps to evaluate convergent and discriminant validities. The analysis was statistically carried out using exploratory factor analysis (EFA) and the findings are statistically discussed below.

a. EXPLORATORY FACTOR ANALYSIS

The exploratory factor analysis test was to screen the data to establish its suitability for SEM. This was done using the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (MSA), item correlations and partial correlations were used to assess the adequacy of the data for factor analysis. The overall measure of sample adequacy (MSA) exceeded the 0.50 criterion (MSA = 0.858), items’ partial correlations were low (< 0.30) and the item correlations was not zero (Determinant = $8.016E-005$). Determinant greater than zero implies that the assumptions of positive definiteness are not violated. Bartlett’s test of sphericity was significant (Chi-Square = 3692.438, $df = 91$, $p < 0.000$) indicating existence of significant non-zero correlations among the measurement items. These results provided support that the data was appropriate for factor analysis.

To extract the factors we used principal component analysis and promax oblique rotation method. This choice was found suitable since the underlying factors were suspected to be non-orthogonal and the factors were to be used in subsequent analysis of structural relationships. The unconstrained initial solution resulted in four factors explaining 63.23% of the item variance. The items were found to have good communalities (> 0.535), however, two items were cross-loaded. The factor model was re-specified by iteratively trimming off the problematic items. The re-specified model extracted three factors explaining 70.846% of the item variance and the items loaded cleanly onto their prior factors as shown in Table 4.2 below.

KMO and Bartlett's Test			
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.			.858
Bartlett's Test of Sphericity	Approx. Chi-Square		3692.438
	Df		91
	Sig.		.000
Component			
Decision-Maker	Strategy	Organization Structure	
X1	.944		
X2	.944		
X3	.851		
X4	.827		
X5	.490		
X6	.889		
X7	.806		

X8	.806
X9	.868
X1	.884
0	
Y1	.733
Y2	.692
Y3	.909
Y4	.846

Extraction Method: Principal Component Analysis.
Rotation Method: Promax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Table 4.2: KMO, Bartlett, and Pattern Matrix test

To assess the degree of internal consistency of the manifest variables, Cronbach's alpha coefficient was used. As seen in table 4.3 the alpha coefficients exceeded 0.70. Hence, the reliability of this findings indicated that there was good internal consistency. Therefore, the research instrument had good reliability.

Variables	Cronbach's Test Results
Strategy	0.899
Decision Maker	0.878
Organization Structure	0.797

Table 4.3: Reliability Test

Once the above data screening tests were satisfactorily carried out, data was subjected to measurement model test using confirmatory factor analysis. The results are presented and scientifically discussed below.

b. CONFIRMATORY FACTOR ANALYSIS

Confirmatory factor analysis starts by testing whether the data fit a hypothesized measurement model or not. Thereafter, this tool helps to identify which manifest variables should be retained and which ones to be removed from further SEM analysis using unidimensionality. Two manifest variables (X11 - owner manager and Y5 - ways of communication) were removed from further analysis because they did not represent the constructs (decision-making and organizational structure respectively) significantly. Then, the measurement model fit was tested and the results in table 4.4 revealed that the adjusted chi-square confirmed that the data fits the measurement model because CMIN/DF is between 2 and 5. Likewise, the values of normal fit index (NFI), relative fit index (RFI), incremental fit index (IFI), Tuck Lewis (TLI) and comparative fit index (CFI) are greater than threshold, which is 0.90. The value of Root Mean Square Error of Approximation (RMSEA) is less than the threshold, 0.50. Therefore, the data fitted well to measurement model.

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	45	352.388	74	.000	4.762
Saturated model	119	.000	0		
Independence model	14	3763.462	105	.000	35.842
Model	NFI	RFI	IFI	TLI	CFI
Default model	.947	.923	.974	.956	.988
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000
Model	RMSEA	LO 90	HI 90	PCLOSE	
Default model	.023	.121	.140	.000	
Independence model	.296	.288	.304	.000	

Table 4.4: Measurement Model Fit

Furthermore, square multiple correlations were analysed to assess the extent to which the dependent variable is explained by the independent variables after X11 (owner

manager) and Y5 (ways of communication) were removed. The threshold for the square multiple correlation is 20%. This further helps to identify which manifest variables should be retained for further analysis and which have to be removed. Table 4.5 showed that all the manifest variables are statistically significant.

Table 4.5 demonstrated that the factor loadings are greater than 0.50, which implies that the manifest variables are significant indicators of the constructs. However, the study requires further investigation for discriminant validity and convergent validity to proceed to structural model fit test in order to address the research objectives correctly.

			Unstandardized Regression				SR	SMC
			Estimate	S.E.	C.R.	P	Estimate	Estimate
X5	<-	Strategy	.695	.049	14.295	***	.645	.416
X4	<-	Strategy	.813	.043	19.031	***	.787	.620
X3	<-	Strategy	.926	.043	21.750	***	.854	.729
X2	<-	Strategy	.972	.043	22.826	***	.880	.774
X1	<-	Strategy	1.000				.859	.739
X10	<-	Decision Maker	1.000				.932	.869
X9	<-	Decision Maker	.785	.043	18.350	***	.724	.524
X8	<-	Decision Maker	.787	.041	19.018	***	.739	.546
X7	<-	Decision Maker	.778	.048	16.189	***	.671	.450
X6	<-	Decision Maker	.999	.035	28.310	***	.898	.806
Y1	<-	Organization Structure	.600	.044	13.653	***	.701	.491
Y2	<-	Organization Structure	.517	.041	12.527	***	.645	.416
Y3	<-	Organization Structure	1.000				.852	.725
Y4	<-	Organization Structure	.977	.071	13.730	***	.705	.497

SR = Standardized Regression and SMC = Square Multiple Correlations

Table 4.5: Regression Weights and SMC for the Measurement Model

Based on CFA and EFA tests, discriminant validity of this study was established as showed in table 4.6 because the correlations between the constructs are less than 0.60. Besides, the correlations square are less than the average variance extraction. This implies that the three constructs of this study are measuring different things. Hence discriminant validity of this study is well established.

Correlations		CFA	EFA	r ²	AVE _i	AVE _j	Discriminant Validity	
		Estimate (r)	Estimate					
Strategy	<->	Decision Maker	.585	.574	0.342	0.655	0.639	Established
Organization Structure	<->	Strategy	.186	.197	0.035	0.533	0.655	Established
Organization Structure	<->	Decision Maker	.336	.310	0.113	0.533	0.639	Established

CFA = Confirmatory factor analysis, EFA = Exploratory factor analysis, and AVE = Average variance extraction

Table 4.6: Discriminant Validity Test Based on EFA and CFA Correlations

The convergent validity of this study was tested using the regression weights of factor loadings, average variance extraction and composite reliability. The factor loading in table 4.5 and average variance extraction in table 4.7 are greater than 0.50. This implies that convergent validity is established. Besides, the composite reliability is greater than the threshold, which is 0.70 and therefore, the convergent validity of this study is also well established.

	Strategy	Decision-Maker	Organizational Structure
Average Variance Extraction Composite Reliability Convergent Validity	0.655398	0.639113	0.532589
	0.943234	0.938147	0.884822
	Established	Established	Established

Table 4.7: Convergent validity test

Since all the above analyses provided satisfactory results, the data was subjected to structural equation modelling test to address the research objectives. However, the procedure required for valid results to be obtained is that the data has to be subjected to structural equation model fit test before estimating the regression weights between latent exogenous and endogenous variables.

C. STRUCTURAL MODEL TEST

The structural model fit was tested by adjusted chi-square, relative fit index (RFI), normal fit index (NFI), incremental fit index (IFI), Tucker Lewis index (TLI), comparative factor index (CFI) and Root Mean Square Error of Approximation (RMSEA). The recommended threshold is the same as stated above in the confirmatory factor analysis. The results in table 4.8 indicated that the data fitted with the structural equation modelling.

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	45	352.388	74	.000	4.762
Saturated model	119	.000	0		
Independence model	14	3763.462	105	.000	35.842
Model	NFI	RFI	IFI	TLI	CFI
Default model	Delta1	rho1	Delta2	rho2	
Saturated model	.947	.923	.974	.956	.988
Independence model	1.000		1.000		1.000
Model	RMSEA	LO 90	HI 90	PCLOSE	
Default model	.030	.121	.140	.000	
Independence model	.296	.288	.304	.000	

Table 4.8: Measurement Model Fit

Lastly, the relationships between latent exogenous and endogenous variables were interpreted using unstandardized regression weights at 5% level of significance from Table 4.9 and 4.10. The interpretation is the same as the factor loading in measurement model above except SEM mainly focuses on the relationship between constructs.

D. EFFECT OF STRATEGY ON ORGANIZATIONAL STRUCTURE

Based on the result in table 4.9 below, all the assessed manifest variables had a positive significant effect on their construct. Similarly the overall strategy had a positive significant effect on organizational structure ($Y = 0.210$, $P = 0.002$ and $SMC = 0.231$). The implication is that changes in either the product breadth, market scope, focus to the specific customers, core business or vision statement leads to changes

in the aspects of complexity, formality and centralization of the organization. This finding is thus consistent with what many similar studies have found (Krishna & Shubhabrata 2015; Karani 2013; Yarmohammadzadeh et al, 2011; Chiyoge, 2009).

			Unstandardized Regression				SR Estimate	SMC
			Estimate	S.E.	C.R.	P		
Organization Structure	<-	Strategy	.210	.068	3.102	.002	.175	.231
X5	<-	Strategy	.675	.048	13.964	***	.632	.399
X4	<-	Strategy	.800	.042	18.972	***	.782	.611
X3	<-	Strategy	.913	.042	21.758	***	.849	.720
X2	<-	Strategy	.972	.042	23.373	***	.886	.786
X1	<-	Strategy	1.000				.867	.751
Y1	<-	Organization Structure	.584	.043	13.464	***	.692	.478
Y2	<-	Organization Structure	.500	.041	12.276	***	.632	.400
Y3	<-	Organization Structure	1.000				.863	.745
Y4	<-	Organization Structure	.970	.070	13.799	***	.710	.504

Table 4.9: Regression Weights without the Moderator

However, when the moderator is introduced as shown in table 4.10 below, the effect of strategy on structure turns insignificant and negative ($P = .815$, $Y = -0.19$ and $SMC = .113$). According to Hayes (2013), a moderating effect exists if, upon introduction of the moderator, the effect of the predictor (in this study strategy) is either; enhanced, decreased or reverses the outcome. In this case the effect is that of reversal as shown by changes in the direction (from positive to negative) and the fact of insignificance. This finding thus indicates that the decision maker overrides the influence of strategy on the organizational structural aspects of centralization, formality and complexity. Although similar systematic studies to this study are not common in the literature, this finding resonates with the position that the decision makers have been found to influence most the aspects of organization structure that impact the control function such as the degree of; centralization, standardization and differentiation (Hollenbeck, 2002; Jabnoun, 2005; Auh & Mengue, 2007). These aspects are what this study used to measure organization structure.

			Unstandardized Regression				SR Estimate	SMC
			Estimate	S.E.	C.R.	P		
Organization Structure	<-	Strategy	-.019	.083	-.234	.815	-.016	.113
Organization Structure	<-	Decision Maker	.492	.100	4.919	***	.346	.416
X5	<-	Strategy	.695	.049	14.295	***	.645	.416
X4	<-	Strategy	.813	.043	19.031	***	.787	.620
X3	<-	Strategy	.926	.043	21.750	***	.854	.729
X2	<-	Strategy	.972	.043	22.826	***	.880	.774
X1	<-	Strategy	1.000				.859	.739
Y1	<-	Organization Structure	.600	.044	13.653	***	.932	.491
Y2	<-	Organization Structure	.517	.041	12.527	***	.724	.416
Y3	<-	Organization Structure	1.000				.739	.725
Y4	<-	Organization Structure	.977	.071	13.730	***	.671	.497
X10	<-	Decision Maker	1.001	.035	28.310	***	.898	.869
X9	<-	Decision Maker	.785	.044	17.774	***	.701	.524
X8	<-	Decision Maker	.788	.043	18.380	***	.645	.546
X7	<-	Decision Maker	.778	.049	15.786	***	.852	.450
X6	<-	Decision Maker	1.000				.705	.806

Table 4.10: Regression Weights for All Variables with the Moderator

A persistent question in the inquiry of organization structures has had to do with why structures differ amongst firms in the similar contexts pursuing similar strategies. This study has shown that variations in organization structure can be explained by the interventions of decision makers who typically do not perceive reality in the same way nor possess same capability. Similarly, the existence of inappropriate structure against a given strategy can also be explained thus. There is a chance that the decision maker's misinterpretation of the requirement of strategy or any other contingency factor may lead to inappropriate action. Strategy just like other contextual factors are at best stimulus for organization structural decision making.

V. CONCLUSION

This study has yielded a high empirical validity for its theoretical model that was to establish; the moderating effect of the decision-maker in the relationship between strategy and organization structures. Accordingly, the assumption held within the structure-contingency model that the linkage between strategy and structure is logical and direct is no longer tenable. Thus the inevitable conclusion of the study is that the organization structure is an outcome of the decision maker's choice. The consequence of this conclusion is that when designing organization structure it is imperative to consider the decision maker(s) and decision making process. Those who have the power to direct organizations ultimately take the call on structure. Thus, the study advances the cause for complementing structure-contingency framework with the strategic choice approach in designing organization structure and future studies. The strategic choice approach which argues that the process of structuring an organization is fundamentally a decision problem finds empirical support in this study.

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