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RELATIONSHIP BETWEEN ENTREPRENEUR'S INNOVATIVENESS AND PERFORMANCE OF AGRO-BASED MANUFACTURING SMALL AND MEDIUM ENTERPRISES IN KIAMBU COUNTY- KENYA

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ABSTRACT

The study sought to establish the relationship between the entrepreneur's innovativeness and performance of SMEs in the agro-based manufacturing sector in Kiambu County in Kenya. To achieve the objectives, the study used descriptive survey research design. The target of the study included the 250 registered agro-based manufacturing SMEs in the food subsector in Kiambu County. Stratified random sampling techniques were used to draw a sample size of 69 enterprises. To collect the data a questionnaire with both closed ended and open ended questions were administered. The data collected was analyzed using Statistical Package for Social Science version 21 to generate descriptive statistics including percentages, frequency tables and mean scores. Correlation coefficient was used to determine the magnitude and direction of relationship between innovativeness and the performance of the SMEs. Regression procedure was used to determine the nature of the relationship. The correlation analysis revealed that there is a significant linear relationship between innovativeness and performance of the SMEs. The correlation Coefficient index is 0.833 at P value less than 0.001 ($r = 0.833$, $P < 0.001$). The regression model of the study indicated that innovativeness explains 69.4% of the variation in performance of the agro-based SMEs. For one unit increase in innovativeness, performance increases by 1.053 units. Based on the findings of the study, the entrepreneurs should strive to be innovative within their financial ability and in consideration of whether the business environment is hostile or not.

Key words: Innovativeness, Entrepreneur, Small and medium Enterprises, Performance

1.0 INTRODUCTION

Innovativeness of entrepreneurs is measured by the propensity by which they innovate their business (Milter and Friesen, 2002); their willingness to try new ways which are different from the existing; the enthusiasm to adopt new ideas or new methods to their business operation; and the eagerness to implement the innovation strategy in their business (Khandwalla, 2007).

Innovativeness reflects a firms, tendency to engage in and support new ideas, novelty, experimentation and creative processes (lumpkin and Dess, 1996) that may result in new products, services, or technological processes and which may take the organization to a new paradigm of success (Swiezczek and Ha, 2003). Further, Bwisa, Kihoro and Patrick (2013) explains innovativeness as the propensity of a firm to innovate or develop new products that meet and / or exceed customers' expectations or the extent of unmet market needs as reflected in its uniqueness in comparison to similar products offered in the market. Giudici (2013), suggested that innovative practices can be represented by the number of new products developed.

Schumpeter (2002) considered entrepreneurship to be essentially a creative activity and entrepreneur as an innovator who carries out new combinations in the field of men, money, material, machine and management. According to him, entrepreneur is an economic man who tries to maximize his profits by making innovations in anyone of the following fields: (1) new products; (2) new production methods; (3) new markets; or (4) new forms of organization. The degree of an entrepreneur's innovativeness will decide how far and how deep the innovation will go in business, in order to meet both the strategic goal formulated for the business and the requirements from the environment (Hult *et al.,* 2004).

Innovativeness represents a basic willingness to depart from existing technologies or practices and venture beyond the current state (Covin 2006). An innovative strategic posture can

contribute to firm performance as it increases the chances that a firm will realize first mover advantage, stay ahead of their competitors, gain a competitive advantage and capitalize on emerging market opportunities that lead to improved financial results (Kreiser *et al.,* 2002; Hult *et al.,* 2004 and Kreiser and Davis, 2010). Innovation is an important tool that provides opportunities to new inventions and building of new markets (Kuhn & Marisck, 2010).

2.0 METHODOLOGY

2.1 Research Design

The study used a descriptive survey design. According to Elahi and Dehdashti (2011), a descriptive survey research is ideal when the research objectives include the following: Portraying the characteristics of a social or physical phenomenon and determining the frequency of occurrence; determining the degree to which the variables are associated and Making predictions regarding the occurrence of social or physical phenomena. The study intended to establish the relationship between the entrepreneur's innovativeness in the agro-based manufacturing sector and performance, thus the design was ideal.

Both qualitative and quantitative research approach were used. According to McMillan and Schumacher (1993) qualitative research is concerned with understanding the social phenomenon from the participants' perspective while quantitative research is an inquiry into an identified problem, based on testing a theory, measured with numbers, and analyzed using statistical techniques. Combining the two approaches provides a richer presentation of the reality, (Silverman, 2005). The study combined the two approaches to understand the relationship between entrepreneurial orientation and performance of businesses in the agro-based manufacturing sector.

2.2 Instrumentation and Data Collection

The data collection involved both primary and secondary data collection. The primary data was collected through a questionnaire and an interview. Interview guide was used to guide interviews conducted with the entrepreneurs. The interviews sought to have an in-depth probing on how entrepreneurs achieve innovativeness. Further, the interview sought to understand the relationship between innovativeness and the performance of the business based on the view of the respondents.

During data collection questionnaires were administered by the researcher at the enterprise premises to avoid inconveniencing the entrepreneurs. This enabled collection of primary data on innovativeness. However, the business earnings data was obtained from secondary data based on the business financial records. The questionnaire had five scale likert questions which sought information on the innovativeness of the proprietor. The respondents rated each item by stating the level of agreement of each statement ranging from strongly agrees to strongly disagree. The questionnaire was administered by the researcher with the help of research assistants.

2.3 Data Analysis

The data analysis included both descriptive and inferential statistics. The data collected on innovativeness, was scored to determine the level of innovation. Similarly performance of the business was measured at the same time. The relationship between innovativeness and performance was shown after data analysis. The level of innovativeness was measured using a 5 scale likert-type. The scale ranged from strongly disagree (1) to strongly disagree (5). A composite score for each measure was obtained by averaging the responses across the items used for the measure. Data was analyzed using statistical package for social science version 21.

The variable relationship in the regression analysis was tested using inferential statistics. The ordinary least square regression analysis was used to determine the relationship that the independent variable had with the dependent variable. To test the linear relationship between the independent and the dependent variable of performance of the SMEs, Spearman's rho correlation was used. The designation r symbolizes the correlation coefficient which varies over a range of -1 to +1. The sign signifies the direction of the relationship. The coefficient is significant in situations where the significant level is between $P< 0.05$.

The performance of the SMEs was measured by obtaining records on the net worth, quarterly earnings, number of the employees and the years the business had been operating. Other descriptive statistics included the type of the business, years of operation, business size, earnings and number of employees.

3.0 Empirical Results

The study sought to find the relationship between the entrepreneur's innovativeness and the performance of the agro-based manufacturing SME's. As shown in table one, 64% of the entrepreneurs agree that they always look for new markets to target, while 52% of the entrepreneurs, agree that they create new products that provide value for their customers. While 56% of the entrepreneurs agree that they create value for their customers through partnerships, 74% agree that they regularly improve their existing products. From the findings, 66% of the entrepreneurs improve customer service through mobile money payment. Of all the entrepreneurs, 98% do not remain in the same business and they do not target only the existing markets. They are innovative in getting into different businesses as well as targeting new markets.

The mean of the responses used to measure the entrepreneur's innovativeness is between 3.5 and 4.2, as indicated in table 1 this implies that the respondents agree with the statements on innovativeness. The standard deviation of all the items is within the range of 0.54 to 0.83. This implies there is no much variation in the opinions of the respondents as far as innovativeness is concerned.

4.0 DISCUSSION

The hypothesis of the study was that there is no significant relationship between innovativeness and performance of agro- based manufacturing SMEs in Kiambu County. The analysis reveals that there is a significant linear relationship between innovativeness and performance of the SMEs. The correlation Coefficient index is 0.833 at P value less than 0.001 ($r = 0.833$, $P < 0.001$). This is shown in table 2. The study concludes that there is a strong positive relationship between autonomy and the performance of the agro-based manufacturing SMEs. As the level of autonomy increases, so does the performance of the SMEs.

The correlation between innovativeness and performance of the agro-based SMEs, was found to be significantly different from zero ($r =0.833$, $P< 0.001$). This is shown in table 2. This study concludes that there is a significant linear relationship between the entrepreneur's innovativeness and the performance of the SMEs. As the level of innovativeness increases, the performance of the SMEs also increases.

The regression analysis results for innovativeness and performance of SMEs is shown in tables 3(a), 3(b) and 3(c). A simple regression model was fitted to the data and it was found to be significant ($F (1, 48) =109.04$, $p <0.001$). This is shown in table 3(b). The value $R^2 = 0.694$, as shown in table 3(a) implies that innovativeness explains 69.4% of the variation in performance of

the SMEs. The hypothesis $H0_2$: $\beta_2 = 0$ (There is no significant relationship between innovativeness and performance of agro- based manufacturing SMEs in Kiambu County), is therefore rejected. This is because $\beta_2 = 0.833$, and it is positive. Innovativeness has a positive influence on Performance. For one unit increase in innovativeness, performance increases by 1.053 units. The model equation generated for innovativeness and performance, $Y = \beta_o + \beta_2 X_2$, which implies that, $Y = 3.578 + 0.833X_2$. Since Y is performance of the SMEs and X_2 is innovativeness, this means that Performance = 3.578 +0.8338*innovativeness. This implies that there is a positive significant relationship between innovativeness and performance of SMEs in the agro-based food manufacturing sector in Kiambu County in Kenya.

5.0 CONCLUSION

The study concludes that innovativeness is a statistically significant factor in determining performance of agro-based manufacturing SMEs in Kiambu County. SMEs aiming to have a good performance should be innovative. The SMEs should regularly introduce improvements on existing products, improve the production process, and improve on customer services such as through online communication as well as use of mobile money payments. In addition the SMEs should strive to look for new business opportunities and new markets to target.

Based on the findings of the study, the entrepreneurs should strive to be innovative within their financial ability and in consideration of whether the business environment is hostile or not. Innovation within an organization is negatively impacted by pressure of hostile environment, where competition is high and resources are scarce. In the absence of a hostile environment, the entrepreneur should strive to regularly introduce improvements on existing products, as well as improve on the production process.

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Table 1 Descriptive statistics on Relationship between Innovativeness and Performance of SMEs

Opinion statements	SD%	D%	N%	A%	SA%	M	SD
(a) Entrepreneur always looks out for new business opportunities.	14	28	22	28	8	4.2	0.57
(b) Entrepreneur always looks out for new markets to target	0	0	8	64	28	4.3	0.54
(c) Entrepreneur creates new products that provide value for all customers	0	0	22	52	26	4.0	0.70
(d) Entrepreneur reaches out to customers through social media	0	6	28	46	20	3.8	0.83
(e) Entrepreneur creates value for customers through partnerships.	0	14	16	56	14	3.7	0.89
(f) Entrepreneur regularly improves the existing products.	0	0	2	74	24	4.2	0.46
(g) Entrepreneur regularly improves production process	0	4	22	58	16	3.9	0.73
(h) Entrepreneur improves customer service through mobile money payment	2	6	6	66	20	4.0	0.83
(i) Entrepreneur remains in the same business and targets only existing markets	36	52	8	4	0	1.8	0.76
(j) Encourage development of employees ideas for the purposes of business improvement	0	3	18	7	0	3.7	0.80

N=50, Cronbach alpha =0.811 with 9 item. (Item i dropped.)

SD= Strongly Disagree, D= Disagree, N= Neutral, A= Agree SA= Strongly Agree

SD= Standard Deviation

Table 2. Correlation Between Innovativeness and SMEs Performance.

		Perfomance	innovativeness
Perfomance	Pearson Correlation	1	.833**
	Sig. (2-tailed)		.000
	N	50	50
Innovativeness	Pearson Correlation	.833**	1
	Sig. (2-tailed)	.000	
	N	50	50

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

Table 3 (a) Model Summary for Regression of innovativeness against Performance of the SMEs.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.833[a]	.694	.688	.38408

a. Predictors: (Constant), Innovativeness

Table 3 (b) Anova table for regression of Innovativeness against performance of SMEs

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.085	1	16.085	109.041	.000[a]
	Residual	7.081	48	.148		
	Total	23.166	49			

a. Predictors: (Constant), innovativeness
b. Dependent Variable: Performance

Table 3 (c) Coefficients for regression of Innovativeness against performance of SMEs

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.578	.054		65.873	.000
	Innovativeness	1.053	.101	.833	10.442	.000

a. Dependent Variable: Performance