

## **Strategic Determinants of Intrapreneurship of Education Institutions in Kenya**

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**Abstract:** *The general objective of this study was to investigate the strategic determinants of intrapreneurship of education institutions in Kenya with specific focus to private secondary schools in Mombasa County. Specifically the study investigated the effects of management support, work discretion, rewards, time availability and organizational boundaries on intrapreneurship of private secondary schools in Mombasa County. Hypotheses were developed to determine the relationships between these determinants and intrapreneurship of the institutions. Data were collected by means of structured survey questionnaires which were administered to a total of 129 departmental heads from the 43 institutions and multiple regression analysis was conducted to identify the predictive ability of the five determinants as predictors of intrapreneurship of these institutions. The questionnaires were earlier developed based on previous studies and modified according to the conditions of private secondary education sector and factor analysis was used to assess the validity Cronbach alpha to assess reliability of the questionnaire. The findings reveal positive and significant relationships between management support, work discretion, rewards, time availability, and organizational boundaries on intrapreneurship. Results confirm previous research and the emphasis on fostering entrepreneurial spirit among Kenyan workforce in private sector being seen crucial to improve the competitiveness of the organization and subsequently enhance the competitiveness of the country following the needs to ingrain intrapreneurial spirit as highlighted in the Kenya's vision 2030.*

**Keywords:** *Strategic determinants, intrapreneurship, performance, private education institutions Kenya.*

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### **1. INTRODUCTION**

Today's business environment is characterized by continuous change as a result of fast changing technologies, ever increasing changes in customer demand and the growing levels of intense global competition (Ireland & Webb, 2009). The recent scenario in the business landscape has witnessed the increasing pressure exerted on organizations to compete towards organizational sustainability. Many businesses in their quest for sustained competitive advantage have reacted to these new set of challenges by downsizing, unbundling, focusing on core business, reengineering, decentralization, outsourcing, restructuring, and relying on self directed work teams (Burns, 2008). Unfortunately, sustained competitive advantage can no longer be found by simply lowering costs, higher quality and better service as these factors have now become the minimal criterion for remaining in the competitive game (Morris, Kuratko & Covin, 2008). According to Drucker (2002), Rigby (2003), Planting (2006) and Morris, Kuratko & Covin (2008), many business executives concur that the ability to drive business growth and implement new and innovative ideas are several of the top priorities of organizations in the 21<sup>st</sup> century. The businesses now should be cognizant of the fact that past economic success is no longer a guarantee of future success. Various measures have been taken by businesses to face the stiff competition; and one of the means is via invigorating intrapreneurial spirit among the workforce to enhance productivity and organizational performance. Intrapreneurship specifically refers to entrepreneurial behaviour exhibited within existing organizations that focuses on initiatives in an organization to start or undertake something new although he or she is not being asked to do so (De Jong, Parker, Wennekens & Wui, 2011). According to De Jong, Parker, Wennekens & Wui (2011), the key elements of entrepreneurial behaviours in existing organizations include pro-

activeness, innovativeness, risk taking, self renewal, new business venturing, resource acquisition and opportunity pursuit.

A study by Holt, Rutherford & Cohessy (2007) found that management support explained significant variations in fostering intrapreneurship behaviour. Work discretion was found to be an important element to trigger intrapreneurship behaviour (Rutherford & Cohessy, 2007). A study by Bhardwarwarj, Sushil & Momaya (2007) found that one of the drivers of corporate entrepreneurship (intrapreneurship) is rewards given to well performing employees. A study by Kuratko, Ireland, Covin & Honsby (2005) found that time availability explained significant variations in fostering intrapreneurship behaviour. The study by Bhardwarwarj, Sushil & Momaya (2007) found that flexible organizational boundaries was one the drivers of corporate entrepreneurship (intrapreneurship).

Researchers and practitioners have increasingly been interested in the concept because of the positive effect on revitalization and performance of firms (Antoncic & Hisrich, 2004). The effectiveness and efficiency of education institutions in Kenya have been the longstanding issues. Among the strategic thrusts proposed is to intensify human capital, equip human resources with necessary competencies and encourage entrepreneurial initiatives to make certain that the private sector is vanguard of the economic development. The emphasis on fostering entrepreneurial spirit among work force in private sector is seen crucial to improve the competitiveness of the organization and subsequently enhance the competitiveness of the country. Therefore, in a dynamic and competitive business environment, the organization such as the education institution in Kenya as well as the country is forced to foster intrapreneurial behaviour in order to grow and sustain its competitiveness. Limited research has been conducted on the nature and management of intrapreneurship in organizations operating in Kenya. In line with the Kenyan government aspiration to transform its economy by fostering entrepreneurial initiatives, it was deemed timely that a study to be undertaken to understand the strategic determinants of intrapreneurship of education institutions in Kenya. As such, the general objective of this study was to investigate the strategic determinants of intrapreneurship of education institutions in Kenya with specific focus to private secondary schools in Mombasa County.

## **2. STATEMENT OF THE PROBLEM**

Kenya's long-term development agenda spelt out in the vision 2030, targets an annual growth rate of 10% in the medium term with an investment rate of 30% (GoK, 2007). Among the strategic thrusts proposed is to intensify human capital, equip human resources with necessary competencies and encourage entrepreneurial initiatives to make certain that the private sector is vanguard of the economic development. The effectiveness and efficiency of education institutions in Kenya have been the longstanding issues. However, excessive centralization of authority and bureaucratic rigidity produces stultifying uniformity, hence this continuous problem has created a more hostile and turbulent environment as the institutions constantly need to keep with the changing needs of the 21<sup>st</sup> century, yet the education institutions including the private secondary schools play a vital role in the process of intensifying human capital. The recent scenario in the business landscape has witnessed the increasing pressure exerted on organizations to compete towards organizational sustainability. Unfortunately, sustained competitive advantage can no longer be found by simply lowering costs, higher quality and better service as these factors have now become the minimal criterion for remaining in the competitive game (Morris, Kuratko & Covin, 2008). The businesses now should be cognizant of the fact that past economic success is no longer a guarantee of future success. Various measures have been taken by businesses to face the stiff competition; and one of the means is via invigorating intrapreneurial spirit among the workforce to enhance sustainability and organizational performance. Researchers and practitioners have increasingly been interested in the concept because of the positive effect on revitalization and performance of firms (Antoncic & Hisrich, 2004). Intrapreneurship is perceived to be important, not only because it assists organizations to obtain a better competitive position, but also contributes to the economy of a country at large. Even though it has been acknowledged that fostering intrapreneurial behaviour is imperative, the research on intrapreneurship remains uncharted, particularly in the context of Kenya. In line with the Kenyan government aspiration to transform its economy by fostering entrepreneurial initiatives, it was deemed timely that a study

to be undertaken to understand the strategic determinants of intrapreneurship of education institutions in Kenya with specific focus to private secondary schools in Mombasa County.

### **3. OBJECTIVES OF THE STUDY**

This study was guided by the following one general objective and five specific objectives.

#### **4. GENERAL OBJECTIVE**

In light with the identified problem, the general objective of this study was to investigate the strategic determinants of intrapreneurship of education institutions in Kenya with specific focus to private secondary schools in Mombasa County.

#### **5. SPECIFIC OBJECTIVES**

This study was guided by the following five specific objectives:

- 1) To test the extent to which management support influences intrapreneurship of private secondary schools in Mombasa County.
- 2) To examine the extent to which work discretion influences intrapreneurship of private secondary schools in Mombasa County.
- 3) To assess the extent to which rewards influence intrapreneurship of private secondary schools in Mombasa County.
- 4) To establish the extent to which time availability influences intrapreneurship of private secondary schools in Mombasa County.
- 5) To ascertain the extent to which organizational boundaries influence intrapreneurship of private secondary schools in Mombasa County.

#### **6. RESEARCH QUESTIONS**

This study endeavored to answer the following research questions:

- 1) To what extent does management support influence intrapreneurship of private secondary schools in Mombasa County?
- 2) To what extent does work discretion influence intrapreneurship of private secondary schools in Mombasa County?
- 3) To what extent do rewards influence intrapreneurship of private secondary schools in Mombasa County?
- 4) To what extent does time availability influence intrapreneurship of private secondary schools in Mombasa County?
- 5) To what extent do organizational boundaries influence intrapreneurship of private secondary schools in Mombasa County?

#### **7. HYPOTHESES**

Null hypotheses were used because it is the practice in thesis writing and it is the null hypotheses that are tested (Mugenda and Mugenda, 2006). Against the backdrop of the literature review, this study was guided by the following five null hypotheses:

H<sub>0</sub>1: Management support will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County.

H<sub>0</sub>2: Work discretion will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County.

H<sub>0</sub>3: Rewards will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County.

H<sub>0</sub>4: Time availability will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County.

H<sub>05</sub>: The absence of organizational boundaries will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County.

## **8. JUSTIFICATION OF THE STUDY**

This study will be of great value to the policy makers and practitioners especially the government and other regulators to understand the strategic determinants of intrapreneurship of education institutions in Kenya. Importantly, the findings of this study have some important implications on organizations in their efforts to stimulate intrapreneurship behaviour towards transformation agenda of Kenyan society as highlighted in the Vision 2030. Investors will be able to identify areas that require further improvement especially in the context of Kenya's human capital development. Moreover, this study was aimed at helping the executives of private secondary schools to understand the strategic determinants of intrapreneurship of education institutions in Kenya. Further, this study will be of great value to the academicians and researchers as it will help them gain both theoretical and practical experience on the strategic determinants of intrapreneurship of education institutions in Kenya. Academicians and researchers will be able to identify areas of further research on intrapreneurship.

## **9. THEORETICAL FRAMEWORK**

Theoretical frameworks are explanations about the phenomenon, and provide the researcher the lens to view the world (Zima, 2007). The study was based on the flexible leadership theory, human capital theory and resource based theory.

## **10. FLEXIBLE LEADERSHIP THEORY**

The Flexible Leadership Theory is conceptualized at firm level and explains how top executives influence organization-level processes that determine a firm's performance. It is a theory of strategic leadership that emphasizes the need to influence key determinants of financial performance for a company: efficiency, innovative adaptation and human capital (Yukl, 2008). The Flexible Leadership Theory was formulated in response to the need for a comprehensive theory of strategic leadership that integrates relevant ideas from several distinct literatures such as leadership, strategy and human resource management (Yukl, 2009). The Flexible Leadership Theory uses ideas from several different literature including leadership, human resource management, strategic management, organizational theory and organizational change (Yukl and Lepsinger, 2005). The Flexible Leadership Theory suggests that the influence of human capital on firm performance is indirect having its impact on factors that are proximal antecedents to firm performance like efficiency and innovative adaptation.

## **11. HUMAN CAPITAL THEORY**

According to Hessels and Terjesene (2008) the Human Capital Theory was proposed by Scrutz (1961) and developed extensively by Becker (1964). Entrepreneurial Human Capital refers to an individual's knowledge, skills and experiences (Hessels and Terjesene, 2008). According to Mahsud, Yukl and Prussia (2011), the effect of human capital is indirect in part because the immediate result of employees with strong skills and motivation is that they will work faster and smarter, which will in turn lead to performance gains. Highly motivated and talented employees can help a company achieve efficiency and innovative adaptation (Mahsud, Yukl and Prussia, 2011). Zhou and Li (2002) focused on how knowledge affects radical innovation in knowledge base, market knowledge acquisition, and internal knowledge sharing. The study was also based on the Human Capital Theory and the study concluded that effects of knowledge breadth and depth are contingent on market knowledge acquisition and knowledge sharing in opposite ways.

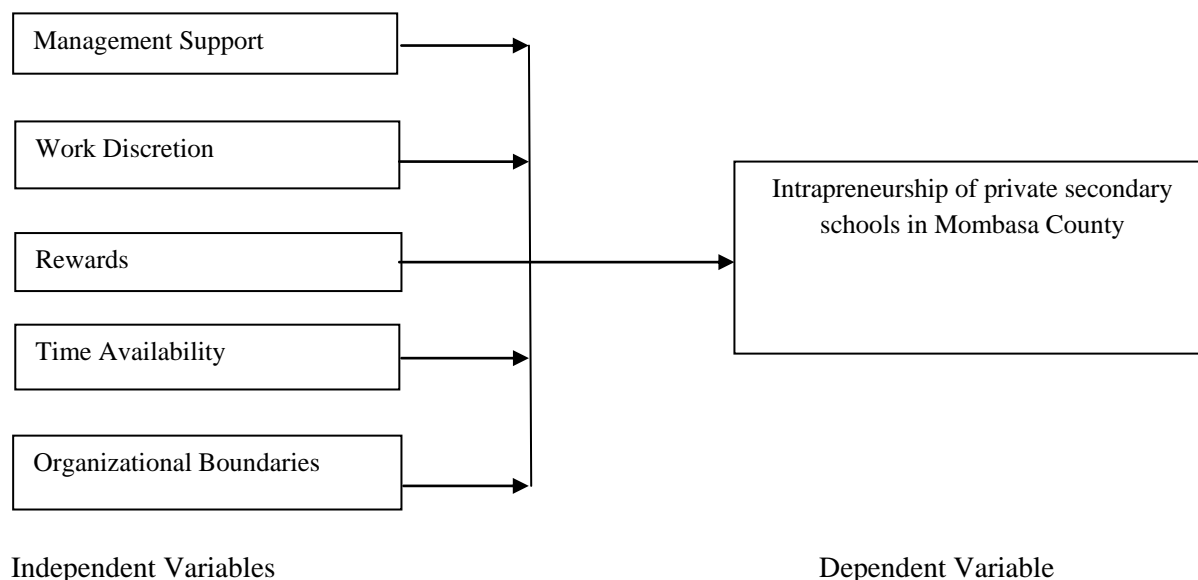
## **12. RESOURCE BASED THEORY**

According to Kraaijenbrink, Spender and Groen (2010), the Resource Based Theory is mainly concerned on efficient and innovative use of resources. The Resource Based Theory has become one of the most influential and cited theories in the history of management theorizing. The Resource Based Theory aspires to explain the internal sources of a firm's sustained competitive advantage (Kraaijenbrink, Spender and Groen, 2010). Barney and Clark (2007) claimed that the intellectual capital is the main source of sustainable competitive advantage to improve enterprise growth. Ganotakis and Love (2010) used the Resource Based Theory to explain the importance of

human capital to entrepreneurship. According to the Resource Based Theory, sustainable competitive advantage results from resources that are inimitable, not substitutable, tactic in nature and synergistic. Therefore, managers need to be able to identify key resources of competitive advantage, performance and value in their organizations.

### 13. CONCEPTUAL FRAMEWORK

Mugenda (2008) defines conceptual framework as a concise description of phenomenon under study accompanied by a graphical or visual depiction of the major variables of study. According to Young (2009), a conceptual framework is a diagrammatic representation that shows the relationship between independent variables and dependent variable. In this model, strategic leadership is viewed as the independent variable while sustainable competitive advantage is viewed as the dependent variable.



### 14. REVIEW OF LITERATURE ON VARIABLES

This section presents a review of the independent variable and the independent variables that will be measured in this study. Intrapreneurship is the independent variable, while the independent variables are the management support, work discretion, rewards, time availability and organizational boundaries.

### 15. INTRAPRENEURSHIP

Intrapreneurship specifically refers to entrepreneurial behaviour exhibited within existing organizations that focuses on initiatives in an organization to start or undertake something new although he or she is not being asked to do so (De Jong, Parker, Wennekers & Wui, 2011). Organizations should capitalize on their employees' ability to innovate in order to transform the organizations to be more competitive. According to De Jong, Parker, Wennekers & Wui (2011), the key elements of entrepreneurial behaviours in existing organizations include pro-activeness, innovativeness, risk taking, self renewal, new business venturing, resource acquisition and opportunity pursuit. In this study intrapreneurship is regarded as a process which involves risk taking, pro-activeness and innovativeness. This view is supported by Morris, Schindehutte & Allen (2005). Innovativeness refers to the creation of new products, services, processes, technologies and business models (Morris & Kuratko, 2002). Risk taking refers to the readiness to make resources available to exploit opportunities (Morris & Kuratko, 2002). Pro-activeness refers to the action orientation (Morris & Kuratko, 2002). Based on previous research, the strategic determinants of intrapreneurship include management support, work discretion, rewards, time availability and organizational boundaries.

### 16. MANAGEMENT SUPPORT

According to Kuratko, Ireland, Covin & Hornsby (2008), management support refers to the willingness of the top-level managers to facilitate and promote entrepreneurial behaviour

including championing of ideas and providing the resources people require to take entrepreneurial actions. A study by Rutherford & Holt (2007) found that the way leaders promote intrapreneurship will influence the employees' entrepreneurial mindset. Another study by Holt, Rutherford & Cohessy (2007) found that management support explained significant variations in fostering intrapreneurship behaviour.

### **17. WORK DISCRETION**

According to Kuratko, Ireland, Covin & Hornsby (2008), work discretion reflects the top-level managers' commitment to tolerate failure, provide decision making latitude and freedom from excessive oversight and to delegate responsibility and authority to middle-level managers. Work discretion was found to be an important element to trigger intrapreneurship behaviour (Rutherford & Cohessy, 2007). It is vital for organizations to allow employees to make decisions about their work process and avoid criticizing them if mistakes occur while innovating.

### **18. REWARDS**

To stimulate innovative behaviour, necessary money and time should be allocated for the implementation of ideas generated by innovative employees (De Jong & Hartog, 2007). The availability of rewards and resources could encourage intrapreneurship (De Jong, Wenneckers, 2008). A study by Bhardwarwarj, Sushil & Momaya (2007) found that one of the drivers of corporate entrepreneurship (intrapreneurship) is rewards given to well performing employees.

### **19. TIME AVAILABILITY**

It is vital for the organization to moderate the work load (Bhardwarwarj, Sushil & Momaya, 2007). According to Kuratko, Ireland, Covin & Hornsby (2008), organizations must evaluate the workloads of employees in order to foster innovative behaviour. A study by Kuratko, Ireland, Covin & Honsby (2005) found that time availability explained significant variations in fostering intrapreneurship behaviour.

### **20. ORGANIZATIONAL BOUNDARIES**

According to Kuratko, Ireland, Covin & Hornsby (2008), organizational boundaries refer to the precise explanations of outcomes expected from organizational work and development of mechanisms for evaluating, selecting and using innovations. Flexible organizational boundaries can encourage the intrapreneurial behaviours (Bhardwarwarj, Sushil & Momaya, 2007). The study by Bhardwarwarj, Sushil & Momaya (2007) found that flexible organizational boundaries was one the drivers of corporate entrepreneurship (intrapreneurship).

### **21. RESEARCH METHODOLOGY**

Orodho (2003) defines a research design as the scheme, outline or plan that is used to generate answers to research problems. This study employed a descriptive research design because emphasis was on describing rather than on judging or interpreting and thus when important new issues and questions arose during the duration of the study, further investigation was conducted. Creswell (2008) stated that the descriptive research design is used to gather information about the present existing condition.

### **22. TARGET POPULATION**

Target population as described by Borg & Crall (2009) is a universal set of study of all members of real or hypothetical set of people, events or objects to which an investigator generalizes the result. The target population of this study was the forty three (43) private secondary schools in Mombasa County according to the information obtained from the Coast Provincial Director of Education's office. The study population for this study was the departmental managers of the forty three (43) private secondary schools in Mombasa County. Departmental managers were selected to participate as they would be most knowledgeable about the overall situation, activities and orientations of the firm (Fitzsimmons, Douglas, Antoncic & Hisrich, 2005).

### **23. SAMPLING FRAME**

Sampling frame is a list that includes every member of the population from which a sample is to be taken. Without some form of a sampling frame, a random sample of a

population other than an extremely small population is impossible (Nicholas, 2011; Mark, Philip & Adrian, 2009). For purpose of this study, the sampling frame the forty three (43) private secondary schools in Mombasa County according to the information obtained from the Coast Provincial Director of Education's office (Appendix I).

### **24. SAMPLE SIZE AND SAMPLING TECHNIQUE**

The ultimate test of a sample design is how well it represents the characteristics of the population it purposes to (Kothari, 2004). Purposive sampling technique was used to obtain information from all the forty three (43) private secondary schools in Mombasa County. Purposive sampling is confined to specific types of people who can provide the desired information, either because they are the only ones who have it or conform to some criteria set by the researcher (Sekaran, 2008). As a result of cost, time and logistical limitations, it was not possible to obtain information from all the departmental managers of the forty three (43) private secondary schools in Mombasa County. The researcher randomly selected three (3) departmental managers from each of the forty three (43) private secondary schools in Mombasa County. Therefore, a total of one hundred and twenty nine (129) departmental managers formed the sample size. Mugenda (2008) and Orodho & Kombo, (2002) recommend that for small populations a sample of 30 is statistically significant.

### **25. INSTRUMENT**

The research instrument that was used in this study was a questionnaire with sufficient questions for the collection of the relevant information required to achieve the research objectives to collect primary data. Franker (2006) stated that a questionnaire is useful in obtaining objective data because participants are not manipulated in any way by the researcher and further, questionnaires have the added advantage of being less costly and using less time as instruments of data collection. The questionnaires were earlier developed based on previous studies and modified according to the conditions of private secondary education sector and factor analysis was used to assess the validity Cronbach alpha to assess reliability of the questionnaire. The Cronbach alpha coefficient was used to evaluate the extent of reliability and the test results ranged from 0.616 to 0.878.

### **26. DATA COLLECTION PROCEDURE**

Creswell (2002) defines data collection as a means by which information is obtained from the subjects of an investigation. Primary data was used which was collected through copies of a structured questionnaire which was administered through the drop and pick method by the researcher to at least three (3) departmental managers from each of the forty three (43) private secondary schools in Mombasa County.

### **27. PILOT TEST**

Cooper & Schindler (2010) indicated that a pilot test is conducted to detect weakness in design and instrumentation to provide proxy data for selection of a probability sample. Cronbach Alpha was used to measure reliability while factor analysis was used to measure validity of the questionnaire. A pilot study was undertaken on at least thirteen (13) departmental managers from the forty three (43) private secondary schools in Mombasa County (not included in the final sample) to test the reliability and validity of the questionnaire in order to ensure the integration of the translation and to improve understanding of the questions. Cooper & Schindler (2010) indicated that the rule of the thumb is that 1% of the sample should constitute the pilot test.

### **28. DATA PROCESSING AND ANALYSIS**

Data analysis was guided by the research objectives presented and the procedure of data analysis advocated by Sekaran (2008) and Kothari (2004) was followed. Before data analysis, data preparation was done on completed questionnaires by editing, coding and entering the data. Statistical analyses were conducted using statistical package for social sciences (SPSS) version 21 which is the most current version in the market to calculate descriptive statistical analysis and inferential statistical analysis. Two steps of detailed statistical analysis of data were involved. At the first stage, descriptive statistic analysis was performed to extract the mean and standard deviation of underlying study variables intrapreneurship (innovativeness, self renewal and pro-activeness) and strategic determinants of intrapreneurship (management support, work discretion,

rewards, time availability and organizational boundaries). At the second stage, inferential analyses were performed to understand the relationship among these variables. To compute the correlation between the dependent variable and the independent variables, Karl Pearson's correlation analysis was conducted. The correlation coefficient (r) was calculated to determine strength of the relationship between the dependent variable and the independent variables. According to Sekaran (2008) and Kothari (2004), the correlation coefficient (r) ranges from -1.0 (perfect negative correlation) to +1.0 (perfect positive correlation). In order to test the hypotheses, multiple regression analysis was conducted using intrapreneurship as the dependent variable and the five strategic determinants of intrapreneurship (management support, work discretion, rewards, time availability and organizational boundaries) as the predicting variables. The study was guided by the following econometric model:

$$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \mu_1$$

where Y = intrapreneurship,  $\beta_0$  = intercept,  $\beta_1$ - $\beta_5$ = regression coefficients,  $X_1$  = management support,  $X_2$  = work discretion,  $X_3$  = rewards,  $X_4$  = time availability,  $X_5$  = organizational boundaries,  $\mu_1$  = error term.

## 29. RESULTS AND DISCUSSIONS

### 29.1. Response Rate

Out of one hundred and twenty nine (129) questionnaires distributed, one hundred and four (104) useable forms were returned producing a valid response rate of about 80.62%.

### 29.2. Descriptive Analysis

Table1 presents the means (M) and standard deviations (SD) for the variables.

**Table 1.** Means (M), Standard deviations, Alpha Scores and Factor Loadings of Variables

Construct	N	Mean	Standard Deviation	Alpha Score	Factor Loadings
Strategic Determinants					
Management Support	104	3.97	0.76	0.945	0.740
Work Discretion	104	3.05	0.72	0.854	0.782
Rewards	104	3.77	0.96	0.818	0.723
Time Availability	104	3.05	0.93	0.792	0.705
Organizational Boundaries	104	3.04	0.82	0.795	0.734
Intrapreneurship					
Risk Taking	104	3.55	0.84	0.814	0.824
Pro-activeness	104	3.26	0.73	0.78	0.712
Innovativeness	104	3.34	0.84	0.84	0.740

Source: Research data (2012)

Based on the highest scale value of 5.0, the means were management support (M= 3.97), work discretion (M= 3.05), rewards (M= 3.77), time availability M= 3.05) and organizational boundaries (M= 3.04), risk taking (M= 3.55), pro-activeness (M= 3.26) and innovativeness (M= 3.34).

### 29.3. Inferential Analysis

Karl Pearson's correlation analysis and multiple regression analysis were conducted for inferential analysis.

#### Karl Pearson's Correlation Analysis

**Table 2.** Correlation Coefficient of strategic determinants of intrapreneurship

		Intrapreneurship	Deductions
Management Support	Pearson Correlation	.757(**)	Positive Relationship
	Significance(2-tailed)	.000	
	N	104	
Work Discretion	Pearson Correlation	.657(**)	Positive Relationship
	Significance(2-tailed)	.000	
	N	104	
Rewards	Pearson Correlation	.565(**)	Positive Relationship



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	Significance(2-tailed)	.000	
	N	104	
Time Availability	Pearson Correlation	.624(**)	Positive Relationship
	Significance(2-tailed)	.000	
	N	104	
Organizational Boundaries	Pearson Correlation	.633(**)	Positive Relationship
	Significance(2-tailed)	.000	
	N	104	

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

Source: Research data (2012)

From the table 2, it is clear that positive significant relationships were found between each one of the five strategic determinants and intrapreneurship in private secondary schools in Mombasa County since the P-values were less than the significance level of 0.05. Therefore, management support, work discretion, rewards, time availability and organizational boundaries are effective strategic determinants of intrapreneurship of private secondary schools in Mombasa County.

### 29.4. Multiple Regression Analysis

In order to test the hypotheses, multiple regression analysis was conducted using intrapreneurship as the dependent variable and the five strategic determinants of intrapreneurship (management support, work discretion, rewards, time availability and organizational boundaries) as the predicting variables.

**Table 3.** Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.795(a)	.632	.613	.296

a Predictors: (constant) Organizational Boundaries, Rewards, Work Discretion, Management Support, Time Availability...

Source: Research data (2012)

From the model summary table 3, it is clear that the adjusted R Square was 0.613 indicating that the five determinants including management support, work discretion, rewards, time availability and organizational boundaries explained 61.3% of the variation in intrapreneurship of private secondary schools in Mombasa County. This therefore, means that other determinants not studied in this research contribute 38.7% of intrapreneurship hence further research should be conducted to investigate the other strategic determinants of intrapreneurship of private secondary schools in Mombasa County.

**Table 4.** ANOVA (b)

Model		Sum of Squares	df	Mean Square	F	P-Value
1	Regression	14.736	5	2.947	33.613	.000(a)
	Residual	8.593	98	.088		
	Total	23.328	103			

a Predictors: (constant) Organizational Boundaries, Rewards, Work Discretion, Management Support, Time Availability...

b Dependent Variable: Intrapreneurship

Source: Research data (2012)

From the ANOVA table 4, it is clear that the overall model (the model involving constant, organizational boundaries, rewards, work discretion, management support and time availability) is significant in predicting how management support, work discretion, rewards, time availability and organizational boundaries determine intrapreneurship because the P-Value is 0.001 which is less than alpha, in this case assumed to be 0.05.

**Table5.** Regression Coefficient (a) Hypotheses Testing

Model		Unstandardized Coefficients		Standardized Coefficients	t	P-Value	Deductions
		B	Std. Error	Beta			
1	(Constant)	.140	.288		.484	.029	Reject Ho
	Management Support	.434	.105	.423	4.131	.000	Reject Ho
	Work Discretion	.188	.091	.184	1.965	.042	Reject Ho
	Rewards	.200	.089	.187	2.239	.027	Reject Ho
	Time Availability	.069	.087	.058	.794	.029	Reject Ho
	Organizational Boundaries	.217	.111	.175	1.958	.043	Reject Ho

a Dependent Variable: Intrapreneurship

Source: Research data (2012)

The study was guided by the following econometric model:

$Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \mu_1$ , where  $Y$  = intrapreneurship,  $\beta_0$  = intercept,  $\beta_1$ - $\beta_5$  = regression coefficients,  $X_1$  = management support,  $X_2$  = work discretion,  $X_3$  = rewards,  $X_4$  = time availability,  $X_5$  = organizational boundaries,  $\mu_1$  = error term. As such, the regression equation becomes:  $Y = 0.140 + 0.434X_1 + 0.188X_2 + 0.200X_3 + 0.069X_4 + 0.217X_5$

The regression equation has established that taking all factors into account (management support, work discretion, rewards, time availability and organizational boundaries) constant at zero, intrapreneurship of private secondary schools will be 0.140. The result in table5 has further established that taking all other independent variables at zero, a unit increase in management support will lead to 0.434 increase in intrapreneurship; a unit increase in work discretion will lead to 0.188 increase in intrapreneurship; a unit increase in rewards will lead to 0.200 increase in intrapreneurship; a unit increase in time availability will lead to 0.069 increase in intrapreneurship; a unit increase in organizational boundaries will lead to 0.217 increase in intrapreneurship. The standardized coefficients assess the contribution of each independent variable towards the prediction of the dependent variable, since they have been converted to the same scale to show comparison. The result indicates that management support having the highest beta of 0.423 hence this result was an emphasis on the role of management support as the most important strategic determinant of intrapreneurship. The second most important strategic determinant of intrapreneurship was rewards with a beta of 0.187 and the third was work discretion with a beta of 0.175. The fourth strategic determinant of intrapreneurship was organizational boundaries with a beta of 0.175 and the fifth strategic determinant of intrapreneurship was time availability with a beta of 0.058 implying that time availability is least important of these five variables. The t-test statistic shows that all the variables are significant as their P-Values were less than 0.05.

### 30. TEST OF HYPOTHESES

In order to test the hypotheses, multiple regression analysis was conducted using intrapreneurship as the dependent variable and the five strategic determinants of intrapreneurship (management support, work discretion, rewards, time availability and organizational boundaries) as the predicting variables.

#### Hypothesis 1

$H_{01}$ : postulates that management support will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County. A positive and highly significant relationship between the management support and the level of intrapreneurship at ( $\beta$ : 0.423;  $p = 0.000 < 0.05$ ). This finding is consistent with the study by Holt, Rutherford & Cohessy (2007) which found that management support explained significant variations in fostering intrapreneurship behaviour. Therefore, the null hypothesis was rejected.

#### Hypothesis 2

$H_{02}$ : postulates that work discretion will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County. A positive and significant relationship between

the work discretion and the level of intrapreneurship at ( $\beta$ : 0.184;  $p= 0.042<0.05$ ). This finding is consistent with the study by Rutherford & Cohessy (2007) which found that work discretion to be an important element to trigger intrapreneurship behaviour. Therefore, the null hypothesis was rejected.

### Hypothesis 3

H<sub>03</sub>: postulates that rewards will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County. A positive and significant relationship between the rewards and the level of intrapreneurship at ( $\beta$ : 0.187;  $p= 0.027<0.05$ ). This finding is consistent with the study by Bhardwarwarj, Sushil & Momaya (2007) which found that one of the drivers of corporate entrepreneurship (intrapreneurship) is rewards given to well performing employees. Therefore, the null hypothesis was rejected.

### Hypothesis 4

H<sub>04</sub>: postulates that time availability will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County. A positive and significant relationship between the time availability and the level of intrapreneurship at ( $\beta$ : 0.058;  $p= 0.029<0.05$ ). This finding is consistent with the study by Kuratko, Ireland, Covin & Honsby (2005) which found that time availability explained significant variations in fostering intrapreneurship behaviour. Therefore, the null hypothesis was rejected.

### Hypothesis 5

H<sub>05</sub>: postulates that organizational boundaries will not have a significant positive effect on intrapreneurship of private secondary schools in Mombasa County. A positive and significant relationship between the organizational boundaries and the level of intrapreneurship at ( $\beta$ : 0.175;  $p= 0.043<0.05$ ). This finding is consistent with the study by Bhardwarwarj, Sushil & Momaya (2007) which found that flexible organizational boundaries was one the drivers of corporate entrepreneurship (intrapreneurship). Therefore, the null hypothesis was rejected.

## 31. CONCLUSIONS AND IMPLICATIONS

This study aimed at investigating the strategic determinants of intrapreneurship of education institutions in Kenya with specific focus to private secondary schools in Mombasa County. The study provides initial empirical evidence of determinants of intrapreneurship in Kenya and concludes that in a dynamic and competitive business environment, the organization as well as the country is forced to foster intrapreneurial behaviour in order to grow and sustain its competitiveness. This study suggests that the strategic determinants of intrapreneurship of education institutions in Kenya include management support, work discretion, rewards, time availability and organizational boundaries.

### RECOMMENDATIONS ON RESEARCH FINDINGS

The findings of this study have some important implications on organizations in their efforts to stimulate intrapreneurship. This study provides a clear direction to the top management of the organization in shaping intrapreneurial behavior among the employees. As a managerial implication, it is possible to suggest that if in an organization the level of intrapreneurship is low, then the level of the organizational support provided to these human resources should be increased. This study further recommends that top managers prioritizing on intrapreneurship should invest to build such an organizational milieu where first of all, management support and rewards/reinforcement exist to a large extend. Based on these results, it is recommended that management support, work discretion, rewards/reinforcement, time availability and organizational boundaries should be modified towards entrepreneurial organization. In short this study provides valuable insights into ways in which the top management within an organization to strategize and foster intrapreneurship in order to encourage innovative practices and initiatives successfully.

### RECOMMENDATIONS FOR FURTHER RESEARCH

In this empirical study there are some limitations; the recovery of them may open new avenues for further studies. For instance, all the variables in the model were measured through the perceptions of only three respondents representing their firms, at the same point in time. In later studies, a

longitudinal study to discover the long term effects of these and other strategic determinants on intrapreneurship may be conducted. The model may be enlarged with some control variables, e.g. firm size and age, and other similar organizational drivers of intrapreneurship, e.g. human, social and organizational capital. Moderating role of human capital, and moderating role of external environmental factors, may be explored; and this extended model may be tested over a larger number of respondents covering a larger number of regions and industries.

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### **Appendix 1: List of Private Secondary Schools in Mombasa County**

1. ABC Mixed Secondary School
2. Abuhureira Secondary School
3. Aga Khan High School, Mombasa
4. Al Madrasatus Saifiyatul Burhaniyah School
5. Bamburi Community Secondary School
6. Baraka Secondary School
7. Bhadala Secondary School
8. Brains Worth Bamburi Secondary School
9. Brains Worth Mombasa Secondary School
10. Changamwe Adventist Secondary School
11. Coast Academy
12. Coast Star Academy
13. Green Palm Academy Secondary School
14. High Bridge Secondary School
15. High gate Secondary School
16. Imara Secondary School
17. Iyale Academy
18. Jaffery Academy
19. JCC Educational Complex
20. Junda High School
21. Kilindini Secondary School
22. Kisauni High School
23. Kumbar Secondary School
24. Light Academy Secondary School
25. Magongo New light Secondary School
26. Mama Washime Secondary School
27. Memon High School
28. Mombasa Baptist High School
29. Mombasa Secondary School
30. New Apak Secondary School

31. New Hope Secondary School
32. Nyali Senior Academy School
33. Precious Mary Secondary School
34. Qubaa Secondary
35. Rise and Shine Secondary School
36. Sea Side Secondary School
37. Sheikh Halifa Bin Zayed Secondary School
38. St. Elizabeth Secondary School
39. St. Michael Academy
40. St. Teresa Academy
41. Talent Secondary School
42. Tudor Academy Secondary School
43. Valentine High School