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Evaluating effect of organizational culture on strategy implementation in private chartered universities in Kenya

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ABSTRACT

This study aimed at evaluating the effect of organizational culture on strategy implementation in Private chartered universities in Kenya. The objective of this study was to ascertain the effect of hierarchy culture on the strategy implementation in Private chartered universities in Kenya. A cross-sectional survey research design was adopted and it used both quantitative and qualitative data as it seeks the effect of organizational culture on the implementation of corporate strategy. The accessible population included University and students' leaders. This study used both stratified random sampling and the target sample size was 194 employees. The statistical package for social sciences (SPSS) version 21 was used to describe the relationships between dependent and independent variables. The study used correlation and regression techniques as well as the analysis of variance (ANOVA) to test the study hypotheses. A multiple linear regression model was also used to derive inferential statistical indicators like the correlation, coefficient of determination, F-statistics, t-test statistic, and the p-value. In this research Pearson's correlation analysis was used to test for the existence of multicollinearity. Normality testing was done to compare the cumulative distribution of the data. Factor analysis was also carried out on all items in each variable in order to reduce the measurable and observable variables. The key finding based on the tests conducted in the study was that the variable: Hierarchy culture had an effect on the dependent variable: Strategy implementation. The p-value published showed that there was a positive effect of hierarchy culture on strategy implementation in Private chartered universities in Kenya.

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Introduction

Studies have been done on the subject of organizational culture and the influence it has on other organizational variables especially in the 1980s. As a result of these studies, the subject has become popular among the managers who have understood that organizational culture could affect organizations and implementation of their strategies (Lund, 2003). Organizational culture and strategy are two important factors that contribute to the growth of an organization and the continuation of its business; and for this to take place, it is important to consider the organizational culture that aids the process of strategy implementation (Nawasar, *et al.*, 2014). An organizational culture is a tool that is powerful for implementation because it influences strongly people's behavior in organizations (Harrison & John, 2014). The model of the hierarchy organizational culture refers to a strongly structured and formalized organization, with precise and reinforced procedures, rules, policies. The strategy meant to secure organization efficiency relies on maintaining the stability and smooth running of an organization (Beytekin, *et al.*, 2010). Hierarchy culture is depicted by internal efficiency, stability, coordination, and control. Organizations exhibiting this type of culture emphasize security of tenure, predictability, and compliance to rules and regulations (Owino & Kibera, 2019).

In Kenya, studies show that there are challenges of strategy implementation and that institutional culture plays an important role in determining the success of strategic planning and implementation in any organization. It is important that the culture of an organization be well-suited with the strategy being implemented (Musyoka, 2011). Culture, especially organizational culture plays a huge factor in the way institutions function. Organizational culture may need to change to be able to accommodate changes (Institution of Engineers of Kenya, 2006). The success of every institution depends on the quality and commitment of its human resources to implement laid strategies (Chemwei, *et al.*, 2014). Organization culture is a factor that has an influence on strategy

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implementation in HEIs and behavior norms and dominant characteristics have a strong influence on implementation of strategies (Isaboke, 2015).

The understanding of organizational culture will help university leaders to manage change more effectively and efficiently. Rick (2013) has noted that when culture embraces strategy, execution is scalable, repeatable and sustainable. Research has shown that 62% of all higher education institutions have a strategic plan, but there are still many difficulties associated with the norms and behaviors of an organization's culture (Khosrow-Pour, 2006; Gachua & Orwa, 2015). The mission of Commission for University Education in Kenya is to regulate and assure quality university education by setting standards and monitoring compliance to achieve global competitiveness (Commission for University Education, 2012). This study is set out to ascertain the effect of hierarchy culture on the strategy implementation in Private chartered universities in Kenya.

Literature Review

Theoretical background

A contingency theory that predicts the nature of effective leadership is best understood within the context of the organization. Universities and colleges are described as various institutional types: Bureaucracy, collegium, political system, or organized anarchy (Nidiffer & Bashaw, 2001). This theory is important for this study because it predicts the nature of appropriate or effective leadership which is best understood within the context of the organization, and Hierarchy culture is simply identified through the domination of rule, system and procedure.

Organizations operate within an environment. This environment influences the organizational culture and strategy implementation efforts of any organization. The open systems theory was developed after World War II in reaction to the earlier theories of organizations. Open systems theories come in many forms, for example, institutional theorists observe organizations as a means by which the beliefs and social values are embedded in organizational structure and are also expressed in organizational change. Private chartered universities operate within an environment and they are not independent of the driving factors behind organizational change. Universities benefit from a strong open system's approach in understanding the environmental demands and the adaptation in policies and the implementation of their strategies (Mwanje, 2016).

According to Swanson and Holton (2009), human resource development is defined as a process of developing and unleashing human potential expertise through the organization development and personnel training and development so as to improve performance. Training is the process of systematically implementing organizational change in order to get better results and performance necessitates the organization, work process and individual or group levels. The core beliefs of human resource development are three. First, that organizations are human-made entities that rely on human expertise establish and achieve goals. Second, that human expertise is maximized and developed through human resource development and should be done for the mutual short term and long term benefit of both the organization and the individuals involved. Third, that professionals are advocates of individual or group work process and organization integrity (Ruona & Gibson, 2004).

The Competing Values Framework was developed initially from research conducted by University of Michigan faculty members on the major indicators of effective organizational performance. This is a useful model for organizing and understanding a wide variety of organizational and individual phenomena, including theories of organizational effectiveness, leadership competencies, organizational culture, organizational design, stages of life cycle development, organizational quality, leadership roles, financial strategy, information processing, and brain functioning. The robustness of the framework is one of its greatest strengths (Cameron & Freeman, 1991). Studies have revealed that the type of culture – clan, adhocracy, hierarchy, or market, is to a larger extent decisive as the organizational effectiveness is more concerned than any of the other two factors, that is, congruence and strength (Lacatus, 2013). In using the competing values framework (CVF), Smart and John (1996) concluded that some types of culture have a stronger positive relationship with traditional measures of the organizational effectiveness of colleges and universities than other culture types; but irrespective of the specific culture type, they noted that it is very important that the culture be 'strong' in order to achieve maximum effectiveness. This study used this framework to assess organizational culture in Private chartered universities in Kenya.

Empirical studies and hypothetical development

Various empirical studies have been conducted on organizational culture and the implementation of strategy. Some studies have consistently cited organizational culture as a key determinant of successful strategy implementation. Some researchers indicated that there is a positive link between organizational culture and performance (Fay & Denisson, 2003; Pirayeh *et al*, 2011). Rajasekar (2014) in his study on factors affecting effective strategy implementation in a service industry identified organizational culture as a key element of strategy implementation process. The study found out that a meaningful relationship existed between organizational culture and strategy implementation. Previous studies show that there is positive link between organization's culture and strategy implementation; and that flexible cultures are more relevant with the implementation process; and that all types of cultures are related to all dimensions of strategy implementation (Ahmadi, *et al*, 2012).

Rajasekar (2014) in his study on factors affecting effective strategy implementation in a service industry identified organizational culture as a key element of strategy implementation process. The study found out that a meaningful relationship exists between organizational culture and strategy implementation. Mozaffari (2008) did a study on the relationship between organizational culture and Leadership. The results of this study agree with the fact that almost all the universities in a widely study currently have a Hierarchy culture type. But it was noted that institutions with Hierarchy cultures did not excel in any of the performance domains (Cameron & Freeman, 1991).

Other studies done in Kenya show that this hierarchy culture is clear, it is easy to access management, delivering process is short and there is a defined way of working and sharing information to the whole organization. It facilitates flow of information and ways of working which enhances work and improves the implementation process (Mutai, 2015). Further, Kimemia (2013) in his study, hierarchy dimension of culture had the second highest mean score from clan culture. The overwhelming majority who responded confirmed that their organizations had clear policies that guided them on how to deal with corrupt practices. This study found that more than 93.5 percent of the participants reported that they had an organizational policy.

Research & Methodology

This study used both qualitative and quantitative methods to be able to examine the relationship between the variables and to explore the phenomenon in the study. The study also adopted cross-sectional survey research design to sample the population of a cross-section of Private chartered universities in Kenya. The sampling frame for this study was obtained from a list comprising of academic staff, middle level management, and student leaders of 14 private chartered universities in operation in Kenya. The study used convenience sampling to select 10 institutions from a total of 14 private universities. This formed 71% of the target institutions which met the threshold that a sample of at least 70% is sufficient enough. From the identified institutions, a sample of 240 respondents was adopted using Cochran (2007) formula which is represented in the following equation. Using Yamane (1973) formula, the sample size was determined as follows:

$$n = \frac{N}{1 + Ne^2} = \frac{605}{1 + 605 \times 0.05^2} = 240$$

The universities that were selected are particularly protestant and catholic. These universities that were established by churches, missionaries, and religious people have some similarities, and data will be comparable (Bonnell, 2015).

In this study, a structured questionnaire and interview instruments were used. The study collected primary and secondary data. Primary data was collected on each of the research objectives from the study population. A likert scale was employed to measure the ratings of items by participants in relation to various variables under investigation. Likert scales are preferred because they are easy to complete and in conducting analyses on the data (Golembiewski, 2005).

This study used correlation and regression techniques as well as the analysis of variance (ANOVA) to test the study hypotheses. The correlation analysis was used to determine the relationship between organization culture and implementation of corporate strategy in Private chartered universities in Kenya by computing Pearson product moment correlation (Cooper & Shindler, 2011). Quantitative data on each of the variables was gathered by use of a likert scale questionnaire. The responses will be coded and weighted to produce variables which were used to analyze the data further by use of regression model. A multiple linear regression model was also used to derive inferential statistical indicators like the correlation, coefficient of determination, F-statistics, t-test statistic and the p-value. Qualitative data generated by interviews was analyzed by classifying responses from participants into main emerging themes, categorizing and coding the categories and assigning them numerical values.

Hypothesis Testing

The objective was to ascertain the effect of hierarchy culture on the implementation of corporate strategy in Private chartered universities in Kenya. This objective was guided by the following hypothesis: H₄: Hierarchy culture has positive significant effect on the implementation of corporate strategy in Private chartered universities in Kenya. To ascertain if hierarchy culture had significant effect on implementation of corporate strategy in Private chartered universities in Kenya, simple Regression analysis was performed between two variables. In this case, R- square value 0.665 was published implying that 66.5% of Strategy implementation was explained by the hierarchy culture as indicated on the summary on Table 1. In this finding, R-square value was calculated in the absence of moderator. Besides this, an R-square value of 0.789 was also imputed in the presence of moderator. The finding shows that model two was much better than model one. Further analysis suggest that the overall model was significant for two models that is, the independent variable hierarchy culture was a good explanatory variable for strategy implementation with F-value of 155.667 with P- value of 0.000<0.05 when there is no moderator and F-value of 322.503 with P- value of 0.000<0.05 when moderator is available showing that the two model were fit.

The coefficient regression equation between Hierarchy culture and implementation of corporate strategy was expressed as

$$Y = 0.873 + 0.720 X_4$$

Based on the model formed it was clear that for every unit of Hierarchy culture, implementation of corporate strategy was increasing with 0.720. In addition to that, regression between hierarchy culture and implementation of corporate strategy in the presence of moderator was given as,

$$Y = 0.232 + 0.900 X_4 * Z$$

the finding was shown on the coefficient Table 1. The p-value published was smaller than 0.05, which simply means that there was a positive effect of hierarchy culture on implementation of corporate strategy in Private chartered universities in Kenya.

Table 1: Model summary for regression Analysis for Hierarchy culture and Strategy implementation

Model Summary						
Model		R	R Square	Adjusted R Square	Std. Error of the Estimate	
1		.809 ^a	.654	.652	.27422	
ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	27.010	1	27.010	359.184	.000 ^b
	Residual	14.287	190	.075		
	Total	41.297	191			
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.462	.143		3.227	.001
	hierarchy culture	.842	.044	.809	18.952	.000

The regression results in table 1 show that the effect of hierarchy culture on implementation of corporate strategy was significant ($F(1,190) = 359.184, p=0.000<0.05$). With $R=0.809$ and $R^2=0.654$, the model implies that about 80.9% of implementation of corporate strategy was contributed by hierarchy culture a variation of 65.4% in implementation of corporate strategy were brought about by hierarchy culture.

The F test was significant with a p value =0.000 which was less than the standard p value of 0.05 and this meant that the model was significant. From ANOVA, since p value =0.000 and was lower than $p=0.05$ (p value $0.00<0.05$) therefore the hypothesis that hierarchy culture has positive significant effect on the implementation of corporate strategy in Private chartered universities in Kenya was accepted. It implies that the contribution of hierarchy culture was significant. The equation that was fitted for the model was

$$\text{implementation of corporate strategy} = 0.462 + 0.842 \text{ hierarchy culture}$$

Results and discussions

Descriptive statistics for the effect of hierarchy culture on the implementation of corporate strategy in Private chartered universities in Kenya showed that Hierarchy culture had significant effect on implementation of corporate strategy in Private chartered universities in Kenya. The respondents were asked to rate the extent to which institutional policies generally governs what people do in implementing strategies. The finding showed that, majority agreed that institutional policies generally govern what people do in implementing strategies and an average score of 4.16 was recorded and standard deviation of 0.76. Smart and John (1996) confirm that rules and policies were the primary mechanisms in hierarchy cultures. Pushnykh and Chemeris (2006) posit that hierarchy organizational culture is a strongly structured and formalized organization, with precise and reinforced procedures, rules, and policies. To obtain the extent to which the respondents agreed that their institutions clearly defines the standard rules; an average score of 4.27 with standard deviation of 0.66 on scale of 1 to 5 was published indicating that the institution clearly defined the standard rules. Study confirms that standardized rules and procedures, and strict control define hierarchical culture (Yu & Wu, 2009).

To find out the extent to which respondents agree or disagree that leadership in the institution demonstrates efficient coordination of strategy implementation, the findings suggest that many of the respondents were in agreement that leadership in the institution demonstrates efficient coordination of strategy implementation because an average score rate of 3.81 and standard deviation of 1.10 was recorded. But the leadership in this type of culture causes to decrease the flexibility of an organization and it is heavily dependent on the personality of a leader. It provides insufficient flexibility for university environment (Pushnykh & Chemeris, 2006). Kising'u (2017) in his study on the role of strategic leadership for sustainable competitive advantage in Kenyan Public and Private Universities confirmed that hierarchy culture is negatively related to financial performance of the firms; and therefore it is not the best type of culture compared to other cultural dimensions. Further, institutions with Hierarchy cultures did not excel in any of the performance domains (Cameron & Freeman, 1991).

With regards to knowing the extent to which respondents agree or disagree that their institution's efficiency relies on maintaining steady operations in strategy implementation, the findings suggest that majority of the respondents were strongly in agreement that institution's efficiency relies on maintaining steady operations in strategy implementation since an average score rate of 3.81 and standard deviation of 1.08 was obtained. The respondents also agreed that their institution describes success on the basis of smooth performance towards strategy implementation; this was supported by mean of 3.77 and standard deviation of 0.85. In addition, the results suggest that the respondents were in agreement that management style in the institution is characterized by efficiency which helps in strategy implementation. This was also supported by mean score of 3.58 and standard deviation of 0.94.

Based on whether the respondent's institution emphasizes consistent quality of strategy implementation, the finding suggests that the respondents agreed with the statement. This was supported by mean score of 3.72 and standard deviation of 0.98. The average score for all items combined which was 4.006 and standard deviation 1.066 suggest that the respondents were in agreement that hierarchy culture had significant effect on implementation of corporate strategy in Private chartered universities in Kenya. Table 2 shows the summary of the findings. Tseng (2010) argued that more firms that were formalized usually possess formalized controls and processes, and thus they have better developed corporate performance because of its effective management.

Table 2: Hierarchy culture Descriptive Analysis

Statement	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Mean	Standard dev
Institutional policies generally govern what people do in implementing strategies	0(0)	11(5.7)	10(5.2)	109(56.2)	64(33)	4.16	.764
Our institution clearly defines the standard rules	0(0)	2(1)	17(8.8)	101(52.1)	74(38.1)	4.27	.662
Our leadership in the institution demonstrates efficient coordination of strategy implementation	2(1)	19(9.8)	51(26.3)	72(37.1)	50(25.7)	3.81	1.106
Our institution's efficiency relies on maintaining steady operations in strategy implementation	13(6.7)	56(28.9)	95(49)	26(13.4)	4(2.1)	3.81	1.085
Our institution defines success on the basis of smooth performance towards strategy implementation	0(0)	18(9.3)	44(22.7)	97(50)	35(18)	3.77	.853
The management style in the institution is characterized by efficiency which helps in strategy implementation	0(0)	33(17)	44(22.7)	88(45.4)	29(14.9)	3.58	.942
Our institution emphasizes consistent quality of strategy implementation	0(0)	28(14.4)	44(22.7)	77(39.7)	45(23.2)	3.72	.980

In qualitative analysis, the respondents were supposed to indicate to what extent their universities reinforced procedures that lead to strategy implementation. Majority of respondents (36.1%) indicated that they were not sure of reinforced procedures that lead to strategy implementation in their universities. Findings on the same statement had 21.1% respondents who indicated that to a great extent their universities had reinforced procedures and this had enhanced strategy implementation. This implies that when there are reinforced procedures, employees are able to contribute their ideas in strategy formulation; own the process and as a result get motivated to implement the strategy (Mwanthi, 2018). Other respondents (6.2%) indicated that the reinforced procedures were

somewhat, fair, average, minimal or low extent. The same percentage of respondents (6.2%) indicated that training staff on formulation of standard procedures have been reinforced. Following ISO as quality assurance procedures was indicated by 3.1% respondents, and the same percentage of the respondents indicated inputs from outside; and monitoring and evaluation. Other reinforced procedures which include constant internal and external audits; acquisition of appropriate management systems; benchmarking and marketing were indicated by 2.1% respondents. The least percentage of respondents (1.0%) listed the following procedures that needed to be reinforced: Placement of staff with expertise in these areas; through appraisal way – with rewards as motivation and close supervision; through financial implementation process; redefining of performance standards; and emphasis on quality in work performance as a way of life. But one respondent (1.0%) indicated that many policies were not in place. The findings imply that there are reinforced procedures in some Private chartered in Kenya, but other universities do not have policies in place. There is great need for the Private universities to have procedures and policies in place that would help them to implement their strategies. Table 3 gives the summary of the findings.

Table 3: Reinforced procedures that lead to strategy implementation

Main themes	Frequency	Percent
None response	35	36.08
Great/high extent	21	21.06
Somewhat/Fair/Average	6	6.19
Minimal/Low extent	6	6.19
Training staff on formulation of standard procedures	6	6.19
Following ISO – quality assurance procedures	3	3.09
Inputs from outside	3	3.09
Monitoring and evaluation	3	3.09
Constant internal and external audits	2	2.06
Acquisition of appropriate management systems	2	2.06
Benchmarking and marketing	2	2.06
Placement of staff with expertise in these areas	1	1.03
Through appraisal way – with rewards as motivation and close supervision	1	1.03
Through financial implementation process	1	1.03
Redefining of performance standards	1	1.03
Emphasis on quality in work performance as a way of life	1	1.03
Many policies are not in place	1	1.03
Total	97	100

In qualitative interview data analysis, the results indicated that the autonomous culture in their institutions hindered the implementation of strategy. Majority of the interviewees (38.5%) indicated that there is no accountability and there is also lack of culture of time management. This finding shows that there is no accountability and culture of time management as a result of autonomous culture. Less than half interviewees (15.4%) indicated that many employees sometimes ignore the values which make implementation hard in terms of cost; but some interviewees (15.4%) think that autonomous culture does not hinder implementation of strategy in any way.

The finding shows that a number of employees ignore values in their universities and this become a great hindrance to implementation of corporate strategies. One of the interviewees (7.7%) highlighted that “Private universities are business entities but Christian corporate runs as if they are not profit-making organizations. Not being business minded - this is a retrogressive culture which is killing a number of programs in the institution” (FO 1) and this hinders the implementation of strategy. Other indications by few interviewees (7.7%) show that some institutions have become monotonous in their dealings; and adoption of the main stakeholders, the students is very low.

The overall findings indicated that Private chartered universities need to check the autonomous and retrogressive cultures with their employees which result to ignoring values and lack of accountability, and hence not able to implement strategies. These findings are not in line with the findings by Brinkschröder (2014) that motivation of employees help to create a culture that increases the working environment which in return enforces effective implementation of strategies. Table 4 gives the summary of the findings.

Table 4: How the autonomous culture in the institution hinders the implementation of strategy

Ranking of Interviewees	Statements from Interviewees	Frequency	Percent
FO 1, HRM 1, PRO 2, PRO 3 & DOS 1	No accountability and lack of culture of time management	5	38.46
PRO 1 & DOS 3	Many sometimes ignore these values which makes implementation hard in terms of cost	2	15.39
DOS 4 & HRM 2	Does not hinder in any way	2	15.39
FO 1	Private universities are business entities but Christian corporate runs as if they are not profit-making organizations	1	7.69
FO 2	The institution becomes monotonous in its dealings	1	7.69
DOS 2	Adoption of the main stakeholders (students) is slow	1	7.69
Total		13	100

Key: FO = Finance Officer; HRM = Human Resource Manager; PRO = Public Relations Officer; DOS = Dean of Students

Normality testing

The values of skewness and Kurtosis should be zero if the data is normally distributed otherwise the data is said to be skewed or highly peaked but the acceptable range of values is -2 and +2 (Field, 2009). In this study skewness and kurtosis values were summarized as follows and from the finding, it was clear that all the variables were within acceptable range of skewness. Table 5 shows the results. In this case values between -2 and +2 are considered normal. In addition, Kolmogorov-Smirnov and Shapiro-Wilk tests can be conducted to test whether the data set is normally distributed (Sarstedt & Mooi, 2014).

Table 5: Skewness and Kurtosis

Variables	N	Mean	Std. Dev	Skewness	Std. Error	Kurtosis	Std. Error	Conclusion
		Statistic	Statistic	Statistic		Statistic		
Hierarchy culture	194	4.0488	.61802	-.108	.173	-.150	.344	Normally Distributed
Quality assurance	194	3.8201	.67217	-.076	.173	-.245	.344	Normally Distributed
Strategy implementation	194	3.7451	.64460	-.010	.173	-.399	.344	Normally Distributed

Normality of a data set was also to be done or tested using Kolmogorov-Smirnov and Shapiro Wilk for all the variables which were under consideration. Kolmogorov-Smirnov and Shapiro Wilk compare the scores in the samples and check whether they have the same mean or standard deviation (Sarstedt & Mooi, 2014). The findings for Kolmogorov-Smirnov showed that, the p- values were greater than 0.05 for hierarchy culture, quality assurance and strategy implementation) indicating that the distributions were normally distributed. Shapiro-Wilk test results also showed that three variables were normally distributed. The details of the findings are shown in Table 6.

Table 6: Kolmogorov-Smirnov and Shapiro-Wilk tests

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Hierarchy culture	.100	192	.240	.977	192	.073
Quality Assurance	.094	192	0.087	.956	192	0.059
Corporate strategy	.129	192	.095	.972	192	.091

a. Lilliefors Significance Correction

Normality of the data was tested using quantile-quantile plot also known as Q-Q plot for the dependent variable (Corporate strategy implementation) based on the finding as shown in Figure 1, it was clear that the majority of the observed values were falling along a

straight line. This therefore means the variable (Corporate strategy implementation) was normally distributed. An extension of Q-Q plot was also done on the other independent variable: hierarchy culture and moderating variable quality assurance and the result showed that they were also normally distributed as indicated on figure 1.

Figure 1: Normal Q-Q plot of Adhocracy culture

Histograms are a good way of getting an instant picture of the distribution of data (Field, 2009). Therefore, a histogram was also employed in the study to test the normality of the dependent variable as shown in Figure 2 since t- test, regression and ANOVA are based on the assumption that the data were sampled from a Gaussian distribution (Ghasemi & Zahediasl, 2012).

Figure 2: Histograms for Normality Test (Hierarchy culture)

Linearity test for hierarchy culture

Similar test for linearity using correlation coefficients as suggested by Cohen, West and Aiken (2003) established that there was a linear relationship between implementation of corporate strategy and Hierarchy culture. The study adopted the Pearson moment's correlation coefficients which are presented in table 6.

The results indicate that the variables had a strong positive relationship as indicated by a correlation coefficient of 0.608. This implies that an increase in Hierarchy culture would result in a linear increase in implementation of corporate strategy.

Table 6: Hierarchy culture Correlations Coefficients

		Strategy implementation	Hierarchy culture
Corporate strategy implementation	Pearson Correlation	1	.608**
	P-value (2-tailed)		.000
	N	194	194
Hierarchy culture	Pearson Correlation	.608**	1
	P-value (2-tailed)	.000	
	N	194	194

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

Conclusions

Based on the findings, it was established that the institutional policies governed what people did in implementing strategies. The respondents agreed that leadership in the institution demonstrated efficient coordination of strategy implementation, and that their institutions' efficiency relied on maintaining steady operations in strategy implementation. Their institutions described their success on the basis of smooth performance towards strategy implementation and that management style in the institution was characterized by efficiency which helped in strategy implementation. Therefore, hierarchy culture has an effect in strategy implementation.

Regression analysis established that model two was much better than model one. Further analysis suggested that the overall model was significant for two models. This finding showed that hierarchy culture was a good explanatory variable for strategy implementation when the moderator is available showing that the two models were fit. The p-value published showed that there was a positive effect of hierarchy culture on strategy implementation in Private chartered universities in Kenya. The linearity test was done and the study adopted the Pearson moment's correlation coefficients where the results indicated that the variables had a strong positive relationship. This implied that an increase in Hierarchy culture would result in a linear increase in Strategy implementation.

The results of this study have implications to both theory and practice. In regard to theory, the findings support the assumptions of the CVF and conserve that there is need for a balanced organizational culture comprising market, adhocracy, hierarchy, and clan cultures is important for effective strategy implementation. However, the findings propose that hierarchy orientation is the most important culture in Private chartered universities for managing the rules and procedures of an organization. Hierarchy is also viewed as an important culture in setting perfect internal conditions that support market and adhocracy cultures to manage organizational adjustment to the environment.

The findings of the study added knowledge by giving rise to insights that were valuable for academic and university leadership measures. Therefore the results of this study were of absorption to leadership of Private chartered universities that implemented strategies and management practices. The first implication of the study was that university leaders need to have effective communication with regard to organization new policies and changes. The Management also needs to be efficient and concerned with students' affairs, and to use effective disciplinary rules to govern up the students.

This study concentrated on organizational culture typology on strategy implementation in Private chartered universities in Kenya. Further studies could be done on a similar topic but concentrate on public universities in Kenya. A comparative study of private and public universities could be done on the effective culture dimensions that result to effective strategy implementation and the challenges that these universities face.

References

- Ahmadi, S. A. A., Salamzadeh, Y., Daraei, M. & Akbari, J. (2012). Relationship between organizational culture and strategy implementation: Typologies and dimensions. *Global Business and Management Research: An International Journal*, 4(3), 286-299.
- Beytekin, O. F., Yalçinkaya, M., Doğan, M. & Karakoç, N. (2010). The organizational culture at the university. *The International Journal of Educational Researchers*, 2010, 2(1):1-13.
- Bonnell, J. R. (2015). *Changing landscapes in Kenyan Higher Education: An Analysis of the impact of shifting contexts upon Religious-oriented universities* (PhD Dissertation). Michigan State University, USA.
- Brinkschröder, N. (2014). *Strategy implementation: Key factors, challenges and solutions*. University of Twente, Faculty of Management and Governance. The Netherlands.
- Cameron, K. S. & Freeman, S. L. (1991). Cultural congruence, strength and type: Relationships to effectiveness. *Research in Organizational Change and Development*, 5, 23-58, 1991.

- Chemwei, B., Leboo, C. & Koech, S. J. (2014). Factors that impede the implementation of strategic plans in secondary schools in Baringo District, Kenya. *International Journal of Humanities and Social Science*. 4(5).
- Cohen, J, Cohen, P., West, S. G. & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates Publishers.
- Commission for University Education (2012). *Vision and mission*. Retrieved on from <http://www.cue.or.ke/index.php/about-us/vision-and-mission>
- Cooper, D. R. & Schindler, P. S. (2011). *Business research methods* (12th ed.). New York, NY: McGraw-Hill Education.
- Fay, C. F. & Denison, D. R. (2003). Organizational culture and effectiveness: Can American theory be applied in Russia? *Organizational Science*, 14(6), 686-706.
- Gachua, M. W. & Bula, H. O. (2015). Factors affecting strategy implementation in public universities in Kenya: Case of Jomo Kenyatta University of Agriculture and Technology. *International Journal of Education and Research*, 3(12).
- Ghasemi, A. & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for non-Statisticians. *Int J Endocrinol Metab*. 10(2), 486–489, 2 Apr 20. <https://doi.org/10.5812/ijem.3505>
- Golembiewski, R. (2005). *Handbook of organizational consultation* (2nd ed.). New York, NY: Routledge.
- Harrison, J. & St. John, C. H. (2014). *Foundations in strategic management*. USA: Cengage.
- Isaboke, C. M. (2015). Influence of organization culture on strategy implementation in selected universities in Kenya. *International Journal of Economics, Commerce and Management*, Vol. III, Issue 9, September 2015.
- Khosrow-Pour, M. (Ed.) (2006). *Cases on information technology and organizational politics and culture*. London: Idea Group Publishing.
- Kimemia, D. (2013). *Organizational culture and corruption: A multiple case study of Non-governmental Organizations in Kenya*. VCU Scholars Compass. Virginia Commonwealth University.
- Lacatus, M. L. (2013). Organizational culture in contemporary university: Education facing contemporary world issues. *5th International Conference EDU-WORLD 2012*, Bucharest University of Economic Studies. Romania: Elsevier Ltd.
- Lund, D. B. (2003). Organizational culture and job satisfaction. *Journal of Business & Industrial Marketing*, 18(3), 219-236.
- Mozaffari, F. A. (2008). A study of relationship between organizational culture and leadership. *International Conference on Applied Economics – ICOAE 2008*.
- Musyoka, L. W. (2011). Challenges of strategy implementation in Jomo Kenyatta Foundation. *International Journal of Current Research*, 3(11), 301-308.
- Mutai, P. K. (2015). *Organizational culture and strategy implementation at Airtel Kenya* (MBA Thesis), School of Business, University of Nairobi, Nairobi, Kenya.
- Mwanje, M. O. (2016). *Challenges of strategy implementation in selected Sugar Companies in Kenya* (PhD Thesis). Jomo Kenyatta University of Agriculture and Technology, Juja, Kenya.
- Mwanthi, T. N. (2018). Linking Strategy implementation with organizational performance in Kenyan Universities. Kabarak. *Journal of Research & Innovation* 5(2) <http://eserver.kabarak.ac.ke/ojs/>
- Nawasar, K. Shahmehar, F. S., Kamel, A. & Vesal, S. M. (2014). Assessing the relationship between Strategy and organizational culture in an Iranian Manufacturing Industry. *Asian Social Science*, 10(21). <https://doi.org/10.5539/ass.v10n21p175>
- Nidiffer, J. & Bashaw, C. T. (Eds.) (2001). *Women administrators in higher education: Historical and contemporary perspectives*. New York, NY: State University of New York.
- Owino, O. J. & Kibera, F. (2016). Organizational Culture and Performance: Evidence from Microfinance Institutions in Kenya. *SAGE Journal*, 9(1), 1-11, January 1, 2019. <https://doi.org/10.1177/2158244019835934>
- Pirayeh, N., Mahdari, A. M., & Nematpour, A. M. (2011). Study of Organizational Culture Influence (Based on Dennison's Model) on Effectiveness of Human Resources in Karun Oil & Gas Production Company. *Australian Journal of Basic and Applied Sciences*, 5(9), 1886-1895.
- Pushnykh, V. & Chemeris, V. (2006). Study of a Russian university's organizational culture in transition from planned to market economy. *Tertiary Education and Management*, 12, 161-182.
- Rajasekar, J. (2014). Factors affecting Effective Strategy Implementation in a Service Industry: A Study of Electricity Distribution Companies in the Sultanate of Oman. *International Journal of Business and Social Science*, Vol. 5, No. 9(1), August 2014.
- Rick, T. (2013). *What is the relationship between corporate culture and strategy?* Retrieved from <https://www.torbenrick.eu/blog/strategy/relationship-between-culture-and-strategy/>
- Ruona, W. E. A., & Gibson, S. K. (2004). Maximizing the strategic contribution of people in organizations: An analysis of the convergence of HRM, HRD and OD. In T. S. Rocco & G. D. Ludwig (Eds). *Human resource management* 43(1), 4966.
- Sarstedt, M. & Mooi, E. (2014). *The process, data, and methods using IBM SPSS Statistics. A Concise Guide to Market Research*. Springer: Berlin.
- Smart, J. C., & John, E. P. (1996). Organizational culture and effectiveness in higher education: test of the 'culture type' and 'strong culture' hypothesis. *Educational Evaluation and Policy Analysis*, 18(3), 219–241.
- Swanson, R. A. & Holton, E. F. (2009). *Foundations of human resource development* (2nd ed.). San Francisco: Berrett-Koehler Publishers.
- Yu, T. & Wu, N. (2009). A review of study on the Competing Values Framework. *International Journal of Business and Management*, 4(7) <https://doi.org/10.5539/ijbm.v4n7p37>.

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