

An Empirical Analysis of Entrepreneurship Scorecard and Performance of Small Scale Women Entrepreneurs in Urban- Kenya

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Abstract

This study addresses women enterprise characteristics hypothesized to influence performance of Small Scale Enterprises (SSEs) owned and /or managed by women. The study sought to establish if Entrepreneurship scorecard influence performance of the SSEs managed and/or owned by women in Kenya. The selected population consisted of a stratified random sample based on four industries of small scale enterprises owned and /or managed by women in the city council wards in Nairobi county which are: Retailing, Education, Food Industry and Personal and Professional Services. The scope of study targeted 384 women owners and /or managers from the four sectors. The response rate was 92%. Data was generated through the use of questionnaires. The data collected was analyzed by use of descriptive and inferential statistical tools. The findings showed that all the four constructs of the composite variable of the entrepreneurship scorecard in the hypothesized model had a correlation to performance namely: Technology and Innovation, Business Planning, Balanced Scorecard and Entrepreneurship skills were statistically significant. However, the baseline characteristics were insignificant.

Key Terms: Entrepreneurship Scorecard, Small Scale Enterprises (SSE), Millennium development goals, balanced scorecard, Women Entrepreneurs, Baseline Characteristics and Performance.

Entrepreneurship Scorecard is defined as-entrepreneurial skills and education required technology and innovation, balanced scorecard and business planning.

Background Information

The classical and neo-classical theorists have labored in trying to define entrepreneurship, but this has not resulted in a single definition of entrepreneurship. The definitions all depend on the focus of the one defining it and from which perspective one looks at it. Entrepreneurship is a multidimensional concept. According to Van Praag (1995), Richard Cantillon (1959) was the first economist to acknowledge the entrepreneur as a key economic factor. Most recent research defines entrepreneurs as a venture that involves a nexus of two phenomena: the presence of lucrative opportunities and the presence of “enterprising individuals” (Shane and Venkataraman, 2000, 25:217-226).

Entrepreneurship Culture in Kenya

The culture of an organization is one of the key factors fostering entrepreneurial activities in organizations (Covina & Slevin, p. 7-25., 1991; Zahra, 1993 Vol. 9). It is an invisible aspect of an organization, which influences everything that people do.

The Kenyan culture seems not be too entrepreneurial; most people go into the informal sector employment as result of necessity- last resort for lack of employment opportunity in the formal sector. The education system in Kenya is also formal employment –biased, bent on producing graduates who are only ready for the formal employment rather than creative agents for establishing entrepreneurial ventures. Entrepreneurship in Kenya comprises of micro and small enterprises with a few enterprises graduating to medium enterprises. The missing middle is a worrying scenario in Kenya’s entrepreneurships not to mention the large enterprises (GOK, 2005, p.6).

Small Scale Enterprises

There are no clear and universally accepted definitions of small business firms, thus their definitions vary widely. Some researchers define SSEs based on capital invested, volume of sales revenue or any of these factors combined. The number of employees engaged by the enterprises is more commonly used unit of measurement of the size of a business than the turnover, the degree of skills per worker (GOK.No.2, 2005). Most definitions appear to be governed by the interest of the perceiver, the size of the economy and the type of criteria used. However, business sizes have been defined variously using the criteria of number of employees, investment base (value of capital), sales turnover among others (Mwamadzingo, 1996). The recently enacted micro and small scale enterprise act (MSE ACT, 2012) defines small scale enterprise as enterprises with 50 and below employees (GOK, 2012). This study incorporated all enterprises that have up to 99 employees because their characteristics and those of the owners and/ or managers seem to be similar.

Status of Women Entrepreneurs in Pursuance of Millennium Development Goals

In most economies especially in Africa, thousands of women invest money, employ workers, operate machinery and assume the risks of production of processed foods and function as entrepreneurs. However, women’s contribution is considered negligible and intermediate enterprises go unrecognized. The Kenyan woman has borne the worst brunt of poverty. Women’s status is reflected in the following areas; women constitute over 50 percent of the total population but, their contribution is not in tandem with their proportion. In Kenya, women are underrepresented in all sectors of the economy; they constitute only 13 percent of the total professionals in public service (SID, 2004, NRB + 21 Conference, 2006). Out of 349 legislators in the current Kenyan parliament, only 5%; 16 elected women and 47 nominated women representatives reflecting the worst case of (mis) representation in Sub-Sahara Africa. Women Entrepreneurs in Kenya face unique socio-economic obstacles in running their businesses, their enterprises are likely to perform poorer compared to those run by their male counterparts. Employment policies in Kenya, as elsewhere in the developing world, have traditionally favored men and discriminated against women. Studies in development have shown that a key way in reducing household poverty levels is to increase access of women to income-earning activities to empower them economically (Daniels, Mead and Musinga, 1995, K-Rep, p.27 & p34).

General Research Objective

The general objective of this study was to establish if there is a relationship between entrepreneurship scorecard and performance of the women owned and /or managed SSEs.

The specific objectives were:

1. To establish if baseline characteristics of women entrepreneurs in SSEs influence the performance of their business enterprises.
2. To examine if there is a correlation between entrepreneurship scorecard and performance of women owners and /or managers of SSEs.

Research Questions

1. What is the influence of baseline characteristics of women owners and /or managers of SSEs on the performance of their enterprises?
2. What is the relationship between entrepreneurial scorecard and performance of women owned and/or managed SSEs?

Research Hypotheses

The hypotheses posed in this study were as follows:

Ho₁: Baseline characteristics of women entrepreneurs do not influence performance of SSEs

Ho₂: There is no significant relationship between entrepreneurship scorecard and performance of women owned and/or managed SSEs.

Practical implications of the study

Entrepreneurship is an important solution that can drive the economies to better performance. Indeed, the global focus of employment and wealth creation is the continued development of the entrepreneurship culture in Kenya and globally. Women entrepreneurs are the engine that will drive the vehicle of millennium development goals of eradicating poverty and eliminating gender inequalities in nations through empowering women economically and graduation of the SSEs to medium enterprise status through application of supportive environment for doing business. It shall provide new knowledge on enterprise characteristics and performance of the SSEs by identifying parameters that will define women's contribution to entrepreneurs and national development for use by governments and policy making organs. It may sensitize governments on the unique characteristics of women entrepreneurs and enable them to appreciate women's participation in economic development and fully integrate them in economic and political activities. It will also serve as an aid in reducing the high mortality rate of SSEs and re-engineer women owned and /or managed enterprises by enhancing the sustainability, success.

Methodology

The relationship between entrepreneurship scorecard, baseline characteristics and performance variables was measured based on the regression model and correlation matrix outlined in this research. The hypotheses were tested at 5% levels of significance using data gathered from a survey of Women SSEs in Nairobi County.

Variables

The independent variables corresponded to entrepreneurship scorecard and baseline characteristics (the educational level, ethnicity, marital status and age) of the women entrepreneurs. The dependent variable was performance with respect to performance indicator index. Hypotheses were rejected at $p \geq 0.05$.

Research Design

Descriptive correlation research in form of surveys was used. The baseline characteristics and the entrepreneurship scorecard measured through a Likert-type scale of five that ranged between 1 and 5; 1 for strongly disagree and 5 for strongly agree (Kothari, 2006, p.84-87). A stratified random sample was used to select 384 respondents from all the council's wards in Nairobi East.

Data Collection and Analysis

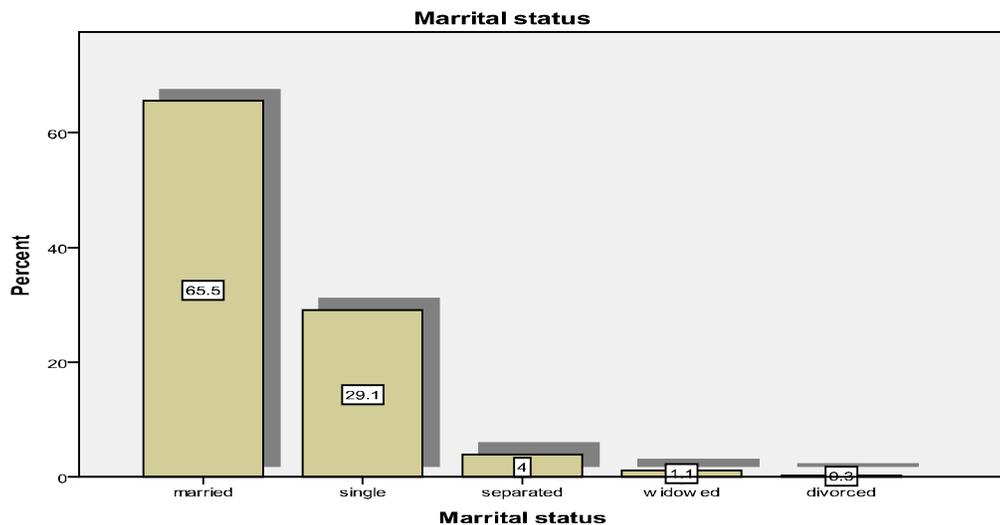
Primary data was generated by use of a questionnaire. A total of 354 questionnaires were completed, resulting into 92% response rate. Data collected were analyzed using descriptive and inferential statistics. Apriori it was expected that one variable will affect change in the other (Cooper and Schindler, 2007).

Research Findings

Relationship between Marital status of women entrepreneurs and performance of their SSEs

A majority, 65.5 percent of the households were married, while 29.1 percent, 4 percent 1.1 percent and 0.3 percent of the respondents were single, separated widowed and divorced respectively. The study sought to establish the relationship between marital status and the growth in profits of the small scale enterprises. Growth in profits was taken as a measure of performance since the averaged score could not be used in the cross tabulation. The cross tabulation results indicated 61.7 percent (119) of the married women strongly agreed that profits had grown. 32.6 percent of single women strongly agreed that profits had grown while 31.3 percent and 24.4 percent of the single women were neutral and agreed that profits had grown respectively.

1.6 percent of the widowed women strongly agreed that profits had grown. From this result, it seems the married women got support from their spouses and this could explain the reasons for the big proportion of the married recording growth in profits as opposed to their other counterparts.



Source: Survey, 2012

Relationship between Performance and Ethnicity of Women SSEs

The cross tabulation results show the relationship between growth in profits and ethnicity. The results indicated that 54.9 percent (190) of the respondents strongly agree that profits had increased. 38.4 percent of the Bantus agree that profits had increased while only 1.2 percent (4) of Bantus strongly disagreed that their profits increased. The study revealed that only a small percentage of the Nilotes was captured and statistics show a uniform response in all measures of performance. 66.7 percent (2) reveal that they strongly agree with the increase in profits. A further analyzes of other performance indicators against ethnicity to establish the role of ethnicity on performance was conducted. The results showed that all factors were significant except two namely: sales and assets. Ethnicity therefore influences capital growth, number of employees and profits. Ethnicity influences performance by influencing all indicators of performance except assets and sales explained by the p- values of 0.16, 0.028 and 0.025 for capital growth and ethnicity, increase in number of employees and ethnicity and growth in profits and ethnicity respectively.

When analyzing the ethnicity Bantus 91.9% improved in sales .When analyzing the ethnicity Cushites (100%) were found to perform better in profits compared to the Bantus (93.8%) and Nilotes (80.6%).The Cushites seemed to perform poorly(33%) in increase in number of employees and capital growth compared to the other ethnic groups. The performance of the Nilotes seemed to be the same (83.9%) in sales and Assets, similar results were recorded with Bantus in capital(89.3%) and assets(89.4%) growth The result also noted that the Bantus were over represented (79.6%) in the study and therefore, this result may not be interpreted that they are better performers than other ethnic groups.

Relationship between Performance and Educational Levels of Women SSEs

The study revealed that 47.9 percent (23) of the respondents below primary level of education strongly agreed that profits had grown, while 55.6 percent (170) of the respondents with secondary education and above also strongly agree that their profits have gone up. 43.8 percent of the respondents with primary education and below agree that their profits have gone up while none of the respondents disagreed that the level of profits has gone up. The study also revealed that 37.3 percent (114) of the respondents with secondary education agree that their profits have gone up.

Relationship between Growth in Performance and Age of Women SSEs

The study reveals that the majority of the respondents who are less than 30 years of age 63.5 percent (80) and the respondents in the age group between 30 and 39 years 50.9 percent (89) strongly agree that their profits have gone up. Only 27.3 percent (3) of respondents more than 50 years old only agreed that their profits had gone up. 31 percent of the respondents less than 30 years agree that the profits have gone up as compared to 72.7 percent of the respondents who are above 50 years old.

This could be explained by the fact that at over 50 years of age the women entrepreneurs have settled and they have also brought up their children and family issues no longer interfere with their businesses, hence limited distraction resulting into better performance as compared to their younger counterparts.

Pearson Correlation Coefficient

A correlation analysis was done on the variables with the performance index. Table 1 show that positive correlations existed in all the variables. There was a significant correlation between Performance index and four variables (components of the entrepreneurship scorecard as a composite index).

An index was formulated for entrepreneurship scorecard by combining entrepreneurship skills, business planning technology and innovations and business scorecard. The correlation matrix indicated that the performance of SSEs and entrepreneurship scorecard of women have a positively high correlation at 1 percent confidence as shown by an index of (0.34) and a P-value 0.00.

Table 1: Correlation analysis of Entrepreneurship Score card as a composite variable and Performance

		Entrepreneurship Scorecard	Performance Score
Entrepreneurship Scorecard	Pearson Correlation	1	0.34
	Sig. (2-tailed)		.000*
Performance Score	Pearson Correlation	0.34	1
	Sig. (2-tailed)	.000*	

- * Correlation is significant at the 0.10 level (2-tailed).
- ** Correlation is significant at the 0.05 level (2-tailed).
- *** Correlation is significant at the 0.01 level (2-tailed).

Source: Researcher, 2012

Table 2: Correlation matrix of Entrepreneurship Scorecard and Performance

	Performance Score	Business Plan	Technology & Innovation	Entrepreneurship Skills	Balanced Scorecard
Performance Score	1				
Business Planning	.279** .000	1			
Technology & Innovation	.069 .195	.066 .219	1		
Entrepreneurship Skills	.062 .241	.200** .000	.351** .000	1	
Balanced Scorecard	.328** .000	.210** .000	.315** .000	.454** .000	1

- * Correlation is significant at the 0.10 level (2-tailed).
- ** Correlation is significant at the 0.05 level (2-tailed).
- *** Correlation is significant at the 0.01 level (2-tailed).

Source: Researcher, 2012

Result shows that balanced scorecard is also positively correlated to the performance indicator score at 5 percent significant level (0.33) and business planning as shown by a coefficient of 0.28. Entrepreneurship skills and Technology & Innovation are positively correlated to performance of SSEs at 0.62 and 0.69 respectively.

Multiple Regression analysis

The analysis was done by the multivariate regression based on the model:

$$\text{Performance Index (Y)} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon \dots \dots \text{model 1}$$

Table 3: Multiple Regression for all entrepreneurship scorecard against performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	11.404	1.311		8.700	.000
	Balanced Scorecard	.288	.047	.343	6.098	.000
	Business Planning	.197	.042	.235	4.679	.000
	Technology and Innovation	-.007	.067	-.006	-.109	.913
	Entrepreneurship Skills	-.150	.062	-.138	-2.432	.016
	R squared	0.169				
	Adjusted R squared	0.16				

* Correlation is significant at the 0.10 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

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

Source: Researcher, 2012

Where,

Y = performance index

β_0 = Constant

$\beta_1 - \beta_4$ unknown parameters

X₁ = Balanced scorecard

X₂ = Business planning

X₃ = Technology and Innovation

X₄ = Entrepreneurship skills

E = error term

$$\text{Performance Index} = \beta_0 + \beta_1 \text{ Balanced scorecard} + \beta_2 \text{ Business planning} + \beta_3 \text{ Technology \& Innovation} + \beta_4 \text{ Entrepreneurship skills} + \epsilon$$

Together all the four factors of the entrepreneurship scorecard proved to be significant using the constant's p-value of 0.00. Balanced scorecard together with the other components of the entrepreneurship scorecard was able to explain 16% of the changes in performance. All the constructs of the scorecard have a significant relationship except Technology and innovation.

A further analysis was carried out and removed the balanced scorecard from the entrepreneurship scorecard and a multivariate analysis of the new entrepreneurship scorecard, balanced scorecard and the other independent variables was carried out. The new entrepreneurship scorecard (less balanced score card) does not spur change on the performance. The p- value for entrepreneurship becomes insignificant without the balanced scorecard. Balanced scorecard assists in enhancing entrepreneurship skills because it is a management tool. This study concluded that balanced scorecard is a major component of the entrepreneurship scorecard and it is also useful as a management tool in enhancing entrepreneurship competency. Balanced scorecard in itself can also be used as a measure of performance and therefore more relevant as a management of performance tool that can be applied as a performance model for managing performance of the women SSEs.

The analysis was done by the multivariate regression based on the model:

$$\text{Performance Index (Y)} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon \dots \dots \text{model 2}$$

Where,

Y = performance index

β_0 = Constant

$\beta_1 - \beta_4$ unknown parameters

X₁ = Business planning

X₂ = Technology and Innovation

X₃ = Entrepreneurship skill

ϵ = error term

$$\text{Performance Index} = \beta_0 + \beta_1 \text{ Business planning} + \beta_2 \text{ Technology \& Innovation} + \beta_3 \text{ Entrepreneurship skills} + \epsilon$$

Table 4 Regression of the Entrepreneurship Scorecard minus Balanced scorecard against performance

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	15.844	1.145		13.839	.000
	Business Planning	.233	.044	.278	5.322	.000***
	Technology and Innovation	.069	.069	.055	1.010	.313
	Entrepreneurship Skills	-.014	.060	-.013	-.227	.821
	R squared	0.81				
	Adjusted R squared	0.73				

* Correlation is significant at the 0.10 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

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

Source: Researcher, 2012

Test of Hypotheses

Hypothesis 1:

Ho₁: Baseline characteristics of women entrepreneurs do not influence performance of SSEs

When the baseline characteristics of women entrepreneurs were analyzed against performance indicators, results indicated that there is no statistical significance between the baseline characteristics and the components of performance as shown by the p-values of 0.152, 0.484, 0.433, 0.282 and 0.543 in the sales, assets, capital, number of employees and profits, respectively, leading to failure to reject the null hypothesis 1: baseline characteristics do not influence performance of SSEs

Hypothesis 2:

Ho₂: There is no significant relationship between entrepreneurship scorecard and performance of women owned and/or managed SSEs

The correlation matrix shows a positive relationship between the two variables; the regression model also shows statistical significance at $p < 0.05$ in the entrepreneurship scorecard which leads to rejection of hypothesis 2: entrepreneurship scorecard is therefore correlated to performance.

Conclusion and Recommendations

The study observed that entrepreneurship scorecard influence performance of the women operated SSEs. The regression results of entrepreneurship scorecard and performance revealed that there is statistical significance between the entrepreneurship scorecard and performance. However, the baseline characteristics of women entrepreneurs had no statistical significance to performance. Therefore, age, education level and marital status of women entrepreneurs do not influence the performance of women operated SSEs in Kenya. Critical factors to performance are: Technology and innovation, Business planning, entrepreneurship skills and Balanced score card. Although, this study indicated that individual predictors of the baseline characteristics such as ethnicity, marital status and age had some effect on the individual predictors of performance, the composite effect of the baseline characteristics against the performance index seems not to have a significant effect, hence the conclusion that baseline characteristics do not spur performance.

It was also observed that 84.2 % (298) of women entrepreneurs interviewed revealed that business planning was very important for performance and over 80% did not have a business plan at the start-up stage of their business life. It was also observed that the holistic application of the balanced scorecard is critical in the success of the SSEs; that it should incorporate learning and growth of employees, financial perspective, customer participation, and use of internal business strategies in their management style which are the drivers of balanced score card. However, this research established that the small scale businesses did not have internal business structures such as missions, visions, values, philosophy among the components of internal strategy.

To mitigate the challenges to achieving two key millennium development goals of eradicating poverty and achieving gender equity and women empowerment by 2015, there is need to sensitize women entrepreneurs on embracing the entrepreneurship scorecard as a major component of success of their businesses. There is need to have more workshops and seminars by various stakeholders in business such as trade ministry and other sectors in the various arms of governments to sensitize women on the need to Business Plan before starting business operations.

Balanced scorecard played a significant role in the performance of business enterprise, especially as a management tool. Policy makers in various countries need to build capacity of efficient managers in entrepreneurships. Balanced Scorecard therefore can be a solution to solving the various management problems that entrepreneurs go through. Stakeholders in entrepreneurships such as organization of women entrepreneurs and various manufacturers associations need to explore the possibility of creating business incubators in various regions; where entrepreneurs can access best practices of managing their businesses through sensitization on the need to incorporate the Balanced Scorecard in their operations. The results indicate that the adoption of new technology within enterprises is actually a crucial determinant to the success of small businesses.

Technology also plays a crucial role in giving any business enterprise a competitive advantage in performance improvement and enhanced service delivery. Information technology in particular has become an indispensable ingredient in several strategic thrust that businesses have initiated to meet the challenges of change. Such strategic thrust includes internetworking, and other types of networks, which have become the primary information technology infrastructure that supports the business operations.

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