



Do Green Entrepreneurship Affect Financial Sustainability of Businesses in Kenya Today? Evidence From Kenyan Business Firms

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Abstract

This study aims to provide an analytical framework that focuses on green entrepreneurship as a mechanism through which businesses obtain their financial sustainability in Kenya. The main objectives of the study were to identify the role of Creative green entrepreneurship, Green washing entrepreneurship and Institutional Structure entrepreneurship on the Financial Sustainability of Businesses. The research employed explanatory design and random sampling techniques to obtain data from a sample of 376 businesses in Kenya using a structured self-administered questionnaire. Results indicate that green entrepreneurship strongly impacts the financial sustainability of businesses in Kenya, and the three variables significantly predict the financial sustainability of businesses in Kenya. The findings of the research revealed that creative green entrepreneurship at ($\beta = 0.41$, $p < 0.05$), green washing at ($\beta = 0.33$, $p < 0.05$) and institutional Structure at ($\beta = 0.21$, $p < 0.05$) all had a positive and significant effect on the financial sustainability of Businesses. Finally, results show that green entrepreneurship affects financial sustainability of businesses in Kenya in the direct effect model. These findings reveal that green entrepreneurship and Financial Sustainability of Businesses in Kenya Today have a strong influence in cultivating new business models that can make an important contribution to the Green Growth transition. Furthermore, it further deepens the understanding that green entrepreneurship among businesses is a critical asset for sustainability through creative, green washing and institutional green entrepreneurship. The financial sustainability of Businesses in Kenya as confirmed by the study findings and can be enhanced through green entrepreneurship awareness in order to improve the impact and return on investment of today's businesses.

Keywords: Green entrepreneurship, Panacea, Financial sustainability, Businesses and today

1. Introduction

Financial Sustainability of Businesses in Kenya has increasingly become an agenda in today's businesses and entrepreneurship debate. In the financial sector, sustainability is necessary due to the critical role played by the sector in national development. In Kenya, financial institutions are financing investments in the various sectors of the economy. (Ghojavand & Abdali, 2012). The key dimension of many entrepreneurs is to remain sustainable and it's Financial Sustainability. The role of entrepreneurship in the progress of societies has been well recognized (Dean & McMullen, 2007). Paradoxically, the same entrepreneurship has been extensively indicted for negative impacts on the society from its business activities. Such unsustainable business practices have been described by researchers as "business-as-usual model" (Rentocchini & Tamvada, 2019). Thus, various institutions such as the United Nations embarked on several educational and enlightenments programs at different levels calculated to create awareness amongst people on ecological sustainability matters in relation to business management (Dean & Payne, 2010). These interventions aimed at expanding knowledge scope on green entrepreneurship.

Akkoyunlu and Aerni (2013) emphasize entrepreneurs' ability to migrate from dirty traditional business model in which business organizations are over reliant on the economic profit at the expense of sustainable development which was the main thrust of green entrepreneurship. Thus, being conscious of biodiversity among the players in the global economic landscape is sacrosanct. However, in the opinion of O'Neill and Gibbs (2016), old unsustainable business practices have hindered the attainment of global aspiration to achieving low carbon economy hence, aggravating the threatening of the planet (earth)'s integrity. In other words, inability of entrepreneurs to conduct their business within the purview of green entrepreneurship represents failure to recognize opportunities in greening.

Therefore, Dean and McMullen (2007) observe that green entrepreneurs are taken advantage of market failure of old business practices by filling these need gaps in the emerging green markets. Furthermore, the need to identify prospects and challenges in the process of going green as entrepreneurs search for opportunities in this regard is equally of important (Esty & Winston, 2009). Thus, this led to the springing up of business ventures with green outlook. Hence, green ventures lay emphasis on efficiency, innovation, market acceptability, revenue growth, flexibility, effective risk and relationship management and other market benefits (Ambec & Lanoie 2008).

Furthermore, Hussain (2018) argues that environmental sustainability is attracting increase attention. Unfortunately, how entrepreneurs got involved in green entrepreneurship in which they are able to contribute immensely to socio-environmental development of a society remained yet unclear. Since both green entrepreneurship firms are known as pro-environmental or environmental friendly or responsible firms, the concern should be to establish or invest in businesses that satisfy specific societal needs without having to undermine entrepreneurs own moral responsibility to preserve nature. For green posterity, entrepreneurs are expected to leverage on the green force of creative destruction, being a formidable platform to build competitive advantage in the contemporary market. However, the researchers believe that very little is known about the characteristics of green entrepreneurship (old or new) with regard to the process involved in penetrating the market and recording innovative performance despite efforts of previous scholars (Criscuolo & Menon, 2015). The study was guided by three main objectives:

- a) To identify the role of Creative green entrepreneurship on the Financial Sustainability of Businesses*
- b) To establish the role of Green washing entrepreneurship on the Financial Sustainability of Businesses*
- c) To investigate on the effect of Institutional Structure entrepreneurship on the Financial Sustainability of Businesses*

The study was also guided by three main hypotheses:

- a) Creative green entrepreneurship has no effect on the Financial Sustainability of Businesses*
- b) Green washing entrepreneurship has no effect on the Financial Sustainability of Businesses*
- c) Institutional Structure entrepreneurship has no effect on the Financial Sustainability of Businesses*

Problem Formulation

In Kenya, financial institutions are financing investments in the various sectors of the economy. (Ghojavand & Abdali, 2012). Hussain (2018) argues that environmental sustainability is attracting increase attention. Unfortunately, how entrepreneurs got involved in green entrepreneurship in which they are able to contribute immensely to socio-environmental development of a society remained yet unclear. However, the researchers believe that very little is known about the characteristics of green entrepreneurship (old or new) with regard to the process involved in penetrating the market and recording innovative performance

despite efforts of previous scholars (Criscuolo & Menon, 2015). Thus, the study's objective was to determine the role of green entrepreneurship on financial sustainability.

2. Review of Literature

2.1. Theoretical Background and Hypotheses Development

The study was guided by Knowledge Spillover Theory which Argues that the business knowledge acquired and retained internally over time amounts to available knowledge stockpile, which can also serve as a good basis for knowledge spillover for further entrepreneurship development (Barbieri et al., 2016). The knowledge spillover theory helps entrepreneurs to take advantage of available opportunities from the recently discovered knowledge through the first stage of innovative idea generation to the commercialization phase. (Braunerhjelm and Carlsson (2009).

2.2. Green Entrepreneurship as a Panacea for Financial Sustainability of Businesses in Kenya Today

Despite the observed rapid growth in the general field of green study, green entrepreneurship, as a field of study is still at its infancy. For instance, Pachecho et al. (2010) observe that there are some crossroad conceptual issues from the related fields such as Business Economics, Entrepreneurship, Finance, and Accounting, which are yet unresolved. O'Neill and Gibbs (2016) posit that entrepreneurs do experience dilemma in determining what undertakings constitute green entrepreneurship. To alleviate this dilemma, researchers at various occasions tried to define or describe green entrepreneurship for ease of understanding. Green Project (2012) for instance, defines green entrepreneurship as activities that are consciously addressing environmental/social problems/needs through implementation of entrepreneurial ideas amidst high risks and expectation of net positive impact on environment and financial sustainability.

The authors further describe a green entrepreneur as one who starts and runs an entrepreneurial venture that is designed to be green in process and products. More so, Sunny and Shu (2017) suggest that green entrepreneurship should be defined in terms of adopted technological line of production or firm's activities. Also, Dale (2018) describes green entrepreneurship as a story telling process through which an entrepreneur obtains supports from stakeholders to pursue his/her ambitions. Literature shows that due to

the premature stage of green entrepreneurship, scholars have not been able to agree on a universally acceptable definition for it (Demirel et al., 2019).

According to the Buck Consultants (2011), 60 percent of businesses today are measuring efficiency through green programs out of which 78 percent of them achieve power efficiency, two-thirds indicate heating/cooling and paper savings while 60 percent are cutting costs on water consumptions. Hence, in the overall, about 69 percent of the respondents indicated that they are already exploring green in their different endeavors, which represent an increase over the previous year's figures. In support of this, Khan (2015) opines that the only strategic solution to the problem of sustainability is for entrepreneurs to establish their businesses and rely on "go green" for prosperity and long term survival.

2.2.1. Creative Green Entrepreneurship as a Panacea for Financial Sustainability of Businesses in Kenya Today

There has been an increasing advocacy for conducive environment for biodiversity, which led to the emergent of green field of study courtesy of creative intelligence. For instance, Demuth (2014) views green creative entrepreneurship as an entrepreneur's ability to obtain stakeholders' approval for his ideas, takes control of the value chains and gets rewarded for his ingenuity to solve environmental problems. The author further argues that entrepreneurs' ability to attract investors for their creative ideas defines the level of success attained through innovative efforts. Meanwhile, Zhaojun et al. (2017) argue that green entrepreneurs' tendency to explore different scenarios due to flexibility and adaptability rooted out of creativity often results in superior solution to business and societal challenges. Similarly, Yousuf, Awang and Iranmaneseh (2017) argue that green entrepreneurs are perceived as disruptive thinkers who are capable of salvaging the sociological landscape from environmental menaces.

Thus, entrepreneurs' ability to begin at any level presents them with the advantages of green market opportunities towards sustainability. In addition, Malavisi (2018) posits that green entrepreneurs are those who are involved in modern green business practices through creative and innovative competencies. However, to mitigate global environmental challenges, Dale (2019) argue in favor of green creativities, which he describes from green entrepreneurship perspective as a revolutionary solution to the current social, economic and environmental challenges. Thus, creative entrepreneurship is a coordination of skills

and other resources (human and material) towards solving socioeconomic problems through legitimate products/services that bring about financial rewards and sense of fulfilment to the owners.

H₀₁: Creative green entrepreneurship has no significant effect on financial sustainability of businesses in Kenya.

2.2.2. Green Washing as a Panacea For Financial Sustainability of Businesses in Kenya Today

The Concept of Green washing in Green Entrepreneurship Nature-friendly words such as “eco”, “bio”, and “organic” sustainability are being used rhetorically by some unscrupulous firms just to deceive unsuspecting consumers to believe that these firms are being conscious of the environment in their business operations (Coad et al., 2016). Dale (2019), argues that consumers are better informed about the negative impact of entrepreneurial activities on their socio-environmental wellbeing today than ever hence, they have started to consider pro-environmental behaviours of each firm and product before finally actualizing their buying decisions.

According to Bannamar and Gressel (2015), unless entrepreneurs at all levels agree to be genuinely committed to greening, collective aspiration for just and sane society would continue to remain a surreal. Thus, firms that desired to enjoy customers’ loyalty should not only produce and market green products and services but must also be able to convince the customers that green is actually their watchword and adhere to green initiative jealously toward achieving environmental sustainability.

H₀₂: Green washing entrepreneurship has no significant effect on financial sustainability of businesses in Kenya

2.2.3 Institutional Entrepreneurship as a Panacea For Financial Sustainability of Businesses In Kenya Today

According to Muhammad and Anuge (2016), institutional structure is an important factor in any type of business landscape. Typical example of institutional framework is the oil sector with the related legal frameworks and norms within which the participants are expected to relate. Thus, upon the discovery of oil in many third world countries occasioned by soaring prices in the ‘70s accelerated industrialization occurred, which of course came at the expense of human and natural environment. Against this backdrop, many people acclaimed to be friends of the earth rose against unsustainable business practices by holding various entrepreneurs to account environmentally.

Dale (2015) posits that efforts to minimize negative effects of business operations on the environment gave rise to the Stockholm declaration in 1972, Bucharest World Council of Churches conference in 1974, Rio de Janeiro Earth Summit in 1992, among others. During this struggle, the phrase “sustainable development” was coughed out as a slogan used in solidarity for environmental wellness which lately transformed into “green” or “greening” revolution. According to Shapira, Gök, Klochikhin and Sensier (2014), entrepreneurs are the ones behind businesses understanding the benefits of green initiatives and embed environmental objectives into their business aspirations is key for green entrepreneurship development. In the opinion of Darnall and Edwards (2006), green entrepreneurship can exist in two ways namely; ‘already established’ firms that migrate into greening and new ‘born green’ firms that rooted in the funders’ concern for socio-environmental wellness.

H₀₃: Institutional entrepreneurship has no significant effect on financial sustainability of businesses in Kenya.

3. Research Methodology

This research employed an explanatory research design. Additionally, the study was performed to identify the nature and also the degree of cause-effect relationship between variables under investigation with a target Population of 6400 selected businesses in Nairobi Kenya. Sampling procedure used was Stratified sampling with a Sample size of 366 Businesses in Nairobi County. Data and Instrument used was Primary data and structured questionnaires. Explanatory research can be conducted in order to assess an impact change on existing norms and various processes (Singpurwalla, 2013). This research design was appropriate as the researcher seeks to determine the influence of green entrepreneurship on organizational performance of listed companies in NSE.

The hypotheses in this study were tested using regression analysis results. The study used 95% confidence level and hence the significance level of 0.05. For the effect of independent variable on dependent variable to be considered statistically significant, p-value had to be not more than significance level of 0.05.

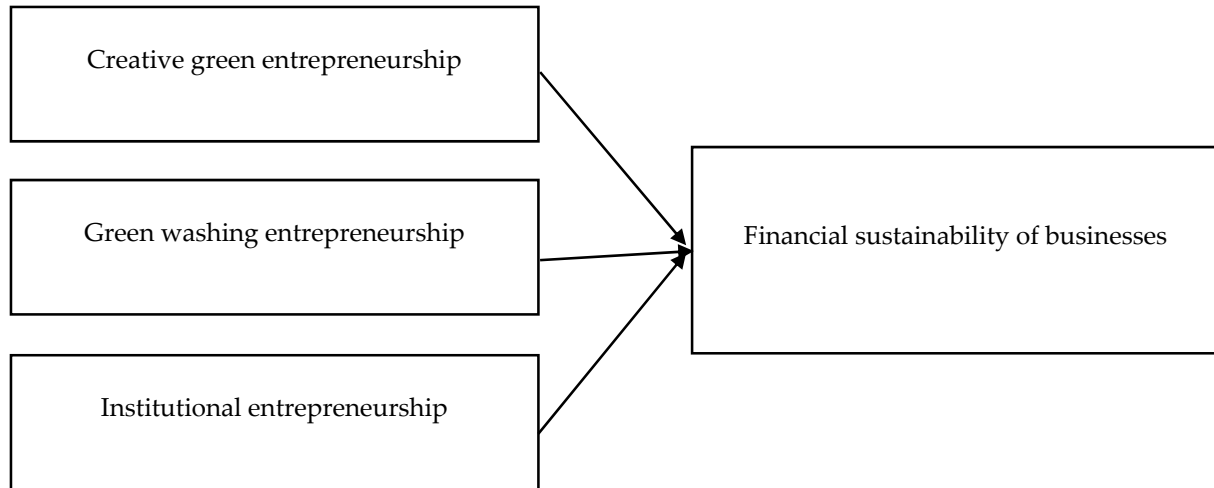


Figure 1. Conceptual Model

Source: Authors, 2022

3.1. Measurement of Variables

Variables in this study were assessed using several item scales adapted from previous studies with minor modifications to fit the current study context. Seventeen (17) items measuring green entrepreneurship were adapted from (Yali & Ying 2017) five items (5) measuring creative green entrepreneurship, seven (7) items measuring green washing entrepreneurship and five items (5) measuring institutional green entrepreneurship. Respondents were requested to indicate their level of agreement/disagreement with each item on a five Likert scale ranging from (1) 'strongly disagree' to (5) 'strongly agree.'

4. Findings

"Univariate analysis"

Correlation is a way of analyzing a probable two-way linear relationship between two measurable variables. From Table 1, the findings indicated that Creative green entrepreneurship, had a positive ($r = 0.912$) correlation with financial sustainability of Businesses, the relationship was significant, $p < 0.01$. Furthermore, the correlation between green washing and financial sustainability of Businesses is positive ($r = 0.879$) and significant at $p < 0.01$. Furthermore, there was correlation between institutional structure

and financial sustainability of Businesses ($r = 0.876$, $p < 0.01$). Overall, the findings are indicative of a positive correlation between green entrepreneurship and financial sustainability of Businesses.

Table 1. Univariate Analysis

	Mean	SD	FSB	GGE	GW	IS
Financial sustainability of Businesses (FSB)	3.41	0.701	1			
Creative Green Entrepreneurship (GGE)	3.12	0.871	.912**	1		
Green washing (GW)	1.55	0.333	.879**	.655**	1	
Institutional Structure (IS)	3.87	0.453	.876**	.401**	.609**	1
** Correlation is significant at the 0.01 level (2-tailed).						

4.1. Regression Statistics

4.1.1. Multiple Regression Analysis (Hypothesis Testing)

The model summary of the regression model is presented in Table 2. The results show that the three predictors of green entrepreneurship (creative green, green washing and institutional entrepreneurship) explained 87.8% percent variation of Financial sustainability of businesses ($R = 0.937$, $R^2 = 0.878$, Adjusted $R^2 = 0.868$).

Table 2. Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.937a	0.878	0.868	0.35773

a Predictors: (Constant), creative green, green washing , and institutional entrepreneurship

The analysis of variance (ANOVA) is instrumental in analyzing the significance of the variation brought by the independent variables on the dependent variable compared to the variation brought by the residuals. The overall test of significance with $F(4, 53)$ value of 95.083 with $p < 0.000$ indicated that the model fit was good. Thus, the model was fit to predict financial sustainability based on the predictors of green entrepreneurship.

Table 3. ANOVA Model

	Sum Squares	of Df	Mean Square	F	Sig.
Regression	48.672	4	12.168	95.083	.000b
Residual	6.783	53	0.128		
Total	55.455	57			

a Dependent Variable: sustainability

b Predictors: (Constant),

a Predictors: (Constant), creative green, green washing , and institutional entrepreneurship

The regression findings are as presented in Table 3 the independent variables that the study focused on were the green entrepreneurship dimensions, which are creative green, green washing, and institutional entrepreneurship. The dependent variable of the study was sustainability.

Creative green entrepreneurship had a positive and significant influence on sustainability ($\beta_1 = 0.41$, p-value = 0.01 which is less than $\alpha = 0.05$). It can also be observed that the calculated t (2.59) is higher than the critical t (1.96). The study, therefore, rejects the hypothesis that there is no significant effect of Creative green entrepreneurship on sustainability. The implication is that an increase in Creative green entrepreneurship would increase sustainability. The study confirms the notion that there is a positive link between Creative green entrepreneurship and sustainability (Yousuf, Awang and Iranmaneseh (2017).

Also, green washing entrepreneurship activities had coefficients of estimate which was significant basing on $\beta_2 = 0.33$ (p-value = 0.01 which is less than $\alpha = 0.05$) hence green washing entrepreneurship activities has a positive and significant effect on sustainability. The implication is that, for each unit increase in green washing entrepreneurship activities, there is 0.33-unit increase in sustainability. Also, green washing entrepreneurship activities' effect is shown by the t-test value of 3.03 which implies that green washing entrepreneurship activities' effect surpasses that of the error. The study, therefore, confirms the positive association between green washing entrepreneurship activities and sustainability highlighted in the literature Dale (2019).

Also, institutional entrepreneurship had coefficients of estimate which was significant basing on $\beta_3 = 0.21$ (p-value = 0.01 which is less than $\alpha = 0.05$) thus the conclusion is that institutional entrepreneurship positively influences sustainability. Consequently, there is 0.21-unit increase in sustainability for each unit

increase in institutional entrepreneurship. The study, therefore, rejects the hypothesis that there is no significant effect of institutional entrepreneurship and sustainability highlighted in the literature (Anuge, 2016).

Table 4. Coefficients of Estimate

		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
(Constant)		0.22	0.17		1.29	0.20
Creative entrepreneurship	green	0.41	0.16	0.41	2.59	0.01
Green entrepreneurship	washing	0.31	0.10	0.33	3.03	0.00
Institutional entrepreneurship		0.20	0.11	0.21	1.89	0.01

a Dependent Variable: sustainability

5. Discussions

The paper concludes that benefits of green entrepreneurship are enormous. Furthermore, there are still some unresolved issues in the field of green entrepreneurship. Therefore, the paper highlighted a need for green entrepreneurship to maintain a cluster-like arrangement and knowledge database for effective dissemination of contemporary green information and clarification of entrepreneurship concepts. The study equally underscores that for Policymakers & Decision Makers formulating policies that promote in understanding the important role played by green entrepreneurship in improving the financial sustainability of businesses in Kenya today. Universities and Management: should provide insights on the key competencies by serving as a benchmark for universities that have not effectively addressed green economy sustainability through green entrepreneurship. Scholars and Professionals on the other hand should contribute to literature on the importance of green entrepreneurship for financial sustainability of their businesses and to enhance and provide avenues for further research in future by adding to the body of knowledge.

6. Implication of the Study

The study found that creative green entrepreneurship, green washing and institutional structure all have positive effects on the financial sustainability of businesses in Kenya. The study argues that businesses that are green have relevant expertise, realistic in whatever choices they make and improved financial sustainability of businesses in Kenya. The study further showed that businesses that possess these variables of green entrepreneurship are in control of their businesses and sustainable. Theoretically this study implies and supports the theories proposition that for a business to be sustainable, it has to be green. Managerial and Policy Implications results suggests that green entrepreneurship and financial sustainability of businesses in Kenya correlates in which financial sustainability of any business is provided by green entrepreneurship as a panacea.

7. Limitations and future studies

This study has some limitations that can be used for future research. The current study was conducted in Kenya on financial sustainability only yet there are other concepts for example innovation. Furthermore, due to differences in cultural backgrounds, this study cannot be generalized to other countries; consequently, caution should be exercised when interpreting this study's findings.

8. Conclusion

This study provides some useful insights into cultivating more insights the financial sustainability of businesses through green entrepreneurship. According to the study's findings, creative green entrepreneurship, green washing and institutional green entrepreneurship significantly predict future sustainability of businesses in Kenya.

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