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RISK MITIGATION STRATEGY AND COMPETITIVENESS OF SMALL AND MEDIUM ENTERPRISES IN KENYA

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ABSTRACT

The purpose of the study was to evaluate the influence of risk mitigation strategies and competitiveness of small and medium enterprises in Kenya. Specifically, the study sought; to determine the influence of technological adoption, management involvement in decision making and mergers/acquisition collaborations on competitiveness of Small and Medium Enterprises (SMEs) in Kenya. Risk mitigation strategy for this study was viewed as methods that reduce the severity of los. The existing literature showed that research has been done on risk management. However, very few studies were done on risk management and competitiveness of SMEs in Kenya having in mind the scope of Kisumu County and specifically the risk mitigation strategy. Therefore, the study sought to address this gap. The success of an organization depends upon the risk management strategies put in place. The strategies adopted can reduce earnings volatility, maximizes value for shareholders and promotes job security and financial security in the SMEs. This study adopted a descriptive research design. The target population were SMEs registered by the County Government City of Kisumu, with the category permit fee of between Ksh 5000 and Ksh 200,000 as of December 2018 and employing between 10-49 and 50- to 99 employees. Stratified random sampling was used then simple random sampling was used to pick a total sample of 375 respondents from each stratum. The study used linear regression model to establish the relationship between risk transfer strategy and competitiveness of SMEs in Kenya. The strata representation was selected using the proportional allocation method for each one in the target population to have an equal chance of participation. Tool for data collection was a standardized questionnaire. The study established that risk mitigation has a significant influence on SMEs competitiveness.

Keywords: *Risk, Mitigation Strategies, Competitiveness*

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INTRODUCTION

Risk management is evolving and taking a center stage in how organizations run their businesses (KPMG Limited, 2017). Risk is generally considered the possibility of outcomes deviating from what was expected, primarily firms are concerned with negative outcomes since their negatively affect the business operation and thus require proper management (Crouhy, Galai, & Mark, 2013). Therefore, it is important for a business to manage its risk exposure. Particularly, SMEs competitiveness is handicapped by inadequacies in risk management with lack of appropriate response to risk facts affecting small firms more compared to large firms (Şenera, Savrulb, & Aydına, 2014). Firms develop strategies to enable them to seize strategic initiatives and maintain a competitive edge in the market (Porter, 2008). The Scope of the study was Kisumu County.

This was guided by the fact that; Kisumu County is one of the Kenya's 47 counties. Specifically, Kisumu County is mainly volatile to political challenges. According to Juma, 2019 Small Medium Enterprises (SME) in Kisumu have been hard hit with political stalemate in the region with most of them getting to the brink of dying. Juma in his report further noted that some of the SMEs had closed for 4 months as political temperature continued to mount in 2017. The study hypothesized that different business environments expose firms to risks and the firms therefore need different strategies which have different requirements for success's use several strategies including risk mitigation strategy to enable them to survive in the competitive environment. It is due to these that the study evaluated influence of risk mitigation strategy on SMEs competitiveness in Kenya. The findings will help SMEs in Kenya to assess their current and future strategic positions, identify critical factors and find methods of assuring success (Kithinji, 2012).

Problem Statement

Engaging in risk management strategies approach to SMEs competitiveness requires a certain budget and human resource. This hampers SMEs ability to set up and invest in a comprehensive risk management program. This is so as SMEs are characterized with scarcity of resources-both financial and human resources. SMEs therefore have little option left and as a result, they must absorb most uncertainties and risks confronting them. However, they are unable to absorb most of these uncertainties and risks. According to the Kenya agribusiness and agroindustry alliance report for 2016, in 2014, 80 percent of jobs created were dominated by these enterprises. Despite their significance, SMEs in Kenya are faced with the threat of failure with past statistics indicating that three out of five fails within the first few months and two thirds of SMEs fail within the first few years of operation (Ng'ang'a, Muthus, & Nassiuma, 2015). It is notable that SMEs continue to grow and have attracted both local and international investors.

In the Kenyan economy, various studies have been done on risk management strategies across various contexts and sectors with limited focus on risk mitigation strategy and SMEs based in Kisumu. In his study, Elahi (2013) focused on risk faced and mitigation strategies employed by SMEs in Nairobi, Kenya. Muchiti, (2021) in her study, focused only on risk management strategies adopted in lending to SMEs in Kenya.In his study, Spikin (2013) states that the increasing volatilty and competition which organizations have faced in this era, have forced them to implement at least some level of risk management. He continues to state in the same study that risk management is not only an instrument to prevent organization damaging events but a force to see opportunities. Since risk mitigation strategy influences firm's economic success, this study sought to investigate risk mitigation strategy and SMEs competitiveness in Kisumu County, Kenya.

Research Objectives

The general objective of this study was to evaluate the influence of risk mitigation strategies and competitiveness of small and medium enterprises in Kenya. The study was guided by the following specific objectives:

- To determine the influence of technology adoption on competitiveness of Small and Medium Enterprises (SMEs) in Kenya

- To determine the influence of management involvement on competitiveness of Small and Medium Enterprises (SMEs) in Kenya
- To determine the influence of mergers and acquisitions on competitiveness of Small and Medium Enterprises (SMEs) in Kenya

Rationale of the Study

This study would be of importance to the SMEs as it brings out the role of technological adoption, management involvement in decision making and adoption of mergers and acquisition on competitiveness of SMEs. The results of this study will also be valuable to policy makers as it provides empirical evidence to direct policy formulation and implementation. The results of the study will also be useful to researchers and academicians as it acts as source of reference for future studies.

LITERATURE REVIEW

Risk Mitigation Strategy

Risk mitigation strategy involves methods that reduce the severity of the loss e.g., equipping staff with health and safety kits, keeping emergency numbers, fire equipment, backing up files, among other activities (USAID , 2019). Risk and risk mitigation is a major concern for all companies, especially small and medium sized enterprises which are particularly sensitive to business risk and competition (Alquier, 2012). SMEs are presented to dangers constantly and such dangers can legitimately influence everyday activities decline income or increment costs, an effect that might be not kidding enough for the business to fall flat.

Traditional risk mitigation focuses on risks stemming from physical or legal causes such as natural disasters or fires, accidents, death, and lawsuits (Feridun, 2006). Risk mitigation is an action in present for securing the future, proactive activity (Raghavan, 2005). It is the process of measuring or assessing risk and then developing strategies to manage the risk Collaboration: Collaboration could be used to overcome risks in carrying out the operations in the SMEs. It involves linking and joint operation of the different SMEs in Kenya to achieve a better and bigger effort in marketing their products. It promotes technological development, advanced skill and competition among SMEs. The networking or linking brings together SMEs dealing with different products to direct customer supplier links reducing middle men exploitation (Fafchaps, 2004; Pedersen, 2001) and hence reducing cost and risk In making choices on the control exercises in an association business consider need to execute audits (contrasting real execution and spending plans, gauges and earlier period execution), data preparing (important to check exactness, fulfillment and approval of exchanges), physical controls (important to give security over the two records and different resources), isolation of obligations (where nobody individual should deal with all parts of an exchange from the earliest starting point as far as possible) (Ndifon & Patrick, 2014). Oluwafemi, Adebisi, Simeon and Olawale, (2013) found those organizations with cutting edge chance administration are with more prominent credit accessibility take out to build the gainful resources and firms benefit. While working on mitigation, daily operations gaps cannot be ignored. Operational hazard is viewed as interior if the monetary organization has power over it. Epetimehin and Fatoki, (2015) demonstrates that operational hazard the board issues in dealing with the administration assignments, for example the board of hazard associated with people, associations, and practices, which created as one of the key capabilities' money related administration partnerships. Direct misfortunes allude to misfortunes in current pay, while backhanded. The basic accounting control activities are segregation of duties, adequate documentation and records, controlled access to assets, independent accountability checks and reviews of performance and approval and authorization (Association of Certified Fraud Examiners, 2011).

Simply put, it recognizes that the success of making a choice, or a decision will depend largely on the choices or decisions made by others (Ateeq, 2012).Therefore, in game theory what a business does depends on what the others in the industry are doing. This information can guide an organization seeking to use risk mitigation

strategy for competitiveness. Risk mitigation is taking adverse steps to reduce adverse effects to an organization operation. In mitigation strategy an organization must be aware of its business environment and not just make rushed decisions. There is one important note to be aware of when using game theory to analyze the competitive landscape of a business. It is relevant only when there are relatively few players, or competitors, within that landscape.

Cressy (1991) on the theory of entrepreneurial opportunism points out that the theory allows the individual to receive a continuous sequence of projects in each of which he decides to invest or not. The model takes the form of the derivation of an optimal decision rule over project success based on probability which maximizes the entrepreneur's expected return and minimize risk given his current knowledge. This rule tells the entrepreneur which projects to accept and which to reject. The optimal reservation probability is shown to be a function of the quality of the entrepreneur's data, ability to formulate the correct model and to update that model as information accumulates. The theory of opportunistic entrepreneurship, businesses can determine the probable strategies that will be employed by their competitors to maximize their business objectives.

Turning strategy into action is concerned with having in place the appropriate risk mitigation strategies. Since strategic decisions influence the way organizations respond to their environment, it is very important for organizations to make strategic decisions and define strategy in terms of its function to the environment. The purpose of strategy is to provide directional cues to the organization that permit it to achieve its objectives while responding to the opportunities and threats in the environment Kotler, Armstrong, Harris, and Piercy (2013). Equally important, a strategy serves as a vehicle for achieving consistent decision making across different departments and individuals.

METHODOLOGY

The study adopted a descriptive research design. The target population was the 16,164 SMEs registered at the Kisumu County paying trading licence of between Ksh 5,000 and 200,000 and employing employees between 10-49 and 50 -99 which is acceptable as an SME in Kenya KRA (2007). This study collected quantitative data from sample 293 SMEs using a self-administered questionnaire with a five-point Likert scaled questions. A pilot study was conducted on 40 SMEs in Kisumu County in Kenya. The purpose of the pilot testing was to establish the validity and reliability of the research instruments (Mugenda & Mugenda 2008). According to Cooper and Schindler (2011), as a rule of thumb, 1% of the sample should constitute the pilot test. Thus, the pilot test was within the recommendations. A construct composite reliability co-efficient (Cronbach alpha) was used to determine reliability. Makgosa (2006) notes that Cronbach‟s Alpha of less than 0.5 indicates unreliability of the variables hence cannot be used to deduce findings. Cronbach alpha of 0.6 or above, for all the constructs, was considered adequate for this study. Overall Cronbach's alpha test for dependent and independent variable was (0.929). While alpha values for the individual variables were between (0.732) and (0.855) which registered acceptability. Validity was tested using factor loadings with Varimax rotations to identify the test items which belonged together and seem to say the same thing. The advantage of which is to ensure that the finding conclusions are focused. The criterion for element inclusion was that only those which had factor loadings of 0.50 and above were considered (Makgosa, 2006). Since all the factors scored above 0.5 under risk mitigation strategy, the items were considered valid for evaluation based on the different components. Data collected was analyzed by descriptive analysis. In addition, the researcher conducted a multiple regression analysis.

RESULTS AND DISCUSSIONS

The study achieved a 78% response rate with most of the respondents being male [58%]. Majority of the respondents [37%] had university education level as their highest education. The respondents were either SMEs owners or senior managers in the organization's that responded.

Risk Mitigation Strategy

The objective of the research study was to analyze the influence of risk mitigation strategy and competitiveness of SMEs in Kenya.

Mergers/Collaborations in the past 3 years

The respondents were asked to indicate whether their firms have had any mergers or collaborations in the past 3 years. The results were as shown in Figure 1.

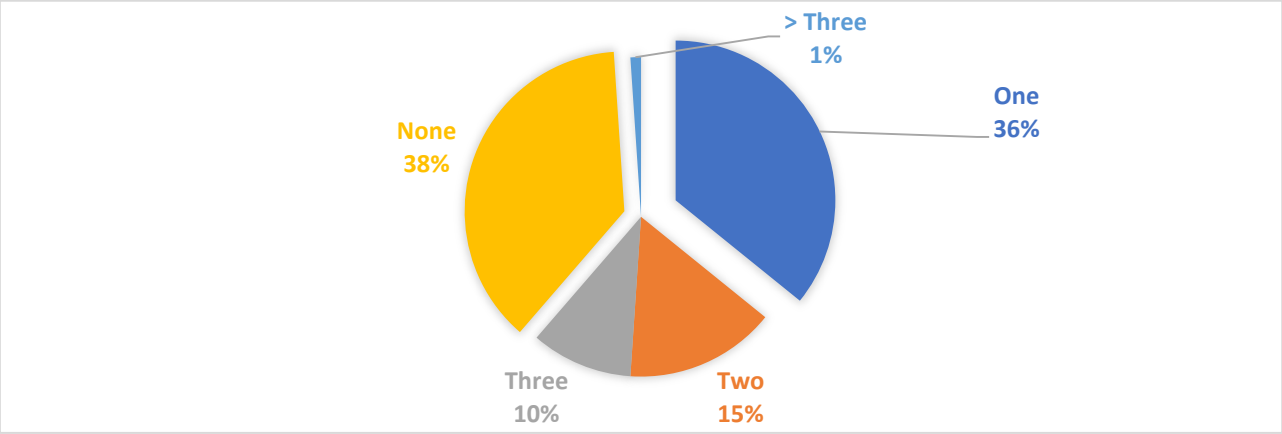

Figure 1: Mergers/Collaborations in the past 3 years

Frequency of Audits

The respondents were asked to indicate whether their firms perform financial audits. The results were as shown in Figure 2.

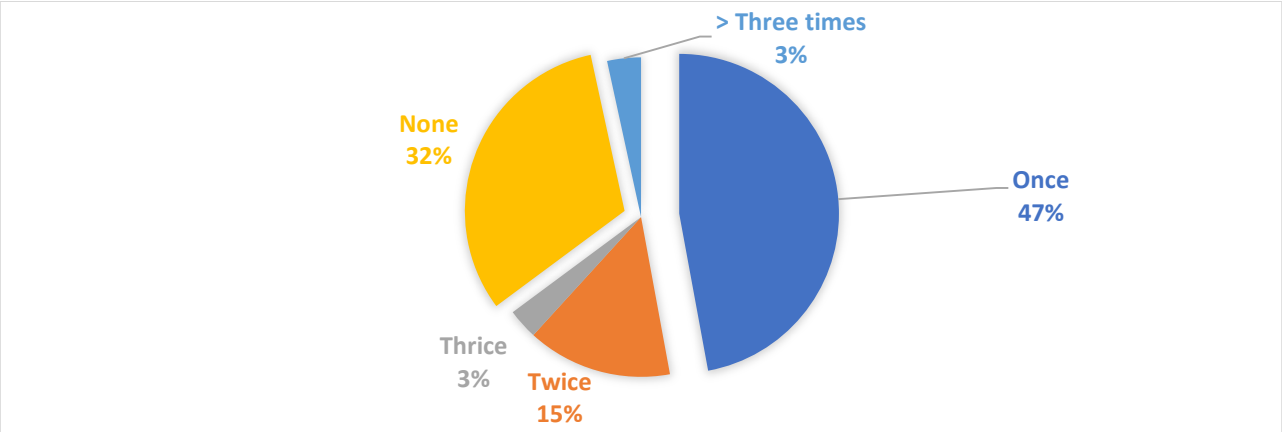

Figure 2: Frequency of Audits per year

Summary Risk Mitigation

According to the findings in Table 1, the respondents indicated that they agreed that collaboration and mergers have reduced middlemen as shown by a mean of 3.73 and a standard deviation of 1.093. They indicated that they agreed that the organization has an audit system to ensure efficiency of resources as shown with a mean of 3.70 and standard deviation of 1.25. In relation to whether firm collaborates with others to promote technology they agreed with a mean of 3.54 and standard deviation of 0.975, they indicated they agreed management involvement in organizational practices as shown by a mean of mean of 3.79 and standard deviation of 0.923. In addition, the respondents showed that they agreed that company has specialized

software to assess risk as shown by a mean of 3.67 and standard deviation of 1.043 and firms have a well-coordinated internal system as shown by Mean of 3.97 standard deviation of 0.955.

Table 1: Summary Risk Mitigation

Item	Response No.	SD	D	N	A	SA	Mean	SD
Technology adoption								
Well-coordinated internal system	292	1.4%	5.5%	22.6%	36.3%	34.2%	3.97	.955
Acquired specialized software used to assess risk	292	5.1%	10.6%	31.2%	32.2%	20.9%	3.53	1.092
Sub Total		*3.25%*	*8.05%*	*26.90%*	*34.25%*	*27.55%*	*3.75*	*1.02*
Management Involvement								
Fully implemented an audit system	293	5.8%	11.6%	13.0%	46.1%	23.5%	3.70	1.125
Views of top management are fully involved in risk mitigation	292	3.4%	4.5%	20.9%	51.7%	19.5%	3.79	.923
Often prepares risk intervention plans	292	4.8%	7.9%	24.0%	42.5%	20.9%	3.67	1.043
Sub Total		*4.67%*	*8.00%*	*19.30%*	*46.77%*	*21.30%*	*3.72*	*1.03*
Mergers and Collaborations								
Collaboration/mergers has reduced middlemen exploitation	292	6.8%	4.8%	21.2%	42.8%	24.3%	3.73	1.093
Often collaborate with other its suppliers to reduce middlemen	292	3.1%	5.1%	14.0%	27.1%	50.7%	4.17	1.051
Often collaborated with other business entities to promote technology development	292	3.8%	8.2%	33.2%	39.4%	15.4%	3.54	.975
Sub Total		*4.57%*	*6.03%*	*22.80%*	*36.43%*	*30.13%*	*3.81*	*1.04*
Grand Aggregate	**292**	**4.3%**	**7.3%**	**22.5%**	**39.7%**	**26.1%**	**3.76**	**1.03**

Hypothesis Testing

Hypothesis One: Technological adoption has no significant effect on competitiveness of SMEs in Kenya

The regression results indicated that considered individually, technology adoption explained 37.1% variance in sustainable competitive advantage (adjusted R^2 = 0.371, F (1, 290) = 172.398, p<.001).

Table 2: Hypothesis One

Model Summary				Number of obs	=	291	
Source	SS	df	MS	F(1,290)	=	172.398	
Model	54.602	1	54.602	Prb > F	=	0.000	
Residual	91.849	290	.317	R-Squared	=	0.373	
Total	146.451	291		Adjusted R-Squared	=	0.371	
				Std Err. Estimate	=	0.563	
SCA	Coefficient	Std. Err.	t	P>|t|	[95% Conf.	Interval]	
_cons	1.491	.140	10.638	.000	1.215	1.767	
Technology	.477	.036	13.130	.000	.406	.549	

From the regression analysis results, the predicted model is as follows.

Y= 1.491 + 0.477 x Technology Adoption + ε

Hypothesis Two: Management Involvement has no significant effect on competitiveness of SMEs in Kenya

The regression results indicated that considered individually, management involvement explained 37.4% variance in sustainable competitive advantage (adjusted R^2 = 0.374, F (1, 290) = 174.682, p<.001).

Table 3: Hypothesis Two

Model Summary				Number of obs	=	291
Source	SS	df	MS	F(1,290)	=	174.682
Model	55.053	1	55.053	Prb > F	=	0.000
Residual	91.397	290	.315	R-Squared	=	0.376
Total	146.451	291		Adjusted R-Squared	=	0.374
				Std Err. Estimate	=	0.561

SCA	Coefficient	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_cons	1.282	.155	8.288	.000	.978	1.586
Technology	.524	.040	13.217	.000	.446	.603

From the regression analysis results, the predicted model is as follows.

Y= 1.282 + 0.524 x Management Involvement + ε

Hypothesis Three: Mergers and acquisitions have no significant effect on competitiveness of SMEs in Kenya

The regression results indicated that considered individually, mergers and acquisitions explained 32.6% variance in sustainable competitive advantage (adjusted R^2 = 0.326, F (1, 289) = 141.054, p<.001).

Table 4: Hypothesis Four

Model Summary				Number of obs	=	290
Source	SS	df	MS	F(1,289)	=	141.054
Model	47.883	1	47.883	Prb > F	=	0.000
Residual	98.105	289	.339	R-Squared	=	0.328
Total	145.987	290		Adjusted R-Squared	=	0.326
				Std Err. Estimate	=	0.583

SCA	Coefficient	Std. Err.	t	P>|t|	[95% Conf.	Interval]
_cons	1.335	.167	7.972	.000	1.005	1.665
Mergers	.510	.043	11.877	.000	.426	.595

From the regression analysis results, the predicted model is as follows.

Y= 1.335 + 0.510 x Mergers and Acquisitions + ε

Multivariate Regression

The regression results indicated that considered collectively, risk mitigation strategies explained 40.4% variance in sustainable competitive advantage (adjusted R^2 = 0.404, F (3, 287) = 66.454, p<.001).

Table 5: Multivariate

Model Summary				Number of obs	=	290	
Source	SS	df	MS	F(3,287)	=	66.454	
Model	59.846	3	19.949	Prb > F	=	0.0000	
Residual	86.141	287	.30000	R-Squared	=	0.410	
Total	145.987	290		Adjusted R-Squared	=	0.404	
				Std Err. Estimate	=	0.548	

SCA	Unstandardized Coefficient		Standardized Coefficient	t	P>|t|	[95% Conf. Interval]	
	B	Std. Err.	Beta				
_cons	1.138	.163		6.998	.000	.818	1.458
Technology adoption	.216	.084	.277	2.584	.010	.052	.381
Management Involvement	.186	.099	.218	1.872	.026	-.010	.382
Mergers & Acquisitions	.164	.069	.184	2.365	.019	.028	.301

From the regression results, the predicted model is as follows;

Y= 1.138 + 0.216 x Technology Adoption +0.186 x Management Involvement + 0.164 x Mergers & Acquisitions + ε

Comparatively, technology adoption has the greatest significant effect on SCA followed by management involvement and mergers in that order. The results in Table 5 show that while one standard deviation change in technology adoption leads to 0.277 standard deviation change in SCA. Further, while one standard deviation change in management involvement leads to 0.218 standard deviation change in SCA. One standard deviation change in mergers and acquisitions leads to 0.184 standard deviation change in SCA.

Composite Regression

An index was then created by averaging the scores from the technology adoption, management involvement and mergers for calculation of a composite score for risk mitigation strategy. The score was then used to run a combined regression analysis. The regression results indicated that considered individually, risk mitigation strategy explained 41.5% variance in sustainable competitive advantage (adjusted R^2 = 0.415, F (1, 291) = 208.56, p<.001).

Table 6: Model for Hypothesis Four

Model Summary				Number of obs	=	292	
Source	SS	df	MS	F(1,291)	=	208.564	
Model	61.664	1	61.664	Prb > F	=	0.000	
Residual	86.037	291	.296	R-Squared	=	0.417	
Total	147.701	292		Adjusted R-Squared	=	0.415	
				Std Err. Estimate	=	0.544	

SCA	Coefficient	Std. Err.	t	P>|t|	[95% Conf. Interval]	
_cons	1.097	.155	7.087	.000	.792	1.401
Mitigation	.579	.040	14.442	.000	.500	.658

From the regression analysis results, the predicted model is as follows.

Y= 1.097 + 0.579 x Risk Mitigation Strategy + ε

CONCLUSION AND RECOMMENDATION

The study confirmed that risk mitigation has a significant influence on SMEs competitiveness. This implies that increasing levels of technological adoption, management involvement and mergers and acquisition have a positive impact on SMEs competitiveness. The study showed that SMEs in Kisumu County has a positive effect on competitiveness through involvement of management in the decision of the businesses. These effects are indirectly transferable to the customers as they facilitate prompt service/ product deliveries, better quality products, customized and products with the best value for money. This in turn acts as drivers of competitive advantages as they attract new customers and retain the existing ones.

The study recommended that future studies should be conducted to determine factors influencing the choice of mitigation strategies. SMEs favor some risk mitigation strategies over others and so there is need to identify the most appropriate and effective risk mitigation strategies among the SME. More studies should be conducted to determine factors influencing the choice of mitigation strategies. Future studies should also identify why insurance is the least applied strategy among SMES.in other counties and generalized to confirm the study.

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