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Alignment of Organizational Structure as an Antecedent to Performance

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Abstract:
Structure refers to the arrangement of hierarchical levels in an organization. It may be as the allocation of work roles and administrative mechanisms that allow organizations to conduct, coordinate, and control their work activities. Numerous dimensions of organizational structure have been studied in conjunction with strategy and performance, including specialization, formalization, size of administrative components, size of staff components, centralization of authority, vertical span, number of operating sites, extent of formal controls, proportion of professionals, and liaison devices. Organizations vary significantly in their structure and this has different effects on organizational and individual performance. Structure is therefore very important and significant to an organization performance. Strategy is a comprehensive master plan for achieving the objectives of a mission of an organization. It is defined at corporate, business and functional levels of a business set up. In order to succeed, organizations usually depend on strategies for the three levels. However the relationship between the levels and the required coordination among these strategies are not straightforward. Apart from the resources availability, the success of the organization depends on the creation and existence of coordination among the units. To ensure a coordinated front there is a need to align the structure to the strategy to achieve the desired fit. In a study carried out in the sugar industry in Western Kenya, the researcher sort to answer the question on the effect of alignment of the organizational structure on its performance. To achieve its objectives the study used both primary and secondary data collected by use of questionnaires and interview guides while the existing literature reviewed. Data was collected from a study census of 50 managers and a sample of 395 farmers from the study population of 50 managers and 130,000 farmers. The methods for data collection allowed for triangulation hence ensuring validity of the data. a survey research design with a mixed approach for both qualitative and quantitative data was used. A correlation coefficient model was applied in the data analysis to determine the strength and direction of the relationship between the variables while the coefficients of determination were used to show the level of change of values occasioned by the mediating variable. The resulting P-values were used to test for the reliability of the samples for the true values of the study population. Research findings were discussed and presented using appropriate summary tables. Finally, a statistically significant effect on competitive performance was assessed at the 0.05 and 0.01 level of significance. The general findings of the study indicated that the mediating variable (strategic alignment had a significant effect on the change in variation of values on the dependent variable occasioned by changes of values of the predictor variables. The study therefore concluded that the alignment of organizational structure of the sugar industry in western Kenya significantly determines the performance of the industry and recommended an alignment of the variables to the corporate strategy to enhance performance.

Keywords: *Strategy, alignment, management, structure, strategic fit*

1. Introduction

1.1. Strategic Fit (Strategic Alignment)

Strategy is a comprehensive master plan for achieving the objectives of a mission of an organization (Shavarini, Salimiani, Nazemi & Albozi, 2012). It is defined at corporate, business and functional levels of a business set up. In order to succeed, organizations usually depend on strategies for the three levels. However the relationship between the levels and the required coordination among these strategies are not straightforward. Apart from the resources availability, the success of the organization depends on the creation and existence of coordination among the units (Valene & Bruggeman, 2006). Lack of a suitable structure for transferring strategies developed at corporate level to the functional level results in innumerable difficulties.

According to Shavarini, Salimiani, Nazemi & Albozi 2012), the operational unit is usually the center core of the organization. It often consumes most of the capital and human assets of the organization; hence a great deal of the production cost is spent. The operation strategy has therefore been known as a competitive weapon and is of utmost value. The question that begs is how the strategic elements of operation can be arranged to have the best fit with business strategy.

Hill & Brown, (2007) posit that strategic fit is the degree of linkage or consistency between the competitive priorities, delivery systems and infrastructure of an operation. The linkage is referred to within the operations strategy and strategic management literature in a variety of ways; strategic fit, strategic alignment, strategic profile and strategic focus. They further defined strategic alignment in the following different perspectives; moderation, mediation, matching, gestalts, profile deviation and co-variation. Strategic alignment in the current study is defined in the mediation perspective.

According to Hill & Brown, (2007), strategic fit/alignment of an operation has two different dimensions; external and internal. *External*; - Consistency between the competitive configuration in the market and the operation processes and infrastructure in the business. External strategic fit exist when the actions and interests of all company employees are focused on key goals. *Internal;* the consistency between the operations strategy and the overall business strategy, consistency with the other functions in the company and consistency between the constituent elements and processes of the operational systems. Internal strategic fit exists when employees from different levels and functions within the organization agree on what is most important for the organization to succeed, specifically, the level of agreement within an organization on the relative importance of the competitive criteria.

For a strategy to be effective it must not only be appropriate (i.e.be well fitted to the competitive environment) but it also must be communicated and widely understood throughout the organization. During the process of strategic alignment clear links between the operation strategies and the corporate business strategy are created. Having clear links between the two levels means; senior management and management of the operation functions must agree on goals of the company and of the operation functions, the operation functions support the strategic direction of the company and management can prevent the emergence of any disparity between an intended business strategy at the corporate level and a realized operations strategy at the functional level (Valene & Bruggeman, 2006).

In the current study the alignment of the organizational structure has been considered as one of the strategies to be used to enhance organizational performance given it influence on strategy implementation and eventual achievement of goals. The managers and the farmers represent the operational and the functional levels of management hence the focus of the study.

1.2. Structure

Structure refers to the arrangement of hierarchical levels in an organization. Mullin (2010), defined structure as the allocation of work roles and administrative mechanisms that allow organizations to conduct, coordinate, and control their work activities. Numerous dimensions of organizational structure have been studied in conjunction with strategy and performance, including specialization, formalization, size of administrative components, size of staff components, centralization of authority, vertical span, number of operating sites, extent of formal controls, proportion of professionals, and liaison devices. Organizations vary significantly in their structure and this has effects on organizational and individual outcomes (Tolbert & Hall, 2009). Structure is very important and significant to an organization. Every organization has a 'port of entry' known as the hiring department (Tolbert & Hall, 2009) where new employees or workers come into the organization. These organizations are guided by rules, regulations and systems on how to do things. These guide the behavior of organizational members and keep them in check (Daft & Willmott, 2010).These organizational behaviors determine the performance of the organization.

Further, organizations vary in different dimensions with some organizations conducting their daily operations from a specific single location and have few variations for their job types while others are operational nationally and internationally at the same time and have a wide variety of job divisions (Daft & Willmott, 2010). Similarly, they also vary in the degree to which employees and departments are given the ability to make decisions, some are central to top management while others are delegated to individual departments (Tolbert & Hall, 2009).

An entity's organizational structure provides the framework within which its activities for achieving entity-wide objectives are planned, executed, controlled, and reviewed. Establishing a relevant organizational structure includes; considering key areas of authority, responsibility and appropriate lines of reporting. An entity develops an organizational structure suited to its needs. The appropriateness of an entity's organizational structure depends, in part, on its size and the nature of its activities (Latifi & Shooshtarian, 2014). Armstrong (2012) regards a structure of an organization as a framework for getting things done. It consists of units, functions, divisions departments, and formerly constituted: work teams into which activities related to particular process projects, products, market, customers, geographical areas or professional disciplines are grouped together. The structure indicates who is accountable for directing and carrying out these activities and defines management hierarchies. According to Tolbert & Hall (2009), most organizational structures change as they are influenced by different kinds of members, member interactions and changes from the environment.
Organizations have different structures over time; some are said to be either formal or informal (Armstrong, 2012) while others are documented as being either structural or contextual (Daft & Willmott, 2010). Tolbert & Hall, (2009) showed that the formal structure entails what is to be done in an organization and which personnel are responsible while the informal structure considers norms and social anticipations that are not officially laid down by an organization. Daft & Willmott (2010) viewed the structural element as the internal aspects of an organization and the contextual element as the

external aspects. The interrelations of these aspects in formal organizational structures determine whether an organization takes up a mechanistic form or an organic form.

According to Tolbert & Hall (2009), a mechanistic structure is "characterized by a hierarchy of authority, task specialization and formal control" while an organic structure is defined as one that is illustrated by a network structure of power, continuous adjustment and Redefinition of tasks within the organization and encouraged communication involving information and advice (Tolbert & Hall, 2009). Daft & Willmott, (2010) argue that as organizations grow, they tend to have more bureaucracies which make their structures more mechanistic and less organic. Further researcher (Daft & Willmott, 2010) indicates that an organization's formal structure is altered by its growth. Growth may be triggered by several factors such as increased competition within the current market; a desire to expand operations/ diversification; access to new markets; opportunities to increase its capital base or even the need to improve its skills and knowledge base so as to remain competitive. From these factors we can construe that organizations change so as to meet some form of resource need that it may have to achieve the desired performance levels. Whatever the cause for change the formal organizational structure is affected but this change is likely to be caused by a change in the resource needs of the organization and therefore affecting its performance.

Armstrong (2012), further, defines organizational structure as the manner in which duties and authority are allocated and work procedures are carried out, by employees in an organization. It can be both formal and informal structures. The formal structure entails clear official organizational specifications, terms and conditions while the informal structure entails unofficial standards and social specifications. Nonetheless, Wang'oe, & Maitha (2013), noted that it is not realistic for organizations to purely exist in either a mechanistic or an organic form. The structure of the organization depends on the present growth level. This agrees with Daft & Willmott (2010), who posits that when the organization is at the creation phase or the entrepreneurial stage it is seen to be very informal and should be portrayed as being organic. However, as they grow the structure tends to be change to mechanistic.

Organizations exist to achieve goals and the goals are broken down into tasks as the basis for jobs. Jobs are grouped into departments where departments in organizations maybe characterized by marketing, sales, advertising, manufacturing, and so on. Within each department, even more distinctions can be found between the jobs people perform. Departments are linked to form the organizational structure. The organization's structure gives it the form to fulfill its function in the environment (Nelson & Quick, 2011). The term organizational structure refers to the formal configuration between individuals and groups regarding the allocation of tasks, responsibilities, and authority within the organization (Greenberg, 2011).

Organizational structures were previously based either on product or function (Oliveira & Takahashi, 2012). However, this has changed as seen in the matrix organization structure which has crossed these two ways of organizing (Galbraith, 2009). Others authors have moved beyond these early approaches and examined the relationship between organizational strategy and structure (Thompson et al 2012; Pearce &Robinson, 2011). This approach began with the landmark work of Chandler (2003), who traced the historical development of such large American corporations as DuPont, Sears, and General Motors (David, 2011). He concluded from his study that an organization's strategy tends to influence its structure. He suggests that strategy indirectly determines such variables as the organization's tasks, technology, and environments, and each of these influences the structure of the organization and ultimately affecting the performance of the organization (Hall and Tolbert, 2009; Miles, Snow, Meyer, & Coleman, 2011).

Mintzberg (2009), suggests that organizations can be differentiated along three basic dimensions: the key part of the organization, that is, the part of the organization that plays the major role in determining its success or failure; the prime coordinating mechanism, that is, the major method the organization uses to coordinate its activities and the type of decentralization used, that is, the extent to which the organization involves subordinates in the decision-making process. The distribution of tasks, the definition of authority and responsibility, and the relationship between members of the organization can be established on a more personal and informal basis; with increasing size, however, there is greater need for a formal organizational structure (Mullin, 2010).

In order for any structure to provide meaningful support to organizational performance, it must achieve the; economic and efficient performance of the organization and the level of resource allocation; monitoring the activities of the organization; accountability for areas of work undertaken by groups and individual members of the organization; co-ordination of different parts of the organization and different areas of work; flexibility in order to respond to future demands and developments, and to adopt to changing environmental influences; and to the social satisfaction of members working in the organization (Mullin, 2010). In practice, the actual operations of the organization and success in meeting its objectives will depend upon the behavior of people who work within the structure and who give shape and personality to the framework (Mahapatro, 2011).

Mullin (2010) asserts that there is a close relationship between organization structure and corporate strategy. Richardson and Evans (2008) emphasized the importance of structure following the organization's strategy, and not only in supporting but in driving the strategic objectives and plan. However, he further suggests that there is a need to ensure that strategy and structure are consistent with each other. Managers need to consider how structural design and methods of work organization influences the behavior and performance of members of the organization which translates to organization performance (Mullins, 2010).

The organizational structure defines the relationships that exist among the members of staff and hence influence the strategy implementation mechanism. The behaviors of the people involved in the process are important determinant to its success, and this is enshrined in their culture. David, (2012) defines culture as a pattern of behavior developed by an organization as it learns to cope with its problems of external adaptation and internal integration that has worked well

enough to be considered valid and to be taught to new members as the correct way to perceive, think and feel. This emphasizes the importance of matching internal with external factors in the process.

Organizational structure plays an important role in helping management to achieve its objectives and follow the firm's strategy (Tran & Tian, 2013). Many studies have found a significant relationship between organic structures and enhanced performance (Enz, 2008). David, (2012) recommended that organizations adopt a flexible structure to encourage greater staff participation, which, in turn, can improve problem identification and resolution and enhance performance and quality. Previous studies (Enz, 2008) have employed organizational structure as a moderating variable in analyzing the relationship between business strategies and performance. Enz (2008) reported a hospitality company's adoption of a decentralized structure to facilitate a quick decision-making process, enhance supplier relationships, minimize costs, and assist in staff training.

A previous study carried out by Atieno & Wanyoike (2015), examined the effect of logistical management practices on operational efficiency at Mumias Sugar Company found out that effective management of information flow improves the company's internal and external processes and that automation of warehousing activities greatly enhances accuracy, speed of operation and reduces wastes, which translates to performance. They recommended the need for proper internal structures and systems to allow free flow of information between organizations and key stakeholders, staff training to handle the systems and fit in the structure to improve the speed and efficiency of operations. Further, in a study carried out by Maduenyi, Oke, Fadeyi & Ajagbe (2015), on the impact of structure on performance confirmed strategy as a moderating factor, rather than a mediating factor on firm performance.

2. Methodology

This study adopted a survey design which enabled the establishment of clear links across the study (Cooper & Schindler, 2011). The descriptive survey design was used to analyze the organizational internal environment as a determinant of performance of the sugar industry in western Kenya. The design helped to describe, clarify and interpret factors and variables that generally affected or influenced the productivity of the sugar industry. It was found more practical as it gave the conditions prevailing at the time of the research. It also allowed respondents the opportunity to comment in a qualitative open-ended manner and therefore the personal interviews emanating from it were necessary. Through questionnaires and interviews, the respondents provided a view of the present state of performance of the sugar industry in western Kenya.

The target population for the study comprised of the 130,000 cane farmers and 50 managers serving the main five Western Kenya Sugar Cane Companies namely: Mumias; Nzoia, Butalis; Sony Sugar and Chemelil **(Annex 1).** The western Kenya region was selected, given its contribution in the sugar industry in the country where 80% of the sugar is produced (KSB, 2010). Secondly sugar cane growing is the main cash crop in the area hence having a major impact on the livelihood and economic well-being in the region (Wangalwa, 2015).

2.1. Study Population

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2.2. Sample Size

A sample is a subset of the population that displays all the characteristics of the population in order to be truly representative. The study used a formula by Yamane (1967) to calculate sample size from the entire population. The proportionate sample size comprised of 398 farmers and 44 managers (Annex 2). After establishing the sample size from the entire population, proportionate sample allocation was used to assign sample sizes to strata in proportion to the stratum population size (Annex 3).

Sampling is the procedure a researcher uses to gather people, places or things to a study. It is a process of selecting a number of individuals or objects from a population such that the selected group contains elements representative of the characteristics found in the entire group (Kombo & Tromp, 2011). According to Mugenda (2008) sampling is the process of selecting a representative sub-set of observations from a population to determine the characteristics of the random variable under study. The research used the concept of a representative sample of the population and therefore proportionate stratified random sampling was used. Convenient simple random sampling was thereafter used to select the identified samples from each stratum especially for the farmers. In identifying the farmers the researcher was assisted by scouts provided by the specific sugar factories through the farmers' association. An estimated radius of 30 KM from the specific factory was found to be appropriate for data collection. For the managers, care was taken to select all managers in each stratum so as to have a representative sample from the population.

3. Data Collection

3.1. Primary Data

The primary data for the study was collected from the sampled population using a questionnaire and supported by an interview guide. The questionnaire was structured according to the specific objectives of the study. The

questionnaire had structured questions so as to present to the respondents a fixed set of choices and some unstructured questions aimed at giving the respondents an opportunity to respond in their own words (Cooper & Schindler, 2011).
Closed ended questions were used to provide the researcher with standardized data that could be presented in an appropriate format that provided quantified and compared data. The questionnaire was also utilized in providing pre-coded data, which would be analyzed easily and gather data that was reliable and valid. The items were carefully designed to elicit the right response and were preceded by appropriate instructions. The filling of the farmer's questionnaire was by assistance from the research assistants to ensure that the right information was obtained, clarity on issues and to reduce the level of un-returned questionnaires'. For the managers, it was a drop and pick arrangement given their busy work schedules. Scaling was of the Likert type scales but some categorical items were also included.

The interview guide was used to collect data to help validate the responses obtained though questionnaire given that they provide in-depth information not possible to get through questionnaires, they guard against confusing the questions since the interviewer would clarify the questions and taking advantage of the flexibility of the interviews. Interviews were particularly useful for getting the story behind a participant's experiences. The interviewer could pursue in-depth information around the topic. Interviews were found to be useful as follow-up to certain respondents to questionnaires, e.g., to further investigate their responses (Kothari, 2014). For more insight data collection, the interviews would provide the advantage of the interviewers probing for more precise details. Due to the time needed to carry out the interviews, the focus was directed to the corporate strategic managers only.

3.2. Secondary Data

The researcher sought to confirm some of the information collected from the primary data by carrying out an analysis of the existing data. This was done by reviewing various reports from the industry and other related studies. This was to allow for more reliability of the information obtained by facilitating triangulation (Sekaran, 2011).

4. Reliability and Validity

4.1. Pilot Testing of Data Collection Instruments

According to Saunders, Lewis & Thornhill (2011), pilot testing refines the questionnaire so that respondents will have no problems in answering the questions. For high precision pilot studies 10% of the sample should constitute the pilot test size (Mugenda, 2008). To ascertain the validity and reliability of the questionnaire and interview guide, pre-tests of the tools were carried out and pilot survey conducted. The pre-test consisted of first revision of the instruments with the supervisors to guarantee suitable coverage of the domain of each construct. A pilot survey was then performed to test the reliability of the research instrument which made it possible to modify or delete certain items. The piloting was carried out at Transmara Sugar Company. The purpose of pilot testing was to establish the accuracy and appropriateness of the research design and instrument and to provide proxy data for selection of a probability samples (Saunders, Lewis, & Thornhill, 2011).

4.2. Reliability of the Research Instruments

The reliability of a measure is an indication of the stability and consistency with which the instruments measure the concept and help to assess the goodness of a measure (Sekeran 2009). To maximize reliability of the research instruments, the approach to their constructions included: framing each question tightly and clearly to reduce ambiguity and avoid any demand bias; sequencing onerous questions towards the end of the survey; keeping open questions to a minimum; devising response scales that would increase the variability of response thereby ensuring high statistical value from the data. In addition to the questions tapping into key issues, the inclusion of questions that provided a profile of respondents and enabling the detection of response differences across demographic characteristics was used (Cooper & Schindler, 2011).

The study instruments were further subjected to a panel of experts to assess if they capture all the items they were intended to measure and their expert opinion was incorporated to ensure face validity. The study also used both construct and content validity. For construct validity, the instruments were divided into several sections to ensure that each section assesses information for a specific objective, and also ensures the same close ties to the conceptual framework of the study. Content validity was achieved by pre-testing the instruments on a similar firm and arising modifications incorporated for clarity, comprehensiveness, relevance, meaning and requisite depth.

Finally, reliability of the instruments was then tested through the Cronbach's alpha method (Cronbach, 1951). Using item inter item correlation matrix as a guide. Items that were not strongly contributing to alpha, and whose content was not critical, were eliminated (Mugenda, 2008). Cronbach's alpha has the most utility for multi-item scales at the interval level of measurement since, it requires only a single administration and provides a unique, quantitative estimate of the internal consistency of a scale (Cooper & Schindler, 2011: Mugenda, 2008). A reliability co-efficient (Rho) of 0.7 and above was considered adequate for this study (Mugenda, 2008). In general, reliabilities less than 0.6 were considered to be poor, those in the 0.70 range, acceptable, and those over 0.80 good (Sekaran, 2011). The content validity was considered suitable since it posted a Cronbach's alpha of 0.876 and 0.796 which is approximately close to and above the 0.80 considered to be good for managers and farmers respectively (Annex 4).

Validity is the extent to which a test measures what it is supposed to measure. The question of validity was raised in the context of the three points; the form of the test, the purpose of the test and the population for whom it is intended. The study sought to establish the validity of the instruments in order to establish whether they were valid or not. To test validity the researcher used the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) test which was computed using

SPSS version 23. The KMO value of more than 0.4 was to be considered adequate. The testing postedresults of 0.444 and 0.521 for managers and farmers respectively hence considered adequate for the study (**Annex 5)**

5. Findings

The variable was examined by asking the respondents to respond to various statements and give their opinion and perspective on whether organizational structure is an appropriate strategy for enhancing performance of the sugar companies. To determine the findings, the researcher undertook a series of tests.

5.1. Kaiser-Meyer Olkin (KMO) Test

This was an important analysis test for the study since it assisted to establish whether the statement items used to describe the variables were suitable for use in further analysis. According to Field (2009), a research item is considered appropriate for further analysis if the factor loading value is more than 0.4. Factor analysis was conducted using Principal Components Method (PCM) approach. The extraction of the factors followed the Kaiser Criterion where an Eigen value of 1 or more indicates a unique factor. According to Rahn (2010) and Williams, Onsman & Brown, (2010) a factor loading equal to or greater than 0.4 is considered adequate. This is further supported by Tabachnick & Fidell, (2007) who asserts that a factor loading of 0.4 has good factor stability and deemed to lead to desirable and acceptable solutions. The results were presented based on the study objectives. The study sought to establish the sampling adequacy and hence the factor loading for the various items used in the study. From the results it is shown that the various items used to describe organizational structure in relation to organizational performance were adequate and hence appropriate for use in further analysis. The results from the managers showed a KMO value of 0.444, and a P - value of 0.000. While the results from the farmers gave a KMO of 0.521 and it was also statistically significant with a P- value of 0.000. The KMO results for both the managers and the farmers were more than the recommended 0.4 and hence appropriate for use for further analysis (Annex 6).

The study further analyzed the factor loadings for each item in order to assess the effectiveness of the statement items to provide the required data for analysis. All the statements attracted coefficients of more than 0.4 hence were retained for analysis. This agrees with Rahn (2010), Black (2002), and Zandi et al, (2006),on the factor loading equal to or greater than 0.4 which they considered adequate with a good factor stability and deemed to lead to desirable and acceptable solutions. All the statements attracted coefficients of more than 0.4 hence were retained for analysis. (Annex 7 and Annex 8).

It was also important to establish the total variance explained by the statements that explained the variable. This was important because it helped to establish the possibility that the items can be reduced into one factor for further analysis. The results for the total variance are given in Annex 9 and 10 for managers and farmers respectively. From the results it is noted that the total variance for the eight items used in the description of organizational structure and organizational performance was 76.361%. This implied that the eight items were appropriate for use in further analysis. The Total Variance analysis for the farmers indicates that the 8 statements on organizational structure can be factored into one factor. The total variance explained by the extracted factor is 67.953%.

5.2. Correlation Analysis for Farmers

The study sought to establish the relationship that existed between the organizational structure, alignment of strategies and organizational performance. The relationship was tested at a 0.01 probability value whereby a P - value of less than 0.05 was considered to be statistically significant. The relationship was also noted to either be direct or inverse based on the r value. The results showed that there was a very weak and inverse relationship between organizational structure and organizational performance of sugar manufacturing companies (r= -0.012 before the introduction of the strategic alignment in respect of the farmers. After alignment the relationship posted a strong direct correlation(r = 0.847). The researcher used the coefficients of determination (r^2) to further interpret the outcomes. The outcomes of the study implied that 0.01 % of the variations in the values of the dependent variable were accounted for by the variations in the values of the independent variable. However after introduction of the mediating variable the 71.7% of the variations in the values of the dependent variable were accounted for by the variations in the values of the independent variable. The difference of the two levels of variation (71.7% – 0.01% = 71.69% was attributed to the effects of the mediating variable (Annex 11).

The findings were also used to test the hypothesis; Null hypothesis: H_o: $\rho \neq o$ (*There is no relationship between organizational structure and organizational performance before the introduction of strategic alignment*) and the Alternative hypothesis: H_1: $\rho = o$ (*There is a relationship between organizational structure and organizational performance after the introduction of strategic alignment*). The outcomes of the study indicated an improvement in the levels of significance after the introduction of alignment of strategies – the mediating variable (before p-value = 0.839 - not significant; after P value = 0.000 – highly significant). The researcher therefore failed to accept the null hypothesis and concluded that there was a significant relationship between organizational structure and performance after introducing the mediating variable.

5.3. Correlation Analysis for Managers

For the managers the results indicated a weak relationship between organizational structure and organizational performance of the sugar manufacturing companies (r = 0.281) before the introduction of the alignment of the strategies (mediating variable). After alignment the results indicated a stronger relationship (r = 0.657). The researcher sought to find out the level of explained variations of the total variations by use of the coefficients for determination (r^2). The findings indicated that 7.9% of the variations of the values of the dependent variable were explained by the variations in

values of the independent variable before mediation. After mediation 43% of the variations of the values of the dependent variable were explained by variations in the values of the independent variable. The difference of the two levels of variation (43% – 7.9% = 35.1% were attributed to the effects of the mediating variable.

The resulting p-values were used to test the study hypothesis: Null hypothesis: H_o: $\rho \neq o$ (*There is no significant relationship between organizational structure and organizational performance before the introduction of strategic alignment*) and the Alternative hypothesis: H_1: $\rho = o$(*There is a significant relationship between organizational structure and organizational performance after the introduction of strategic alignment*). The outcomes of the study indicated an improvement in the levels of significance after the introduction of the mediating variable - alignment of strategies (before p value = 0.126 - not significant; after P value = 0.000 – highly significant). The researcher therefore rejected the null hypothesis and concluded that there was a high significant relationship between organizational structure and performance after introducing the mediating variable (Annex 12).

6. Conclusion

The study sought to determine the effects of strategic alignment of the organizational structure on the performance of the sugar industry in Western Kenya. The objective was subjected to different tests to determine its suitability and eventually analyzed for its effect on performance of the sugar industry in Western Kenya. The researcher sought to find out the views of the managers and the farmers on the effect of the alignment of the organizational structure on performance. The correlation test findings for the managers (-.012) indicated that the organizational structure had a weak inverse relationship. However after subjecting it to a strategic alignment test the relationship indicated a strong direct relationship (.847). The coefficient of determination (r^2) was used to determine the test outcomes. The findings indicated that only .012% of the variations of the values of the dependent variables were accounted for by the variations of values of the independent variable before strategic alignment. However after introduction of the mediating variable the effect changed to 71.7 % of the variations in values of the dependent variable explained by variations in the values of the independent variable. The change of 71.6% of changes in variations was attributed to the mediating variable.

The researcher tested the study hypothesis; Null hypothesis: H_o: $\rho \neq o$ (*There is no significant relationship between organizational structure and organizational performance before the introduction of strategic alignment*) and the Alternative hypothesis: H_1: $\rho = o$ (*There is a significant relationship between organizational structure and organizational performance after the introduction of strategic alignment*). The findings of the test indicated an improvement in the levels of significance after the introduction of the mediating variable (P-values of 0.839 before mediation and 0.000 after). The findings therefore indicated a highly significant relationship between the organizational structures once it has been aligned to the organizational strategy.

The second part involving the farmers posted similar results to those of the managers i.e. a weak direct correlation between the organizational structure and performance (0.281) and (0.657) respectively. The coefficient of determination (r^2) indicated that 7.9% and 43% of the changes in variation of the values of the dependent variable were accounted for by changes in variations of the independent variable respectively. The test on the study hypothesis indicated P-values of 0.126 before and 0.000 after the mediating variable. The test therefore posted a significant relationship between organizational structure and performance after introduction of the mediating variable.

7. Recommendations

In order for performance to be achieved the management should review their organizational structures and adopt those that a relevant to drive the current strategic direction adopted by the industry. From the findings of the study, the sugar firms have continued to maintain the same structures despite changes in their strategies.

8. Areas of Further Research

Based on the findings of the study and owing to the performance levels of the sugar industry, the researcher proposes a replication of the study on a high performing industry. The researcher in the study model pointed out the existence of other internal environmental factors that have an effect on an organizational performance. Studies focusing on the other variables may also be considered either in the same industry or elsewhere.

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Appendix

Annex 1: The Target Population

Company	Managers	Farmers
Mumias Sugar	13	45,000
Nzoia Sugar	13	25,000
Butalis	6	30,000
Sony Sugar	12	25,000
Chemilil Sugar	6	5,000
Total	50	130,000

Table 1: Distribution of the Target Population
Source: Respective Websites of the Companies (2019)

Annex 2: Calculation of the Sample for Managers and Farmers
The sample for managers

$$n = \frac{\mathrm{N}}{1 + \mathrm{N(e)2}}$$

$$n = \frac{50}{1 + 50(0.05)2}$$

$$n = \frac{50}{1 + 0.125}$$

$$n = \frac{50}{1.125}$$

$$n = 44.4$$

The sample for farmers was as follows;

$$n = \frac{\mathrm{N}}{1 + \mathrm{N(e)2}}$$

$$n = \frac{130{,}000}{1 + 130{,}000(0.05)2}$$

$$n = \frac{130{,}000}{1 + 325}$$

$$n = \frac{130{,}000}{326}$$

$$n = 398$$

Annex 3: Assignment of Sample Size to Strata

Company	Population	Proportionate Sample Size	Sample Size
Mumias Sugar	45,000	$398 \times \frac{45{,}000}{130{,}000}$	137.77
Nzoia Sugar	25,000	$398 \times \frac{25{,}000}{130{,}000}$	76.53
Butalis	30,000	$398 \times \frac{30{,}000}{130{,}000}$	91.84
Sony Sugar	25,000	$398 \times \frac{25{,}000}{130{,}000}$	76.53
Chemilil Sugar	5,000	$398 \times \frac{5{,}000}{130{,}000}$	15.31
Total	130,000		397.98

Table 2: Distribution of the Sample Size for Farmers
Source: Researcher (2019)

The study used a total of 398 farmers selected from the five sugar companies.

Company	Population	Proportionate Sample Size	Sample Size
Mumias Sugar	13	44 x 13 / **50**	11.44
Nzoia Sugar	13	44 x 13 / **50**	11.44
Butalis	6	44 x 6 / **50**	5.28
Sony Sugar	12	44 x 12 / **50**	10.56
Chemilil Sugar	6	44 x 6 / **50**	5.28
Total	50		44

Table 3: Distribution of the Sample Size for Managers
Source: Researcher (2019)

Annex 4: Reliability Test

	Managers		Farmers	
Objectives	**Cronbach's Alpha**	**N Of Items**	**Cronbach's Alpha**	**N Of Items**
Organizational Structure	.876	8	.796	8
Strategic Training	.827	8	.764	12
Firm Production Policy	.729	10	.779	10
Strategic Decision Making	.878	12	.701	12
Strategic Alignment	.792	10	.899	10
Organizational Performance	.874	7	.747	7

Table 4: Reliability Test
Source: Researcher (2019)

Annex 5: Validity

		Managers	Farmers
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.444	.521
Bartlett's Test of Sphericity	Approx. Chi-Square	211.487	1877.778
	Df	28	28
	Sig.	.000	.000

Table 5: Sampling Adequacy for the Items Describing Organizational Structure
Source: Researcher (2019)

From the table it is clear that the items selected for the study under each objective were valid and hence suitable for use in further analysis given that they had a KMO value of more than the recommended threshold of 0.4.

Annex 6: Sample Adequacy

		Managers	Farmers
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.444	.521
Bartlett's Test of Sphericity	Approx. Chi-Square	211.487	1877.778
	Df	28	28
	Sig.	.000	.000

Table 6: Sampling Adequacy for the Items Describing Organizational Structure
Source: Researcher (2019)

Annex 7: Communalities Analysis for the Managers

	Initial	Extraction
Control mechanism for work	1.000	.855
Tasks performed effectively and efficiently	1.000	.821
Assist in attainment of goals	1.000	.767
Describe the internal characteristics of an org	1.000	.673
Defines the formal system of authority	1.000	.873
Describes the formal arrangement of jobs and tasks	1.000	.749
Ensure farmers access management easily	1.000	.830
Delivery services made easier for farmers	1.000	.540

Table 7: *Extraction Method: Principal Component Analysis*
Source: Researcher (2019)

Annex 8: Communalities Analysis for the Farmers

	Initial	Extraction
The organizational structure of the firm helps as a control mechanism for work outcomes	1.000	.527
The organizational structure of the firm ensure that the required tasks are performed effectively and efficiently	1.000	.663
The organizational structure assist in the attainment of organizational goals and objectives	1.000	.529
The organizational structure describes the internal characteristics of an organization	1.000	.758
The organizational structure defines the formal system of authority	1.000	.444
The organizational structure describes the formal arrangement of jobs and tasks in organizations	1.000	.734
The organizational structure ensures that farmers access management easily	1.000	.913
The structure makes it easier for service delivery to the farmers	1.000	.868

Table 8: Communalities Analysis for the Farmers
Extraction Method: Principal Component Analysis
Source: Researcher (2019)

Annex 9 Total Variance Explained According to the Managers

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.519	56.492	56.492	4.519	56.492	56.492
2	1.590	19.870	76.361	1.590	19.870	76.361
3	.780	9.747	86.108			
4	.482	6.029	92.137			
5	.265	3.308	95.446			
6	.222	2.778	98.224			
7	.125	1.560	99.785			
8	.017	.215	100.000			

Table 9: Total Variance Explained According to the Managers
Extraction Method: Principal Component Analysis.
Source: Researcher (2019)

Annex 10: Total Variance Explained According to the Farmers

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.413	42.664	42.664	3.413	42.664	42.664
2	2.023	25.289	67.953	2.023	25.289	67.953
3	.888	11.098	79.051			
4	.670	8.374	87.425			
5	.638	7.977	95.402			
6	.198	2.473	97.875			
7	.146	1.826	99.701			
8	.024	.299	100.000			

Total 10: Variance Explained According to the Farmers
Extraction Method: Principal Component Analysis
Source: Researcher (2019)

Annex 11.Correlation Analysis for Farmers

			Alignment of strategy	Performance	Organizational structure
Spearman's rho	Alignment of strategy	Correlation Coefficient	1.000	.847**	-.012
		Sig. (2-tailed)	.	.000	.839
		N	302	302	302
	Performance	Correlation Coefficient	.847**	1.000	-.108
		Sig. (2-tailed)	.000	.	.061
		N	302	302	302
	Organizational structure	Correlation Coefficient	-.012	-.108	1.000
		Sig. (2-tailed)	.839	.061	.
		N	302	302	302

Table 11: Correlation Analysis between Organizational Structure and Organizational Performance for Farmers
***. Correlation Is Significant at the 0.01 Level (2-Tailed)*
Source: Researcher (2019)

Annex 12 Correlation Analysis for Manager

			Performance	Organizational Structure	Alignment Of Strategy
Spearman's rho	Performance	Correlation Coefficient	1.000	.281	.657**
		Sig. (2-tailed)	.	.126	.000
		N	31	31	31
	Organizational structure	Correlation Coefficient	.281	1.000	.311
		Sig. (2-tailed)	.126	.	.089
		N	31	31	31
	Alignment of strategy	Correlation Coefficient	.657**	.311	1.000
		Sig. (2-tailed)	.000	.089	.
		N	31	31	31

Table 12: Correlation Analysis between Organizational Structure and Organizational Performance for Managers
***. Correlation Is Significant at the 0.01 Level (2-Tailed)*
Source: Researcher (2019)