



## MANAGER DEMOGRAPHICS AND STRATEGY IMPLEMENTATION BY PRIVATE UNIVERSITIES

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### **Abstract**

*This study sought to establish influence of manager demographics on strategy implementation by private universities in Kenya. The study was informed by the critical role that human element plays in determining success in implementing strategies. However, a glaring gap established from literature review indicated that the question of how organizations can build and benefit from a diverse team of manager composition remains unanswered. Guided by the theoretical perspectives of upper echelons theory, stratified random sampling was employed to pick a sample of 360 respondents from 3,594 top managers, middle managers and lecturers involved in strategy implementation in 23 private universities accredited by Commission for University Education (CUE) in Kenya. Use of structural equation modelling (SEM), in particular, path analysis, revealed that the relationship between manager demographics and strategy implementation was positive and statistically significant. The age, education, experience and tenure of managers therefore influence success of strategy implementation in private universities in Kenya. It is recommended that when selecting a team that can be charged with ensuring that strategies developed are successfully implemented, vice chancellors and human resource managers of private universities need to consider factors such as age, level of education, tenure and previous experience of the managers appointed.*

*Keywords: Manager Demographics; Private Universities; Strategy Implementation, Upper Echelons Theory; Structural Equation Modelling*

## INTRODUCTION

The challenges faced by managers in implementing an organization's strategy is a timely issue that has been the subject of numerous studies (Gębczyńska, 2016; Radomska, 2014; Kaplan & Norton, 2008). Successful managers spend valuable time in ensuring that strategies are implemented flawlessly, given that an organization's output suffers when insufficient time and effort are expended on strategy execution or inappropriate execution actions (Jiang & Carpenter, 2013). Burlton (2015) was concerned that only about half of the ideas described in strategic plans end up being implemented. Rajasekar (2014) linked strategy implementation to an organization's success.

The demographic characteristics of managers including age, years of experience, level of education and gender impact on an organization's strategies (Analoui & Samour, 2012). Milana and Maldoan (2015) reveal that tenure and functional track also determine the outcome of decisions made by managers. The upper echelons theory plays a significant role in informing the demographic characteristics to look out for amongst managers. However, Fabian and Steffen (2015) are concerned that the theory has not been used to analyze the impact of demographic variables of managers in universities. There is growing evidence that university education is vital to a country's efforts in increasing social capital and in promoting its social cohesion which is an important determinant of economic growth and development (Uphoff et al., 2013). The social pillar in Kenya's vision 2030 singles out education and training as the vehicles that are expected to drive Kenya into becoming a middle-income economy as the education sector is responsible for co-ordination of education, training, research, education policy formulation and implementation (Ministry of Education, 2012).

Managers' demographics play a key role in shaping the outcome of an organization but the question of how organizations can build and benefit from a diverse team of manager composition remains unanswered (Georgakakis, 2014). The human element is critical in the strategy implementation process. However, despite the critical role that they play in ensuring that strategies get implemented successfully, Memon, Mangi, and Rohra (2009) are concerned that the human factor has for a long time been ignored in organizations. Agili and Okibo (2015) therefore find it important to study the influence of the human factor amongst university managers in successfully implementing their strategies.

While some authors have been in support of the fact that a manager's demographics influence their success at implementing strategies, others are of contrary opinion. Karami, Analoui, and Kakabadse (2006) revealed that previous experience, educational background and strategic awareness were critical factors in implementing strategies in United Kingdom Small and Medium Enterprises (SME) sectors amongst managers. Milana and Maldaon (2015),

however, indicated no significant influence of age, education and functional track but positive and significant effect of tenure on the organizations' outcomes in a Syrian study. While studying the factors affecting implementation of strategic plans in government learning institutions in Kenya, Omboi and Mucai (2015) revealed that the human element is critical in the strategy implementation process.

## **RELATED LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT**

The section, presents the literature on upper echelons in organizations. Specifically, it detail the foundational works on the theory that have formed the bases for subsequent empirical research. Additionally, the section outlines relevant empirical research that has contributed to the current as well as laying the foundation for the development of an integrated approach to applying Structural Equation Models in the analyses of the factors that determine strategy implementation.

### **Theoretical Literature**

The theoretical basis for this study is the Upper Echelons Theory (UET). UET was founded on the premise that organizational outcomes are directly impacted by the knowledge, experiences and expertise of those individuals occupying prominent managerial roles in the organization. The UET was first introduced by Hambrick and Mason (1984) then further developed by Hambrick (2007), Hiebl (2014) and Rau and Bromiley (2015). This model was introduced by these authors to address situations occurring in the context of organizational life but in the context of strategic choices by managers and as a function of the unique characteristics these individuals exhibit.

The theory argues that a manager's characteristics are key determinants to organizational outcomes. Managers therefore are deemed to highly influence organizational outcomes based on the choices that they make and their characteristics (Hiebl, 2014). Bromiley and Rau (2016) who updated the theory divided manager characteristics into three approaches. The first approach was demographic variables, also known as observable characteristics which informs this study's manager demographics characteristics objective and further categorized into age, tenure, experience, gender, origin and career. The second approach was underlying factors grouped together as personal characteristics comprised of the five factors while the third approach was interactions with others. In order to reconcile the impact "upper echelons" have on organizations, Hambrick and Mason (1984) argued that focus should be directed towards observable data reflecting individual characteristics with respect to educational, professional, and social backgrounds of prominent managers in organizational contexts. Thus, through

collection and analyses, UET states that organizational outcomes can be predicted to some degree based upon characteristics of executive managers.

Due to the fact that the cognitions, values, and perceptions of employees are difficult to measure, UET focuses on examining demography to suggest that managerial characteristics are reasonable proxies for underlying differences in cognitions, values, and perceptions (Carpenter, Geletkanycz, & Sanders, 2004). Thus, variables such as age, number of years worked and specific focus of work experience, and educational background can be applied to predict the actions of employees when faced with strategic decisions in organizations. To apply UET effectively to examine organizational performance, the issue of causality is an important consideration (Hambrick & Mason, 1984). First, those managers with significant professional experience within an organization or industrial context come to act in accordance with these previous experiences more so than on the basis of their individual attributes. Strategies employed in organizational life as a function of executive decision making are often a function of macro forces driving the pursuit of organizational goals. In addition, differences in approaches or strategies with respect to strategy development and implementation may appear less frequently than in a context in which managers demonstrate more diverse backgrounds.

### **Related Empirical Literature and Hypothesis Development**

Previous research on the influence of “upper echelon” managers has confirmed the importance of matching the characteristics of managers with successful strategy implementation (Kathuria & Porth, 2003). Empirical study by Hattke and Blaschke (2015) sought to evaluate the influence of top management team diversity on academic excellence of 75 public German universities. Results using multivariate regression analysis indicated that disciplinary and educational diversity of upper echelons had a positive effect of the university’s outcomes. However, other top management team characteristics such as age and gender showed no significant effects. These results were in line with Karami, Analoui and Kakabadse (2006) and Analoui and Samour (2012) who considered education as influencing the organization’s outcomes. However, it was contrary to Hiebl, Gartner, and Duller (2016) and Milana and Maldaon (2015) who deemed education as not influencing an organization’s outcomes. Organizational outcomes can therefore be partially predicted by the characteristics of the upper echelons (who in this case are the organization’s managers) (Hambrick & Mason, 1984).

#### *Age of the Manager and Strategy Implementation*

Age has become one of the focal variables in investigating work-related motives and behaviors (Kooij et al., 2011). It is expected that the age of managers has an impact on employees in their

ways of working through engagements with the employees, the way they behave in unexpected situations, their acceptance of the risks required to handle some of the opportunities or openness to new ideas and other aspects that are as a result of the age of the manager (Milana & Maldaon, 2015). Individuals of different ages differ in many aspects, among them work-related attitudes and values (Wiernik, Ones & Dilchert, 2013). As workforces become older and more varied in age, organizations need to consider how this affects an organization's strategy implementation initiatives. As age compositions of organizations' workforces change and vary around the world, understanding how age affects strategy implementation initiatives becomes vital (Hedge et al., 2006). Research in social psychology supports the idea that younger and older managers differ in their orientations towards self, others, and work, and these differences may lead to different motives (Wagner & Rush, 2000). The age of managers is expected to influence decision made, choices considered, and perspectives adopted when implementing strategies. Individuals of similar age have common experiences which lead to shared beliefs and attitudes. The impact of ageing could diminish a manager's capacity to cope with the job of managing an organization (Lee, Yen, & Chen, 2008). Taken together, it is proposed that:

*H1: Age of the manager has a significant effect on strategy implementation in private universities in Kenya.*

#### *Education of the Manager and Strategy Implementation*

Education has been regarded as a good indicator of an individual's value, cognitive preference and perception (Hambrick & Mason, 1984; Hambrick, 2007). The influence of education on managers lies in the fact that knowledge gained enhances manager capacity to develop a superior business in general or implement industry-specific strategies (West & Noel, 2009). Consequently, resources can be acquired more efficiently, costs are reduced and revenues are increased (Soriano & Castrogiovanni, 2012). Both the level of education and the type of education (business or non-business) provide measures of the manager's knowledge and competency base (Hambrick & Mason, 1984). Managers with higher levels of education and business degrees are expected to generate a wider range of creative solutions when faced with complex problems, hence have been linked to successful strategy implementation (Karami, Analoui, & Kakabadse, 2006). It is acceptable to say that the level of education is positively related to openness and innovation, whereby more educated managers have greater cognitive complexity, which increases capacity to absorb new ideas which increases the tendency to accept organizational changes (Ahn, Mortara, & Minshall, 2014). This leads to:

*H2: Education of the manager has a significant effect on strategy implementation in private universities in Kenya.*

### *Tenure of the Manager and Strategy Implementation*

Relationships have been established between manager characteristics and tenure. Tenure of managers reflect a time-based process of understanding the external and internal environment of the organization. Longer tenure, according to Milana and Maldaon (2015) yields more knowledge regarding the specific job and organization context. When the manager's tenure increases, they tend to become more committed to implementing their own pattern of how the organization should be run (Liu & Ravichandran, 2007). However, Hambrick and Mason (1984) argued that managers who have worked for a long period in one organization are likely to have limited perspectives and avoid changes proposed in implementation plans. In the same context, argument is put forward to the effect that short-tenured managers may lack sufficient awareness to evaluate strategic risks. Short-tenured managers are not well known within the organization, lacking legitimacy and are untested, which might limit their performance. Therefore, manager tenure directly influences performance through its direct influence on the management team risk-taking tendency (Milana & Maldaon, 2015). Thus, we hypothesize that:

*H3: Tenure of the manager has a significant effect on strategy implementation in private universities in Kenya.*

### *Experience of the Manager and Strategy Implementation*

Experience refers to the knowledge and skills gained by observing and dealing with a variety of situations encountered at firms similar to the one the manager is dealing with as of that time (Soriano & Castrogiovanni, 2012). Employees with long experience with a similar organization tend to be more reliable at implementing strategies and find it more difficult to change jobs due to emotional attachment with the organization. This shows an affective commitment and satisfaction of an employee towards an organization (Meyer, et al., 2002). Research has indicated that an employee who stays in an organization for a long period of time is likely to become emotionally attached to the organization (Riordan, Griffith, & Weatherly, 2003). Career experiences other than functional track record, can be expected to have a significant effect on the types of actions taken by a manager or an entire top management team (Analoui and Samour, 2012). A manager's experience helps in development of integrated processes that help to make strategy implementation work within the organization and across different industry settings (Hrebiniak, 2013). The professional experience of managers, measured in terms of previous occupations, technical expertise, or product knowledge – and attained in a strategy setting, tend to place more emphasis on the implementation of formal strategies. Therefore, assumption is that experienced managers tend to place more weight on development of formal strategies than those lacking work experience (Ahn, 2014). This leads to:

*H4: Experience of the manager has a significant effect on strategy implementation in private universities in Kenya.*

## METHODOLOGY

A mix of a survey cross sectional and explanatory design was used in this research. Survey research was found useful in studying the relative incidence, distribution and interrelations of variables while explanatory (Causal) research was conducted in order to identify the extent and nature of cause-and-effect relationships (Creswell, 2005). The target population consisted of 3,594 top level managers, middle level managers and lecturers in the 23 private chartered universities and university colleges in Kenya. These are the categories that are responsible for implementing strategies in their institutions in line with previous research done by Omboi and Mucai (2015). Proportionate stratified random sampling was used to select representative sample of each category of university staff in order to account for the attributes of the various levels. Thereafter, simple random sampling was used to select the number of managers from whom data was collected (Uprichard, 2013). Purposive sampling was used to collect data from top level managers. Table 1 shows sample size distribution across the population categories.

Table 1: Sample distribution

Population Category	Population Size	Sample Size
Top Managers	112	11
Middle level	297	30
Lecturers	3,185	319
Total	3,594	360

Questionnaires were used to collect primary data from a sample size of 360 top and middle level managers and lecturers in the 23 private universities in Kenya. Questionnaires were checked for accuracy of data entry and for missing values. A sub- group mean value replacement function was used to replace those missing values as advocated for by Sekaran and Bougie (2013).

This study uses structural equation modeling to investigate the influence of manager demographics on strategy implementation. Prior to undertaking structural equation modelling, Exploratory Factor Analyses (EFA) was conducted using AMOS 23 to test underlying patterns of the measurement scales. To assess factorability of items, two indicators were examined which were the Kaiser Meyer-Olin (KMO) measure of sampling adequacy and Barlett's Test of Specificity. Additionally, Community measure the variability of each observed variable was

used in an attempt to explain by the extracted factors variability. This study employed variance percentage, Kaiser's criterion in order to determine the number of factors that can be best used to represent the interrelations among the set of variables (Hair et al., 2010). Additionally, principal component analysis extracted factors, and factor loadings greater than 0.5 were retained. The reliability and internal consistency of the items constituting each construct was estimated. Confirmatory factor analysis (CFA) was conducted in order to assess the extent to which the observed data fits the pre-specified theoretically driven model. Absolute and incremental fit indices were used to establish whether, overall, the model is acceptable, and if acceptable, then establish whether specific paths are significant. After the measurement model was validated, the next step was to test the validity of the structural model and its corresponding hypothesized relationships.

## ANALYSIS AND DISCUSSION OF RESULTS

The study used Analysis of Moment Structures (AMOS) version 23 to construct a conceptual model linking the variables under study. Confirmatory factor analysis (CFA) and structural equation modelling (SEM) in particular, the path analysis were used to construct the linkage between the dimension of manager demographics and strategy implementation. Partial Least Squared (PLS) analysis was used to confirm these intuitions. PLS analysis determined how strongly each indicator loaded onto its underlying latent construct (the measurement model) and whether the paths among the underlying constructs were themselves significant (the structural model).

### *Age of the Manager*

Table 2: KMO and Bartlett's Test for Age of Manager

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.73
Bartlett's Test of Sphericity	Approx. Chi-Square	364.47
	Df	6
	Sig.	.00

Table 2 indicates that the KMO measure of sampling adequacy for age of the manager was 0.73 which is greater than 0.5 as recommended by Cerny and Kaiser (1977) hence the data collected on age of the manager was adequate to run factor analysis. The Bartlett's test of sphericity was significant ( $\chi^2$  (6, N=264) = 364.47,  $p < 0.00$ ) in confirming that patterns of correlations are close and factor analysis should yield consistent and reliable factors.

A confirmatory factor analysis was conducted to assess the measurement model of this construct. The fit indices summary was provided by the CFA output. The Chi-square value was 3.28 with 2 degrees of freedom. The  $p$ -value associated with this result was significant at  $p=0.04$ . Thus, the  $\chi^2$  goodness-of-fit statistic indicated that the observed covariance matrix matched the estimated covariance matrix within sampling variance. In addition to the  $\chi^2$  result, the value for CFI, an incremental fit index, was 0.98 which is greater than 0.90 as recommended by Hair Jr., (2010), while the values for absolute fit indices were 0.95 for GFI which is greater than 0.9, hence a good fit (Bagozzi & Yi, 1988) and 0.98 for NFI which is above 0.90, hence good fit (Bentler & Bonett, 1980). These fit statistic results suggested that the measurement model for age of manager provided a reasonably good fit. Moreover, all factor loading estimates considerably exceeded 0.05 and the construct reliability was found to be good (CR=0.86). Taken together, the evidence supported the unidimensionality and convergent validity of the measurement model and, as a result, all four items were retained to measure the age of the manager construct.

### ***Education of the Manager***

Table 3: KMO and Bartlett's Test for Education of Manager

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.88
Bartlett's Test of Sphericity	Approx. Chi-Square	645.11
	Df	15
	Sig.	.00

The Keiser-Meyer Olkin (KMO) measure of sampling adequacy was 0.88 which is greater than 0.5 as recommended by Cerny and Kaiser (1977) as indicated in Table 3 hence the data was adequate to run factor analysis. The Bartlett's test of sphericity was significant ( $\chi^2$  (15, N=264) = 645.11,  $p < 0.00$ ) confirming that patterns of correlations are close and factor analysis should yield consistent and reliable factors.

Fit indices summary was provided by the CFA output. The Chi-square value was 2.33 with 9 degrees of freedom. The  $p$ -value associated with this result is significant at  $p = 0.01$ . Thus, the  $\chi^2$  goodness-of-fit statistic indicated that the observed covariance matrix matched the estimated covariance matrix within sampling variance. In addition to the  $\chi^2$  result, the value for CFI was 0.98 which is greater than 0.90 as recommended by Hair Jr., (2010) while that of NFI was 0.97 which is above 0.90, hence good fit (Bentler & Bonett, 1980). The value for absolute fit indices was 0.97 for GFI which is greater than 0.90, hence a good fit (Bagozzi & Yi, 1988).

These fit statistic results suggested that the measurement model for education of manager provided a reasonably good fit. Moreover, all factor loading estimates considerably exceeded 0.05 and the construct reliability was found to be good (CR=0.86). Taken together, the evidence supported the unidimensionality and convergent validity of the measurement model and, as a result, all six items were retained to measure the education of the manager construct.

### ***Experience of the Manager***

Table 4: KMO and Bartlett's Test for Experience of Manager

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.76
Bartlett's Test of Sphericity	Approx. Chi-Square	353.79
	Df	6
	Sig.	.00

Table 4 indicates that Keiser-Meyer Olkin (KMO) measure of sampling adequacy was 0.76 which is greater than 0.5 as recommended by Cerny and Kaiser (1977). This indicates that the data was adequate to run factor analysis. The Bartlett's test of sphericity was significant ( $\chi^2(6, N=264) = 353.79, p < 0.00$ ) confirming that patterns of correlations are close and factor analysis should yield consistent and reliable factors.

The Chi-square value was 7.94 with 2 degrees of freedom. The  $p$ -value associated with this result was significant at  $p=0.00$ . Thus, the  $\chi^2$  goodness-of-fit statistic indicated that the observed covariance matrix matched the estimated covariance matrix within sampling variance. In addition to the  $\chi^2$  result, the value for goodness-of-fit (GFI), an absolute fit index was 0.97 which is above the recommended cut-off of 0.90 (Bagozzi & Yi, 1988) while the values for incremental fit index were 0.96 for CFI hence indicating good fit as it is above the 0.90 threshold (Hair Jr., et al, 2010) and 0.96 for normed-fit index (NFI) which is above the recommended 0.90 threshold (Bentler & Bonett, 1980). These fit statistic results suggested that the measurement model of experience of manager provided a reasonably good fit. Moreover, all factor loading estimates considerably exceeded 0.05 and the construct reliability was found to be good (CR=0.81).

Taken together, the evidence supported the unidimensionality and convergent validity of the measurement model and, as a result, all four items were retained to measure the experience of the manager construct.

## ***Tenure of the Manager***

Table 5: KMO and Bartlett's Test for Tenure of Manager

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.50
Bartlett's Test of Sphericity	Approx. Chi-Square	216.99
	df	1
	Sig.	.00

The Keiser-Meyer Olkin (KMO) measure of sampling adequacy was 0.50 which is at the recommended cut off of 0.5 by Cerny and Kaiser (1977) as indicated in Table 5 meaning that the data was adequate to run factor analysis. The Bartlett's test of sphericity was significant ( $\chi^2(1, N=264) = 216.99, p < 0.00$ ) confirming that patterns of correlations are close and factor analysis should yield consistent and reliable factors.

The measurement scale of this construct was analyzed using CFA. Fit indices summary was provided by the CFA output. The Chi-square value was 15.02 with 2 degrees of freedom. The  $p$ -value associated with this result was significant at  $p=0.00$ . Thus, the  $\chi^2$  goodness-of-fit statistic indicated that the observed covariance matrix matched the estimated covariance matrix within sampling variance. In addition to the  $\chi^2$  result, the value for goodness-of-fit (GFI), an absolute fit index was 0.95 which is above the recommended cut-off of 0.90 (Bagozzi & Yi, 1988) while the values for incremental fit index were 0.90 for CFI as recommended by Hair Jr., et al (2010), hence indicating good fit and 0.90 for normed-fit index (NFI) which is also at the recommended 0.90 threshold (Bentler & Bonett, 1980). These fit statistic results suggested that the measurement model for tenure of manager provided a reasonably good fit. Moreover, all factor loading estimates considerably exceeded 0.05 and the construct reliability was found to be good (CR=0.86). Taken together, the evidence supported the unidimensionality and convergent validity of the measurement model and, as a result, all two items were retained to measure the tenure of the manager construct.

### ***Test for Overall Manager Demographics on Strategy Implementation***

Manager demographics was hypothesized as a second-order latent construct identified by the four first-order latent variables namely age of the manager, education of the manager, experience of the manager and tenure of the manager discussed above. Table below indicates that the level of model fit was satisfied by this measurement.

*Sampling Adequacy and Specificity for Manager Demographics*

Table 6: KMO and Bartlett's Test for Manager Demographics

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.85
Bartlett's Test of Sphericity	Approx. Chi-Square	1941.64
	df	136
	Sig.	.00

Table 6 indicates that Keiser-Meyer Olkin (KMO) measure of sampling adequacy resulted to 0.85 which is greater than 0.5 hence the data was adequate to run factor analysis. The Bartlett's test of sphericity was significant ( $\chi^2$  (136, N=264) = 1941.64,  $p < 0.00$ ) therefore factor analysis should yield consistent and reliable factors.

*Explained Variance Total Under Manager Demographics*

Table 7: Total Variance Explained for Manager Demographics

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings <sup>a</sup>
	% of			% of			Total
	Total	Variance	Cumulative %	Total	Variance	Cumulative %	
1	5.96	35.03	35.03	5.96	35.03	35.03	4.85
2	1.92	11.28	46.30	1.92	11.28	46.30	4.11
3	1.62	9.58	55.88	1.63	9.58	55.88	3.74
4	1.32	7.78	63.66	1.32	7.79	63.66	2.36
5	.91	5.33	68.99				
6	.71	4.19	73.17				
7	.63	3.71	76.89				
8	.58	3.39	80.28				
9	.53	3.17	83.44				
10	.51	3.01	86.45				
11	.45	2.62	89.07				
12	.42	2.45	91.52				
13	.36	2.13	93.64				
14	.35	2.06	95.70				
15	.28	1.64	97.34				
16	.26	1.55	98.89				
17	.19	1.12	100.00				

According to the findings, four factors of manager demographics having eigenvalues greater than 1 accounted 63.66 percent of the total variance explained.

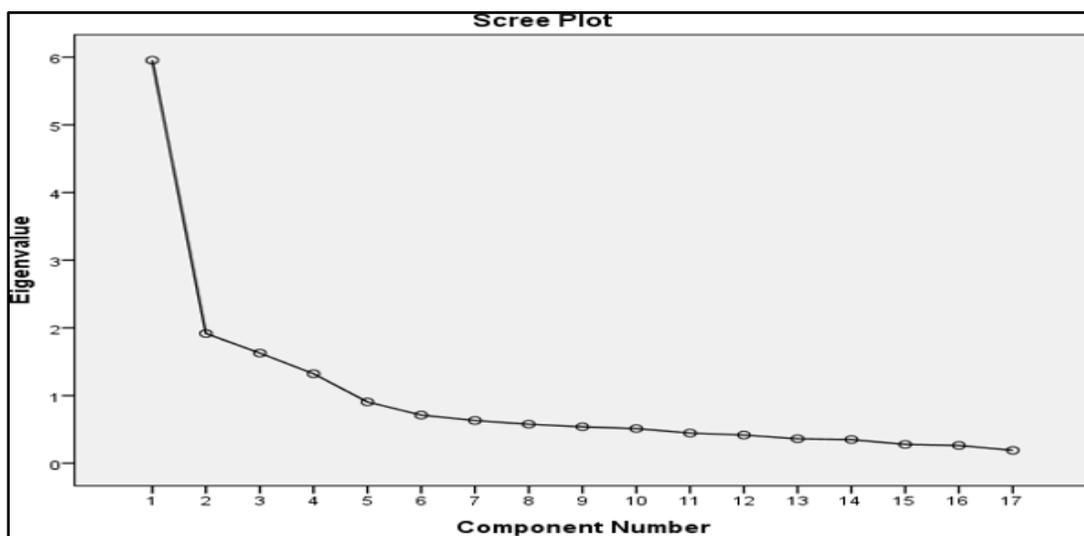


Figure 1: Screen Plot for Manager Demographics

Figure 1 shows the screen plot that was inspected. The inflexion point was observed to be at factor 5. This confirms that four factors under manager demographics construct would be retained. These four factors are as represented in the pattern matrix in Table 8,

Table 8: Pattern Matrix for Manager Demographics

	Components			
	1	2	3	4
AM1			.866	
AM2			.895	
AM4			.686	
AM5			.644	
EM2	.705			
EM3	.700			
EM4	.740			
EM5	.799			
EM6	.783			
EM7	.798			
TM4				.917
TM5				.922
E.M1		.566		

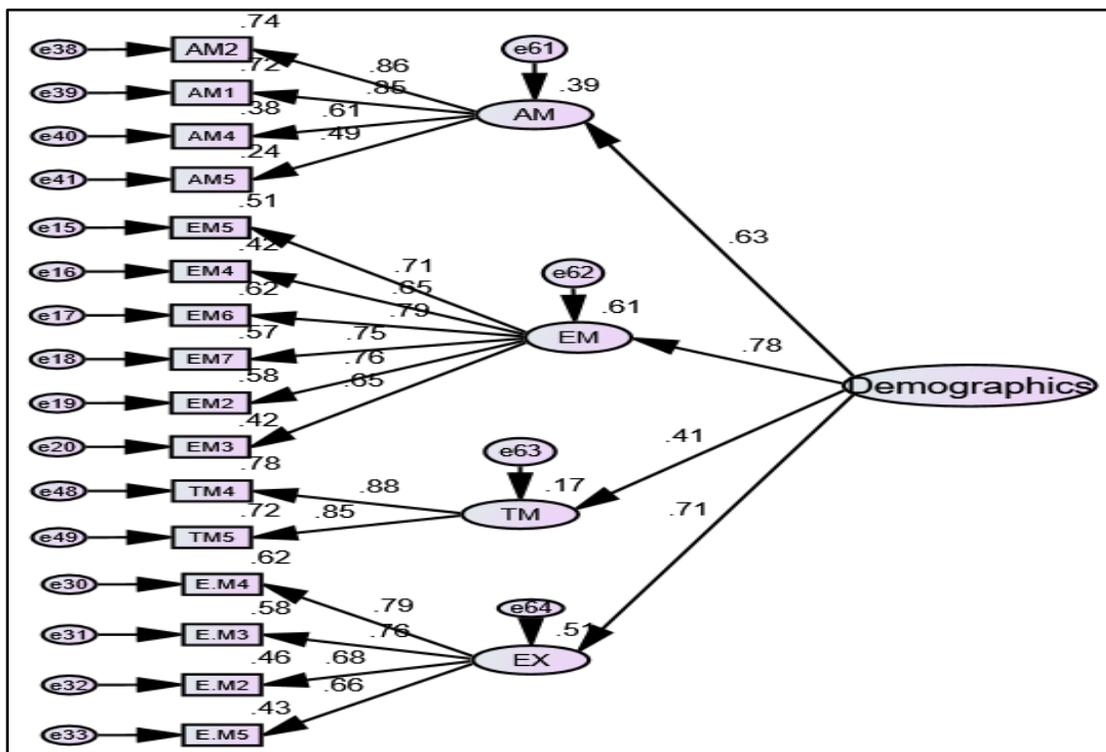
E.M2	.862
E.M3	.857
E.M4	.720
E.M5	.661

Table 8...

Table 8 shows that the first component was education of the manager which had six items loading (EM2, EM3, EM4, EM5, EM6 and EM7). The second component was experience of the manager which had five items loading (E.M1, E.M2, E.M3, E.M4 and E.M5). The third component was the age of the manager which had four items loading (AM1, AM2, AM4 and AM5) and the fourth component was tenure of the manager which had two items loading (TM4 and TM5).

*Confirmatory factor analysis (CFA)*

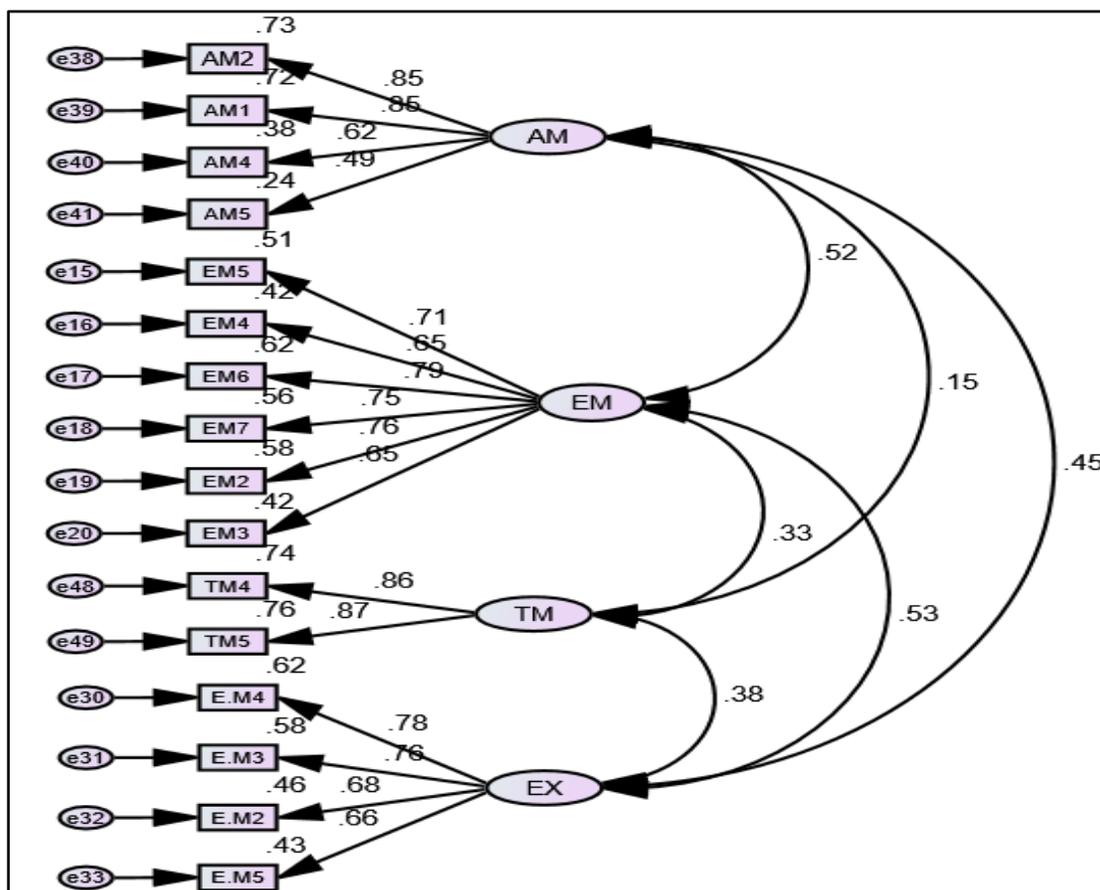
Confirmatory factor analysis (CFA) was conducted to assess the extent to which the observed data fits the pre-specified theoretically driven model. CFA is a technique usually employed to confirm on a priori hypothesis about the relationship between a set of measurement items and their respective factors. The following section discusses CFA results for the age of the manager, education of the manager, experience of the manager and tenure of the manager.



$\chi^2 = 1.72$ ;  $DF=100$ ;  $CFI=0.96$ ;  $GFI=0.93$ ;  $RMSEA=0.05$

Figure 2: Model Fits for Demographics CFA

Figure 2 shows the fit indices summary provided by the CFA output. The Chi-square value was 1.72 with 100 degrees of freedom. The  $p$ -value associated with this result was significant at  $p=0.00$ . In addition to the  $\chi^2$  result, the value for CFI, an incremental fit index was 0.96 which is above the 0.90 threshold (Hair Jr., et al, 2010) hence acceptable while the values for absolute fit indices were 0.93 for goodness-of-fit (GFI) which is above the required 0.90 threshold hence acceptable (Bagozzi & Yi, 1988) and 0.05 for RMSEA which is a value below 0.08, hence a good fit (Hair Jr., et al, 2010). These results suggest that the measurement model for demographics of manager provided a reasonably good fit.



$\chi^2 = 1.72$ ;  $DF=100$ ;  $CFI=0.96$ ;  $GFI=0.93$ ;  $RMSEA=0.05$

Figure 3: Correlation for Demographics of Manager

Figure 3 indicates that the factor loading estimates were significant and ideal (above 0.30 at  $p=0.00$ ). An examination of inter-correlations between the four dimensions of demographics of the manager showed all estimates to be significantly below the cut-off value of 0.90, ranging from 0.15 to 0.53, implying distinctness in construct content or discriminant validity. The congeneric measurement model with all unidimensional constructs did not contain any cross-

loadings either among the measured variables or among the error terms. Taken together, these results supported the measurement model validity and, as such, hypothesis one, which states that manager demographics is a second order latent construct composed of age, education, experience and tenure of the manager was confirmed.

**Structural Equation Model for Manager Demographics and Strategy Implementation**

The following section discusses the R-squared value, path coefficients and model fit results for the relationship between manager demographics and strategy implementation.

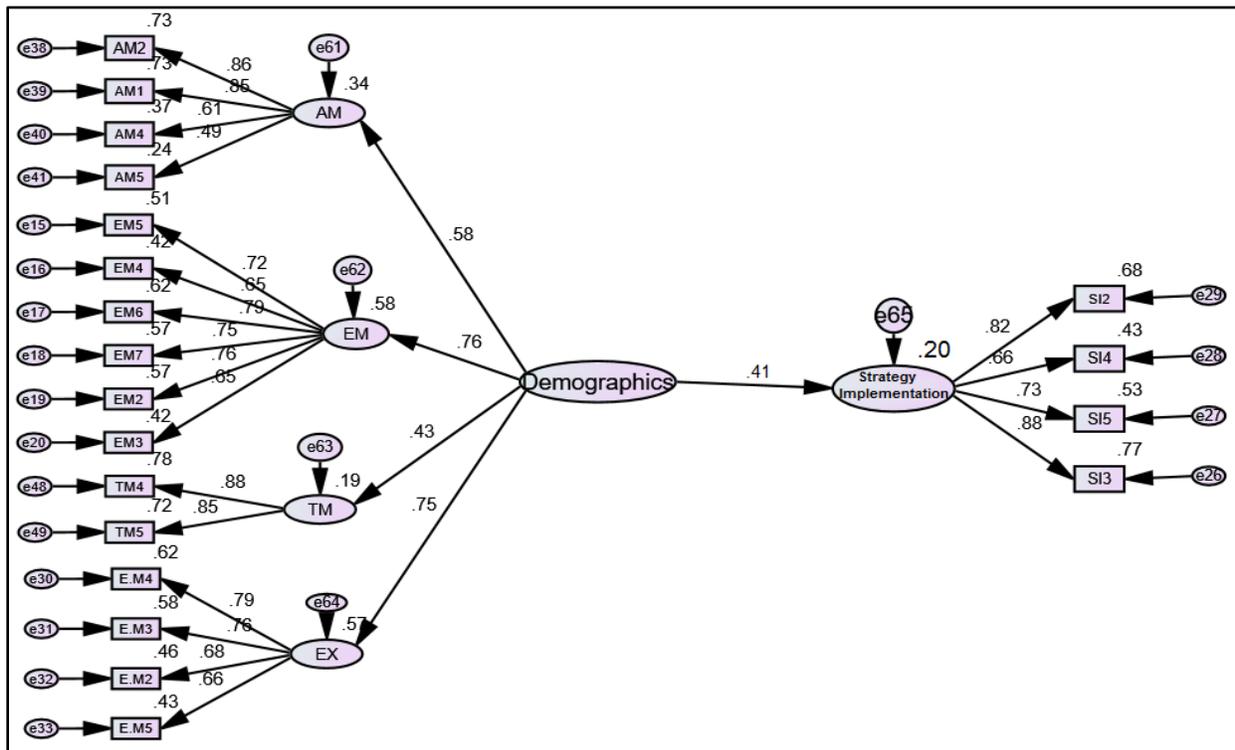


Figure 4: SEM Model for the Relationship between Manager Demographics and Strategy Implementation

Figure 4 indicates that based on the estimated structural equation model, for every magnitude change in demographics, strategy implementation is increasing by 0.41 units. In this model, the R-squared value was 20% implying that manager demographics have a significant positive influence on strategy implementation and explain 20% of the variance in the strategy implementation ( $R^2 = 0.20$ ) of private universities in Kenya. This  $R^2$  value exceeds Falk and Miller's (1992) recommendation that  $R^2$  should be greater than or equal to 10% as an indication of substantive explanatory power.

Table 9: Path Coefficients for the Relationship of Manager Demographics on Strategy Implementation

Path			Unstandardized Estimate	Beta	S.E.	C.R.	P
Age	<---	Demographics	1.18	0.59	0.26	4.63	***
Education	<---	Demographics	1.46	0.76	0.30	4.82	***
Tenure	<---	Demographics	1	0.43			
Experience	<---	Demographics	1.32	0.75	0.27	4.88	***
Strategy	<---	Demographics	0.84	0.41	0.20	4.25	***

P < 0.05 \*, P < 0.01 \*\*, P < 0.00\*\*\*

Table 9 shows that the relationship between demographics and strategy implementation was positive and statistically significant ( $\beta = 0.41$ ,  $T=4.25$ ,  $P<0.05$ ). Therefore, the study concludes that manager demographics have significant influence on strategy implementation of private universities in Kenya.

Table 10: Model Fits for the Relationship of Manager Demographics on Strategy Implementation

Measure	Result	Threshold	Interpretation
GFI	0.91	>0.90	Acceptable
CFI	0.96	>0.90	Acceptable
RMSEA	0.04	<0.08	Excellent

Table 10 indicates that the value for CFI, an incremental fit index was 0.96 which is above the 0.90 threshold (Hair Jr. et al, 2010), hence acceptable while the values for absolute fit indices were 0.91 for goodness-of-fit (GFI) which is greater than the required 0.90 threshold (Bagozzi & Yi, 1988) hence acceptable and 0.04 for RMSEA which was below the 0.08 threshold hence excellent fit (Hair Jr. et al., 2010). These results suggest that the measurement model for discretion of manager provided a reasonably good fit.

## CONCLUSIONS

It was evident that manager demographics have a positive and significant influence on strategy implementation in private universities in Kenya. This means that the demographics that are inherent of managers influence the success of strategies that are implemented. Factors such as whether the manager is categorized as young or old, whether they have attained graduate or post graduate degrees, the number of years they have worked in the same university and length

of time that has been spent in similar capacity are all critical factors that can influence how strategies are implemented. Particularly, the study concludes that when considering the age of managers, younger managers tend to be open to new ideas, the type of education attained by the managers influences the manager's competency, previous experience prepares managers with required skills and short tenured managers lack the experience required in evaluating strategic risks. Additionally, of the four demographic characteristics, the manager's experience seemed to have the greatest influence on how managers implement strategies in private universities in Kenya. The study was however limited by the fact that in as much as gender is appreciated by authors as one of the demographic characteristics, it is not considered in the upper echelon theory to influence an organization's outcome hence not included in this study.

## RECOMMENDATIONS

It is recommended that when selecting a team that can be charged with ensuring that strategies developed are successfully implemented, vice chancellors of private universities in Kenya need to consider factors such as age, level of education, experience and tenure of the managers appointed.

Given that implementation of strategies in universities is done by a team, it would be important to conduct further study to establish how similarities or differences in manager demographics would influence strategy implementation in a group of individuals. The study would therefore establish whether a group of young managers would be more successful than a group of old managers or whether a mix of young and old managers would be more successful in implementing strategies. It would also establish whether a mix of employees who have been with the institution for long and those newly employed, or a mix works better. The level of education would also be determined whether similar or different levels would be better for strategy implementation.

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