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Preamble

African Journal of Business, Economics and Industry **(***AJOBEI) is an academic peer-reviewed biannual publication that publishes original, innovative research and academic output that contributes to growth of knowledge in Business, Economics, Industry and related descipline. The journal targets: Business professionals/scientists, researchers, media specialists, business students, government agencies/policymakers and citizens with a passion for contemporary business ventures.*

This second edition is aligned with the newest research output addressing contemporary concerns and latest global transposition in business. It carries original full-length articles that reflect the latest research and developments in both theoretical and practical aspects of a modern business society. It promotes research awareness and compatibility platform through a concise and methodical interface to cater for all categories of scholars in business, while encouraging innovation, creativity in research

The topical issues in this journal include: Impact of tourism on the economy corporate social responsibility on performance, agro-food manufacturing sector, media training on competence of journalists, credit risk on financial performance of commercial banks, SME credit access and performance, youth empowerment, competitive strategies, embracing innovative technology for low cost housing, training and development on organizational performance.

The journal is both in print and online versions.

Chief Editor

Table of Contents

1. Impact of Tourism on the Economy of Rwanda Input-Output Approach
Pius Odunga **6**

2. Effect of Corporate Social Responsibility on Performance of Commercial Banks Listed in Nairobi Stock Exchange.
Martin Muchiri, Jotham Wasike & Gitau Muigai **13**

3. Does Gender Matter in Agro-Food Manufacturing Sector? Perceptions of Micro and Small Scale Food Processors in Kenya
Francis Omillo-Okumu & Jude Omukaga **34**

4. Influence of Media Training on the Competence of Journalists in Kenya: Perceptions of Standard Group Limited Managers and Senior Journalists.
Marion Amukuzi & Martin Kuria **47**

5. Effect of Credit Risk on Financial Performance of Commercial Banks in Kenya.
Gitau Mungai & Edward Wamweya ***73***

6. Enhancing Small and Medium Enterprises Credit Access and Performance through Technological Integration**.**
Douglas Mwirigi & Wasike Jotham **92**

7. Youth Empowerment through Recycling of Textile Products in Kenya**.**
Millicent Kimemia, Dinah Tumuti & Emily Oigo **102**

8. Competitive Strategies Adopted by Private Universities in Kenya.
Steve Ogwe, Joseph Thomas & Edwin Sitinei ***111***

9. Embracing Innovative Technology for Low Cost Housing: A Kenyan Perceptive.
Patrick Mwangi & Jotham Wasike **123**

10. Effect of Training and Development on Organizational Performance
Peter Butali & David Njoroge ***133***

Impact of Tourism on the Economy of Rwanda Input-Output Approach

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Abstract

Tourism has emerged as a driver for economic progress and social development in Rwanda. The sector has strong linkages in the national economy, producing economic and employment benefits in related sectors, thereby promoting economic diversification and strengthening the country's economy. This paper analysed the impacts of changes in tourism demand; policies and regulations that affect tourism directly or indirectly; beyond the direct control of the industry; public and private investment proposals; resource allocation; and policy and management of tourism development strategies. The primary objective of this study was, to evaluate the economic impact of tourism and assess the strength of tourism inter-industry linkages in Rwanda's economy for the year 2013/2014. The input-output model was used to estimate the impact on production, employment generation, labour income earnings and total value creation. The relationships between expenditure and output, and income and employment (direct and indirect) are described by multipliers. Data for analysis was sourced from multi-region input-output table (MRIO) database: http://www.worldmrio.com/ and the Rwanda Tourism Satellite Accounts (2014).All impacts have a starting point in the economy, defined as the direct effect. The direct effect sets off iterations of indirect (inter-industry production) spending. Internal tourism consumption, an aggregate that describes the size of direct visitor acquisition within a country of reference was used as basis for calculating tourism multipliers and their associated effects. There are several different types of multipliers depending on the secondary effects included and the measure of economic activity used. The common multipliers computed were associated with output, income, value addition and employment in the economy for the year 2013/2014. Multipliers were decomposed into their various multiplier effects: initial and production effects.

This study quantified the impact and effects of internal tourism expenditure/consumption. With total expenditure of $286 million, the tourism sector supported about 569 thousand jobs and generated $120 million as labour income, $238 million in value addition and $522 million output. In this report, internal tourism expenditure (a portion of internal tourism consumption) was used as a basis for calculating relevant multipliers and associated effects; thus future studies can re-estimate the

multipliers by considering internal tourism consumption in its entirety. Attempts should be made to integrate other components of total tourism internal demand (i.e. tourism gross fixed capital formation and tourism collective consumption) into the analysis. More robust methodologies such as Social Accounting Matrix (SAM) and Computable General Equilibrium (CGE) models could be considered for further analysis.

Keywords: Total Impact, Tourism, Economy, Rwanda, Input-Output Approach

Introduction

Rwanda is a member of the East African Community (EAC), a regional economic block whose membership includes Kenya, Uganda, Tanzania, Burundi and Southern Sudan. Agriculture is a key sector of Rwanda's economy and contributed on average 33 % of GDP between 2009 and 2014, employed 71% of the population and generated 45% of the country's export revenues. The main crops are coffee and tea (NISR, 2016; World Bank, 2011). The country's manufacturing sector contributed 15% of GDP annually between 2009 and 2014. Rwandese service sector is sub-divided into trade and transport services which on average contributed 15% of GDP annually and other services including tourism which accounted for 32% of GDP. In 2014, Rwanda's GDP was estimated at RWF[1] 5,395 billion translating to GDP per capita of RWF 491,000.

Rwanda's Tourism Industry

By 2011, the Rwandese tourism industry was contributing 63% of the country's service export earnings and supporting balance of payments. The sector ranked highly in Foreign Direct Investment (FDI) attraction accounting for up to 40% of total FDI into the country (UNTAD, 2014).

Table 1 summarizes international tourist arrivals in Rwanda between 2011 and 2014 by region and shows an aggregate 9.3% growth over the period with visitors from Africa forming 85-89% of inbound tourists on account of improved intra-regional accessibility. Poor

connectivity with major international capitals explains lower arrivals from European, American and Pacific regions over the period (UNWTO, 2016, UNWTO, 2017 and UNWTO, 2018).

Table 1: International Regional Inbound Tourists Arrivals; 2011-2014

	Regional ITA ('000)						
Year	**Africa**	**Americas**	**E. Asia & Pacific**	**Europe**	**Middle East**	**Others***	**Total**
2011	774	38	13	67	2	14	908
2012	936	33	12	62	2	16	1,061
2013	988	38	15	61	3	17	1,122
2014	1,088	35	12	61	3	21	1,220

*Others include arrivals from South Asia and other non-classified markets

(*Source:* RTSA, 2014; UNWTO, 2016)

Rwanda is reliant on wildlife based tourism for 90% of its tourism generated revenues (MoTI, 2009). The principle wildlife attractions are Volcanoes National Park which offers opportunity for gorilla tracking, Nyungwe tropical forest, the largest remaining track of mountain forest in East and Central Africa and Akagera National Park which offers a typical Savannah experience.

Rwanda's Tourism Statistics (2014)

Rwanda's international inbound tourism arrivals increased steadily from 908,009 in 2011 to 1,219,529 in 2014[2]. During the year 2014 almost 90% of arrivals used land transport.[3] The average length of stay was estimated at 6.5 nights as weighted according to purpose of visit and mode of transport.[4] Almost 1,013,607 tourists generated 6,605,211 nights' stays and total expenditure of RWF 202,800 million in 2014[5]. The total expenditure by same-day and overnight visitors was estimated at RWF 208.1 billion. About 22% of Rwanda's population participated in domestic tourism and approximately 24% of those who participated in domestic tourism were urban-based. Female participation rate was approximately 50.6%. Domestic tourism generated RWF 53.1 billion in 2014.[6]

The internal tourism consumption for the year 2014 was thus estimated at RWF 261.2 billion at market price. At basic price, this translated to RWF 209.2 billion.[7] However, only tourism expenditure was covered in the survey. "Other" components of tourism consumption were not captured in the TSA for Rwanda.[8]

The primary objective of this study was to evaluate the economic impact of tourism on Rwanda's economy for the year 2014. The specific objectives were to estimate these impacts in terms of output, employment generation, and labour income, and total value generation. The significance of the current study is mainly related to policy formulation, implementation, monitoring and evaluation.

Empirical Review

.

The relevance of tourism as a socio-economic growth and development tool has continued to motivate scholarly attention. Briassoulis (1991) pointed out that rigorous study of economic impact is necessitated by the truism that tourism bears economic costs that discount associated benefits. Real tourism benefits are thus often at variance with what is envisaged in development policy blue prints, hence economic impact studies are necessary as a policy monitoring and evaluation tool.

A range of alternative approaches for assessing tourism economic impacts have thus been developed. However, these methods are premised on estimation of tourism demand changes and subjecting the change to a model or set of multipliers that trace its reverberations in the economy, Stynes (1999). Methods include expert judgment, surveys, off-the-shelf multipliers and econometric models. Kumar and Hussain (2014) states that the decision on multiplier methods and models to use is based on precision expected, data availability, complexity of technique and assumptions underpinning the analysis.

Multiplier studies speculate that a shock introduced by tourism expenditure leads to additional activities in related industries which magnifies the overall change from the initial shock; the analyst's task is thus to estimate this magnification. Input-Output (I-O) analysis technique has been widely applied in deriving multipliers. The technique is used to analyze direct and indirect impacts, simulate *ex ante* or *ex post* effect of tourism demand at national, sub-national, industry or sub-sector levels, (Dwyer, Forsyth & Spur, 2004; Frechtling, 2013). Other methods used to study economic impacts include Social Accounting Matrix (SAM) and Computable General equilibrium model (CGE).

Due to its design elegancy, simplicity and reliance on observed economic data, I-O models have been popularized in tourism economic impact analysis since their first use in the 1960s (Frechtling, 2013).

Atan and Arslanturk, (2012) used I-O analysis to examine significance of tourism in the Turkish economy to establish the link between tourism and economic growth. The study computed total output multipliers for 16 sectors of the Turkish economy to assess the relative

significance of tourism in increasing output. Results showed that tourism specific sectors; hotels and restaurants, auxiliary transport activities and travel agency activities had high output multipliers or backward linkages (between 1.85 and 1.90). It was further noted that hotels and restaurants sector (1.90) was second to manufacturing (2.02) in terms of total output multiplier. The researchers asserted that tourism had a high capacity to grow other sectors of the economy on account of the high quantity of input from other sectors required to generate a unit tourism output.

Michálková *et al.,* (2018) applied the I-O model to quantify direct and secondary economic benefits of a cultural event in Bratislava, Slovakia. The study borrowed multipliers previously calculated from Slovakian I-O table and applied them on aggregated tourism expenditures obtained from survey data. They were able to estimate total economic contribution generated by final tourism consumption during the coronation event held in Bratislava at €3,347,023.

Ivandić and Šutalo (2018) used data from Croatian TSA and I-O tables to estimate tourism's contribution to GDP and measured multiplicative effects of tourism demand on the economy. The study evaluated impact of a tourism boom on structural changes in the economy comparing three periods between 2005 and 2013. It applied a vector column of internally produced domestic tourism consumption on the Leontief inverse matrix to compute output and gross value added (GVA) multipliers for seven tourism related sectors. Results showed marked volatility in output multipliers in the 3 periods and that "air transport" had the largest backward influence (output multiplier =2.08) on the economy. The findings indicated that "hotels and restaurant" sector had the lowest share of intermediaries in total output implying that it drew weakly from others slowing down potential overall growth. The study observed volatility in GVA multipliers similar to output multipliers. However, they showed that "hotels and restaurants" had the highest total GVA multipliers in all the periods leading to a conclusion that tourism demand gainfully impacted on other non-tourism sectors of the economy due to overall inter-sector connections.

Surugiu (2009) used IO analysis to estimate the economic impacts of tourism on the hotel and restaurant sector in Romania over the period 2000 and 2005. Output and employment multipliers were found to have increased but those of value added and income had declined. The analysis showed that hotels and restaurants had one of the lowest interdependence levels in the economy. The researcher suggested that transport infrastructure needed to be strengthened and services diversified in order enhance the respective linkages.

Elsewhere, Archer and Fletcher (1996) using IO analysis, examined the impact of tourism on income, employment, public sector revenue and balance of payments in Seychelles. They used 18 aggregated IO sectors with separate industries related to tourism and concluded that tourism impact was distributed over several productive sectors with different magnitudes. Results revealed tourist groups that maximize economic benefits and the sectors tourists should be encouraged to spend in.

Whereas Frechtling and Horvath (1999) concluded that tourism multipliers are relatively high for income and employment but low for output compared with other sectors;

Jones and Munday (2004) in yet another study observed that the level of backward linkages (multipliers) varies among tourism related industries.

Structure of the 1-0 Table

I-O tables track the output generated by an industry as the intermediate input in the production process of another industry or the final purchase by the various consumers (Miller and Blair, 2009).

I-O models focus on the industry under study and its direct relationships with other parts of the economy, ignoring other key aspects of the economy. This, however, leads to over-estimates of specific and general impacts in the economy (Dwyers et al, 2004).

The following mathematical input-output model was adopted for the study:

$$X = A \times X + F - M \qquad \text{Equation (1)}$$

Where X is vector of total gross output from industry $_{j=1}$ to industry $_{j=n}$;

A is input coefficient matrix from industry $_{j=1}$ to industry $_{j=n}$;

F a vector of final demand from industry $_{j=1}$ to industry $_{j=n}$; and

M a vector of import from industry $_{j=1}$ to industry $_{j=n}$.

In order to extract the invert matrix or the Leontief inverse, which is a multiplier explaining direct and indirect effects, all elements from equation (1) are transposed to X as the following show (2):

$$(1 - A)X = F - M \qquad \text{Equation (2)}$$

$$X = (1 - A)^{-1}(F - M) \qquad \text{Equation (3)}$$

Where $(1 - A)^{-1}$ is the inverse matrix.

1-0 Multipliers

A computerized software helps to produce the inverse matrices, which are a set of multipliers. Analyses of four different sets of multipliers from the input-output system, namely total industry output, labour income, value added, and employment are conducted under given mathematical input-output model[9]. Each set of multipliers creates four types of multipliers namely: Type 1, Type 2, Type 3, and Type 4 multiplier within the IMPLAN system. A Type 1 multiplier shows the direct effect plus the indirect effect. When input-output model is exclusive of households, the model becomes open type (i.e. Type 1 multiplier).

Data

The data was sourced from a global supply chain database that consists of a multi-region input-output table (MRIO) model that provides a time series of high-resolution IO tables with matching environmental and social satellite accounts for the 190 countries including Rwanda: http://www.worldmrio.com/country/

Rwanda's Input-Output Table 2013/2014

The study relies on Rwanda I-O tables 2014 (RI-O, 2014), the latest complete account of inter-industry transactions and final demand produced for Rwanda to derive an I-O model.

The tables are available on http://www.worldmrio.com/country/ which contains a database of high resolution multi-region I-O tables (MRIO) for 190 countries including Rwanda.

The first quadrant/intermediate usage sub-matrix or transaction tables of the Rwandese I-O tables, 2014 records flows between twenty-six (26) industries. Food and beverages, hotels and restaurants, retail trade and transport are industries that relate to tourism in the sub-matrix. The second quadrant shows output disposition to final demand categories which include household (96%), state and local government (14%), capital formation (41%), institutional sales (-29%) and net exports (-25%). The sum of row totals of this sub-matrix gives total final demand at $5.378 billion in 2014. The third quadrant is made up of primary inputs to production by the 26 industries and includes returns to primary inputs such as compensation to employees, gross operating surplus, gross mixed incomes, imports and net taxes on production. The column total of row sums of this sub-matrix computes total value added at $5.57 billion in 2014. The final quadrant shows all primary inputs into final demand by household, government, investment and exports.

Rwanda Tourism Satellite Account

The second set of data was obtained from Rwanda Tourism Satellite Accounts year 2014 (R-TSA, 2014 Appendix Table 1).[10] In the TSA framework, "tourism industry" is identified from the demand side by commodities that serve tourists' needs and linked to the supply side with tourism specific industries supplying such commodities. The R-TSA 2014 was used to compile the final consumption (demand) vector based on total internal tourism demand (TITD). R-TSA, 2014 identifies five tourism characteristic commodities i.e. accommodation, food and drinks, local tour packages, day tours/excursions and local transport.

Methodology

Tourism Satellite Accounts (TSAs) provide input data for entry into an economy's input- output model. TSAs are constructed to aggregate a country's tourism activities into a single industry. These accounts measure the direct economic contribution of tourism to the

economy in a manner that is consistent with IO table (Frechtling, D. 2010 and Pratt, S. 2015). TSAs are not a modelling but an accounting tool that records annual activities of tourism as an industry (Hara, 2012). The ten TSA tables were built according to National Accounting System (NAS). The aggregated tourism industry was inserted as one explicit industry in the I-O table, thus avoiding double counting. Data from Rwanda TSA (2014) was used to estimate the macroeconomic and inter-industry linkages of the tourism industry. Final consumption by tourists was extracted from general output in a process referred to as 'fractionalization' in terms of matrix algebra and 'desegregation' in terms of national accounts. The values of the extracted parts of output together with accompanying inputs were separated into new vectors of 'tourism activities'. Vector components of tourism activity were then aggregated into an explicit new 'tourism industry'. This is the desegregation of outputs and inputs into tourism and non-tourism parts (Hara, 2008). Therefore, TSA is used in compiling the intermediate and final consumption (demand) vectors based on internal tourism consumption.

Tourism industry is related with several other industries in the economy (Hara, 2008) thus both the tourism demand and supply forces create primary (direct) and secondary (indirect) economic effects. The primary and secondary effects resulting from internal tourism demand can be captured by multiplier based input-output methods (Frechtling, 2013). Input-output models have advantages over econometric analyses since they simultaneously take into account inter-industry input-output relations and final demand (Blake, 2009). Final demand consists of consumption, investment, exports and imports (i.e. Y-=C+I+G+X-M). Therefore, Input and output models are preferred over econometric analyses in examining the quantitative economic contribution of tourism demand to a country's general economy (Song, et al, 2012; Frechtling, 2013).

This study used the IMPLAN (Impact analysis for Planning) software to evaluate the economic impact of tourism sector on Rwanda's economy (Appendix Table 2). For a complete description of sources and methodology for construction of the IMPLAN database please refer to the IMPLAN Pro User's, Analysis and Data Guide.

Results

Total tourism internal demand consists of the sum of internal tourism consumption, tourism gross fixed capital formation and tourism collective consumption (TSA: RMF 2008). Internal tourism consumption is the central aggregate that describes the size of direct visitor acquisition within a country of reference.

Input-Output Multipliers

Four general sectors closely associated with tourism consumption were considered in this paper. Namely; Food and Beverage (F&B), Hotels and Restaurants (H&R), Transport and Retail Trade. Under the direct multipliers, for every one million dollars of production, Food and Beverage sector generated $70,401 in labour income $143,815 in value addition, and created 22 jobs. Hotels and Restaurants sector generated $266,355 in labour income and $392,161 in value addition, and created 77 jobs. Transport sector generated $234,046 in labour income, $345,873 in value addition and, created 243 jobs.

Under the indirect multipliers, for every one million dollars of production, Food and Beverage sector generated $218,322 in labour income $727,579 in value addition, and created 5,260 jobs. Hotels and Restaurants sector generated $172,155 in labour income, $452,808 in value addition, and created 1,912 jobs. Transport sector generated $122,059 in labour income and $264,563 in value addition, and created 112 jobs. For every one dollar of output; Food and Beverage sector generated $1.1, the Hotels and Restaurants sector $0.9, and Transport sector $1.2.

Tourism Economic Impacts

Five tourism specific sectors; Accommodation, Food and Drinks (F&D), Passenger Transport, Travel Agency and Tour-Operations, and Shopping were considered under expenditure impact analysis.

Internal tourism expenditure in the year 2014 was segregated into accommodation ($124 million), food and drinks ($54 million), passenger transport ($35 million), travel agency and tour-operations ($4 million) and shopping ($71 million). This study quantified the impact of internal tourism expenditure/consumption. With total expenditure of $286 million, the tourism sector supported about

569 thousand jobs and generated $120 million as labour income, $238 million in value addition and $522 million output.

Approximately $124 million spending in the accommodation sub-sector of hotels and restaurants sector created 236,000 jobs and generated $54 million in labour income, $104 million in total value addition and $238 million in output. Approximately $54 million spending in the food and drinks sub-sector of food and beverage sector created 270,000 jobs and generated $15 million in labour income, $46 million in total value addition and $111 million in output. Almost $33 million spending in the passenger transport sub-sector of transport sector created 12,000 jobs and generated $13 million in labour income, $21 million in total value addition and $54 million in output. Up to $4 million spending in the travel agency and tour-operations sub-sector of transport sector created 1,400 jobs and generated $1.5 million in labour income, $2.5 million in total value addition and $6.5 million in output. Nearly $71 million spending in the shopping sub-sector of retail trade sector created 50,000 jobs and generated $38 million in labour income, $63 million in total value addition and $112 million in output.

Conclusion

Contribution of tourism to Rwanda's economy includes direct and indirect effects classified as increase in domestic production, generation of labour income, creation of employment, foreign exchange earnings from inbound tourist expenditure, and other economic effects. The indirect effects of tourism are much larger than the direct effects. Both effects show that tourism contributes substantially to the economy of Rwanda.

Interventions to grow internal tourism demand such as increasing tourism arrivals or promoting high-end gorilla tourism may create higher value addition in the services sector in addition to higher labour incomes and output. Tourism has the potential to stimulate demand in other economic sectors and hence encourage growth. In other words, tourism-based industries are interlinked with other sectors of the economy in general. These industries, in

turn, generate relatively high value added multiplier effects. However, lower labour income multiplier for tourism sectors suggest low quality jobs diminishing per capita impact of tourism created jobs in the economy.

World Tourism and Travel Council (2018) analysis is based on strong assumptions due to lack of data and consequently their figures are higher than the estimates of this study.

Way Forward

In this report, internal tourism expenditure was used as a basis for calculating relevant multipliers and their associated effects. Therefore, future studies can re-estimate the multipliers by considering internal tourism consumption in its entirety. More robust methodologies such as Computable General Equilibrium (CGE) and Social Accounting Matrix (SAM) models are recommended.

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Appendix

Table 1: Rwanda TSA Table 1 Internal Tourism Consumption by Products 2014 (RWF billion)

	Internal Tourism Expenditure				
	Inbound Tourism Expenditure	**Domestic Tourism Expenditure**	**Internal Tourism Expenditure**	**Other Components of Tourism Consumption**	**Internal Tourism Consumption**
Products	(1.3)	(2.9)	(4.1)=(1.3)+ (2.9)	(4.2)	(4.3)=(4.1)+ (4.2)
A.Consumption Products					
A.1 Tourism Characteristic Products					
Accommodation	101.2	2.9	104.1	-	104.1
Food & Drink	31.4	10.5	41.9	-	41.9
Local Tour Packages	7.5	26.8	34.3	-	34.3
Day Tours and Excursions	3.3	0.02	3.3	-	3.3
Other Local Transport	26.9	0.2	27.1	-	27.1
A.2 Other Consumption Products					
Shopping	25.1	9.2	34.3	-	34.3
Other	12.7	3.5	16.2	-	16.2
TOTAL	**208.1**	**53.1**	**261.2**	**-**	**261.2**

Source: Rwanda TSA (2014)

Table 2: ***Rwanda Implan Model***

Rwanda IMPLAN Model	Copyright 2017 Minnesota IMPLAN Group, Inc.			
Model Information				
Model Year	2013		***Value Added***	
GRP	$5 569 868 114		Employee Compensation	$2 322 098 437
Total Personal Income	$4 163 492 000		Proprietor Income	$721 414 497
Total Employment	5 560 000		Other Property Type Income	$2 520 215 134
			Tax on Production and Import	$6 140 046
Number of Industries	26			
Land Area (Sq. Miles)	10 169		Total Value Added	$5 569 868 114
Area Count	1			
			Final Demand	
Population	11 460 000		Households	5 182 582 010
Total Households	2 546 667		State/Local Government	$
Average Household Income	$1 635		Federal Government	$876 256 173
			Capital	$2 222 740 128
Trade Flows Method	Supply/Demand Pooling		Exports	$285 053 232
Model Status	Multipliers		Imports	-$1 622 100 303
			Institutional Sales	-$1 566 862 485
Economic Indicators				
Shannon-Weaver Index	.51503		Total Final Demand:	$5 377 668 756
Top Ten Industries				

Sector	**Description**		**Employment**	**Labour Income**	**Output**
1	Agriculture		3 254 281	$85 003 670	$428 973 500
2	Fishing		621 039	$10 857 460	$32 334 910
16	Wholesale Trade		265 049	$226 165 000	$525 059

						800
17	Retail Trade			252 031	$222 705 600	$567 889 200
14	Construction			233 520	$284 157 600	$671 708 600
25	Others			227 915	$3 451 336	$27 185 530
23	Education, Health and Other Services			155 680	$501 221 800	$1 313 087 000
19	Transport			116 760	$112 241 400	$479 570 400
21	Financial Intermediation and Business Activities			94 520	$692 705 900	$3 013 000 000
3	Mining and Quarrying			61 160	$4 785 626	$119 032 400
Areas In the Model						
Rwanda	National					

Source: Implan Output

Effect of Corporate Social Responsibility on Performance of Commercial Banks Listed in Nairobi Stock Exchange.

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Abstract
Interest on Corporate Social Responsibility (CSR) has risen to great heights within the banking sector in the last decade. Commercial banks have increasingly embraced CSR disclosure practice on education and environmental operations. The relationship between CSR investments and financial performance is however unknown. This study investigated the effect of CSR dimensions relating to education and environmental conservation on performance of commercial banks listed in the Nairobi Stock Exchange. The paper employed desktop research by reviewing and analyzing audited published financial reports for the listed commercial banks in Kenya. 11 commercial banks listed by December 2017 were surveyed. CSR investments were measured using monetary expenditure on social activities, while financial performance was measured using net profit after tax. Data was analyzed using Karl Pearson correlation model to examine the relationship between the variables. The study analyzed data for the period 2012 to 2016. Results showed that investments in CSR activities are positively related to financial performance of commercial banks; thus banks which embraced a consistent approach to investing in CSR had high financial performance; with better customer loyalty. It also emerged that CSR programs build the bank's reputation, hence increase market share which consequently lead to high financial performance. We recommended that commercial banks and other institutions should consistently invest in CSR including education programs for the disadvantaged groups and environmental conservation programs as such investments lead to high financial performance.

Key Words: Corporate Social Responsibility, Commercial Banks, Education, environment, financial performance.

Introduction and Background

According to Hopkins (2004), CSR entails handling members of society as well as other interested parties of the business in a manner that is acceptable and aims at improving quality of their lives while at the same time preserving profitability. Mullin (2010), asserted CSR is beyond revenue, profit, and legal responsibilities. Adoption of Corporate Social Responsibility in the twenty-first century is growing exponentially. Various scholars have given their views on commitment by the firms to make social investments. Whereas Friedman (1962) argued that the primary goal of a firm is to generate profits and that a firm ought not to put more focus on social investments, Freeman (1984) argued that businesses need to focus on creating value for their stakeholders for them to succeed.

Carol and Shabana (2011) argued that corporations need to embrace CSR in a bid to earn a good reputation and maintain legitimacy in society. Stakeholders too also want their firms to invest in corporate social responsibility. The pressure from social activists and NGOs for firms to adopt CSR has also increased. High level of market dynamism characterizes the modern world of business. Where customers now have a platform to articulate what they want from firms. Worldwide Campaigns such as the Bank Transfer Day held on November 5, 2011 urging customers to prefer the community banks have been on the rise. Governments of different states such as Boston, New York, Los Angeles and San Diego have taken initiatives to encourage their financial institutions to promote the communities in their neighbourhood through their services as a way of fighting poverty and making it easy to do business with them.

The stakeholders and investors have also pressured their firms to disclose information regarding their investments in Corporate Social Responsibility (Hooghiemstra, 2000). Ponn and Okoth, (2009) observed that some businesses out of will have responded to the demands by the investors and shareholders to

disclose information regarding their investments on CSR. Some disclose the information on their websites or in annual reports. Ferreira and Ding (2014), observed that one of the significant shortcomings of social investment is lack of standardized measures and disclosure for CSR. Kepkemoi (2010) reported no relationship between CSR and financial performance of Kenyan banking institutions while a similar study by Kipruto (2013) indicated a positive relationship between CSR and Financial performance. According to Gichana (2004), all the firms listed in the Nairobi Stock Exchange had incorporated CSR in their mission statements.

Garnt (1991) observed that it is possible for firms to achieve higher performance as a result of investing in social activities thus firms which increases their investments in CSR earn a future competitive advantage. Elsewhere Moore and Spence (2006), firms which invest highly in CSR activities easily attract highly skilled staff, customers and enjoy easy access to hostile markets and according to Marcia and Hassan (2013) customers tend to have a good perception of such firms. Similar results presented by Okoth (2012), Kitzmuelery and Shimshack (2012) and Margolis, et al (2007) among others.

On the contrary other researchers have reported no relationship between CSR investments and financial performance, Kepkemoi (2010) Nelling and Webb (2009). also concluded that there is no evidence for any relationship between CSR and the financial performance. These findings are contracdicting and highly inconsistent, and creates a scholarly gap. This study investigated the effect of CSR investments on financial performance of commercial banks in Kenya. The findings of the study will, potentially, be beneficial to corporate managers involved in making short term and long term decisions which affect financial performance of the firms.

Literature Review

Kepkemoi (2010) defines CSR as pursuance of wealth maximization goal without violation of the law. CSR contributes solutions to existing social problems in a community. According to Ogore and Kusa (2013), the financial performance of a company is influenced by internal and external factors and are affected by the decision made by the managers. Performance is also influenced by the size and age of a firm. Mirza and Javed (2013) noted that economic conditions, corporate governance, a sequence of relationships between investors, company management, the board and other interested parties, and capital are the major determinants of financial performance. According to Bairathi (2009), good corporate governance is characterized by a transparent, efficient and fair administration and increases the accountability of a firm while weak governance creates a loophole for fund mismanagement (Wanjiru, 2013).

In a study conducted by Fauzi (2009), no relationship was reported between corporate social responsibility and financial performance. Elsewhere Fauzi and Rahman (2007) indicated that the connection between CSR and corporate Financial performance is inconclusive. The study used a regression model and did not find a significant relationship between CSR and financial performance. In a 5-year study involving 422 firms, Tsoutsoura (2004) investigated the relationship between CSR and Financial Performance. Using regression model and established a positive relationship between financial performance and Corporate Social responsibility. Similar results were reported by Gheli (2013) used a regression model on 322 US firms and indicated a positive relationship between financial performance and CSR.

Elsewhere, Anastashia and Maria (2010) performed a similar study in the banking sector using data for 189 commercial banks using regression analysis and indicated no evidence that firms with high CSR activities have high financial performance.

Okwoma (2012) sampled 28 commercial banks and used a regression model to analyse data and reported a significant positive relationship between CSR and CFP and that investments in Corporate Social Responsibility did not CFP small banks. Ondieki (2013), used descriptive and inferential statistics to analyse data from firms listed on NSE and established a positive association between financial

performance and CSR practices. Additional studies have reported similar results, (Kipruto, 2014). Wambui (2012) focused on the partnership between corporate firms and NGO's and reported a positive relationship between CFP and CSR.

A number of researchers have argued that investments in Corporate Social Responsibility by businesses bring long-term benefits to the firm indicating that CSR and financial performance of firms are positively related (Weber, 2008). According to Angelidis, Massetti and Magree- Egan, (2008), the relationship between financial performance and CSR is the least understood aspect of social investments. Jensen and Meckling (1976) also argued that businesses can realize a long-term economic activity from solving a social problem. The authors argued that firms with high investments in CSR can easily get entry into new markets, maintain their customers, remain competitive and be in a better capacity to understand the needs and wants of the customers.

According to Marcia, et al (2013), customers like associating themselves with corporations which are perceived to be socially responsible. Lorraine (2009) also observed that the amount of CSR investments is also dependent on the size of the firm. Thus, large firms are associated with high CSR investments. Because of the contradicting results so far reported there is need for more research to determine the association between the CSR and the financial performance.

Methodology

This study employed desktop research by reviewing and analysing the audited published financial reports of 11 commercial banks listed on NSE as at Dec 2017 and data spanning five-year period between 2012 to 2016 analysed CSR investments were measured using the monetary expenditure on the social activities, while the Financial performance was measured using the net profit after tax. A descriptive research design was used in the study. The causation of CSR investments on the financial performance of the banks was explored through a survey for each bank. The study targeted the CSR investments made by the listed banks in Kenya for the period 2012 to 2016. Secondary data used for the analysis was retrieved from the banks' websites, published annual reports, NSE handbooks as well as published bank reports.

Table 1: Data Analysis, Interpretation and Presentation

Statistics

		CSR investment for education for Equity bank	CSR investment for Cop Bank in education	CSR investment for education for Barclays bank	CSR investment on education for CFC bank	CSR investment on education for Diamond trust bank	CSR investment on education for HF group	CSR investment on education for I & M bank	CSR investments on education by KCB	CSR investment on education for National Bank of Kenya	CSR investment on education for NIC bank	CSR investment on education for Standards chatered bank
N	Valid	5	5	5	5	5	5	5	5	5	5	5
	Missing	0	0	0	0	0	0	0	0	0	0	0
Mean		.0580	.0580	.0820	.02100	.0560	.0680	.05540	.1820	.0840	.0980	.08020
Std. Deviation		.00837	.03114	.00837	.009381	.01817	.01483	.032323	.10780	.03975	.01924	.012458
Skewness		.512	-.933	-.512	.027	.567	.552	-1.225	-.536	1.538	1.517	-1.302
Std. Error of Skewness		.913	.913	.913	.913	.913	.913	.913	.913	.913	.913	.913
Minimum		.05	.01	.07	.010	.04	.05	.003	.06	.05	.08	.060
Maximum		.07	.09	.09	.031	.08	.09	.090	.28	.15	.13	.091

Table 1 above shows the various averages for CSR investments in education by the various commercial banks. Data relating to education investment by the banks for the five year spanning 2012-2016 analysed. The average investment for Equity bank on education for the period between 2012 and 2016 was Ksh 0.058 billion which was similar to that of the cooperative bank. Barclays bank invested an

average of Ksh 0.082 billion on education, CFC invested an average of Ksh 0.021 billion, DTB Ksh 0.056 billion, HF group Ksh 0.068 Billion, I & M bank Ksh 0.0554 Billion, KCB Ksh 0.182 billion, National Bank of Kenya Ksh 0.084 billion, NIC bank Ksh 0.098 billion and Standard chartered bank invested Ksh 0.0802 billion. The data presented on table 1 indicates that the Kenya Commercial Bank invested the highest amount of money on CSR activities relating to education than other banks within the same period. The standard deviation for equity bank, cooperative bank, Barclays, CFC, DTB, HF group, I & M, KCB, National bank, NIC bank and Standard Chartered banks were 0.00837, 0.03114, 0.00837, 0.009381, 0.01483, 0.032323, 0.1078, 0.03975, 0.01924 and 0.12458 respectively.

Table 2: Mean Investment by the Listed Banks on Environmental Conservation

Statistics

		CSR investment on environment for Equity bank	CSR investment for Cop Bank on environment	CSR investment for Barclays Bank on environment	CSR investment for CFC Bank on environment	CSR investment for Diamond Trust Bank on environment	CSR investment for HF Group on environment	CSR investment for I&M Bank on environment	CSR investment for KCB on environment	CSR investment for NBK on environment	CSR investment for NIC Bank on environment	CSR investment for Standard chatered Bank on environment
N	Valid	5	5	5	5	5	5	5	5	5	5	5
	Missing	0	0	0	0	0	0	0	0	0	0	0
Mean		.1240	.0700	.0720	.0148	.0560	.0680	.0696	.0940	.0620	.0880	.0800
Std. Deviation		.05595	.04301	.01304	.00554	.01517	.01304	.08732	.04393	.01643	.00837	.02236
Skewness		.089	-.754	.541	1.501	1.118	-.541	1.050	1.882	-.518	.512	.000
Std. Error of Skewness		.913	.913	.913	.913	.913	.913	.913	.913	.913	.913	.913
Minimum		.05	.01	.06	.01	.04	.05	.00	.06	.04	.08	.05
Maximum		.20	.11	.09	.02	.08	.08	.20	.17	.08	.10	.11

Data presented on table 2 above indicate that the average investment for Equity bank on environment for the period 2012 to 2016 was Ksh 0.1240 billion, Cooperative bank 0.7, Barclays bank Ksh 0.072 billion on environment, CFC invested an average of Ksh 0.0148 billion, DTB Ksh 0.056 billion, HF group Ksh 0.068 Billion, I & M bank Ksh 0.696 Billion, KCB Ksh 0.094 billion, National Bank of Kenya Ksh 0.062 billion, NIC bank Ksh 0.088 billion and Standard chartered bank Ksh 0.08 billion. Equity bank had the highest investment in environmental activities estimated at 0.1240. The standard deviation for equity bank, cooperative bank, Barclays, CFC, DTB, HF group, I & M, KCB, National bank, NIC bank and Standard Chartered banks were 0.5595, 0.4301, 0.1304, 0.00554, 0.1517, 0.01304, 0.08732, 0.04393, 0.1643, 0.00837 and 0.02236 respectively. I & M bank had the highest variance.

Table 3: Average Net Profits by the Listed Banks

Statistics

		Net profit for Equity Bank	Net profit for Cop Bank	Net profit for Barclays Bank	Net profit for CFC Bank	Net profit for DTB Bank	Net profit for HFgroup	Net profit for I & M Bank	Net profit for KCB Bank	Net profit for National Bank of Kenya	Net profit for NIC Bank	Net profit for Standard chatered Bank
N	Valid	5	5	5	5	5	5	5	5	5	5	5
	Missing	0	0	0	0	0	0	0	0	0	0	0
Mean		18.61745100	9.84576000	8.11020000	4.62360620	7.17404200	1.34782540	19.97731180	13.27544500	.80710760	5.34538280	8.57984540
Std. Deviation		8.502957826	2.228705499	.570583210	1.025557862	4.066900782	.316808445	29.02040077	2.928507652	.399496174	3.686009879	1.518422515
Skewness		1.828	.490	-.401	-1.197	1.955	-.255	2.145	-.171	-1.295	2.090	-.549
Std. Error of Skewness		.913	.913	.913	.913	.913	.913	.913	.913	.913	.913	.913
Minimum		12.080255	7.723858	7.399000	2.979891	4.067968	.907631	4.119558	9.368678	.162190	3.036794	6.342427
Maximum		33.251000	12.676210	8.741000	5.686661	14.263252	1.753518	71.444110	16.499407	1.153477	11.851020	10.436180

Data presented on table 3 above indicate that the mean net profit for the period between 2012 and 2016 was Ksh 18.617451 billion, Cooperative bank 9.84576, Barclays bank Ksh 8.1102 billion, CFC Ksh 4.6236062 billion, DTB Ksh 7.174042 billion, HF group Ksh 1.34782540 Billion, I & M bank Ksh 19.9773 Billion, KCB Ksh 13.2754425 billion, National Bank of Kenya Ksh 0.80710760 billion, NIC bank Ksh 5.34835280 billion and Standard chartered bank invested Ksh 8.57984540 billion. The standard deviation for equity bank, cooperative bank, Barclays, CFC, DTB, HF group, I & M, KCB, National bank, NIC bank and Standard Chartered banks were 8.5030, 2.2287, 0.5706, 1.0256, 4.0669, 0.3168, 29.0204, 2.9285, 0.3995, 3.6860 and 1.5184 respectively. The data indicates the banks which have high investments in CSR activities relating to education and environment had high net profits. Equity bank with the highest investments in environmental CSR on average recorded high net profit of 18.62 billion followed by KCB with a net profit of 13.28 billion.

Table 4: Coefficient between individual banks financial performance and CSR investment in education and environment

BANK	Correlation Between Net Profit And CSR on Education	Correlation Between Net Profit CSR on Environment
EQUITY BANK	0.724	-0.336
COPERATIVE BANK	0.888	0.330
BARCLAYS BANK	0.270	0.069
CFC BANK	0.730	-0.678
DTB	0.743	0.881
HOUSING FINANCE	0.273	0.130
I & M BANK	0.659	0.898
KCB	0.845	0.044
NATIONAL BANK	0.687	0.661
NIC BANK	0.969	0.798
STANCHART BANK	0.952	0.851

The Data presented on table 4 demonstrate a positive correlation between the two independent variables and financial performance except for a few cases that show a negative correlation. The correlation coefficient between the CSR investment by Equity bank on education and environment is -0.336 and 0.724 respectively. This means that expenditures by equity bank on education are negatively related to the financial performance of the bank while the CSR investments on the environment are positively related to the financial performance. A coefficient correlation of 0.724 indicates a very strong relationship between CSR investments on environment and the financial performance. This implies that an increase in investments for Environmental activities leads to increase in overall financial performance of the bank. The negative correlation of -0.336 indicates that an increase in CSR investments in education is associated with a decrease in financial performance.

Cooperative bank has a positive correlation of 0.880 and 0.330 for CSR investments in education and environment respectively showing solid correlation between CSR investments for education and financial performance. 0.880 is close to 1 meaning a positive change in the amounts invested in education lead to significant positive change in the overall financial performance of the bank. Conversely The correlation coefficient of 0.33 for environment indicates a weak positive relationship between the CSR investments made on environment and financial performance.

There was a positive correlation between the overall financial performance and CSR investments both in education and environment for Barclays bank. The correlation between the net the net profit and CSR investment on education was 0.27, showing a weak positive relationship between the two variables. This implies that a positive change in the amount invested in education would lead to less than proportionate change in the overall financial performance of the bank. On the other hand correlation coefficient between the financial performance and the CSR amounts invested by the bank on the environment is 0.069 giving a weak positive relationship between the two variables.

CFC bank recorded a positive relationship between the overall financial performance and the CSR amounts invested in education, however, there was a negative correlation between CSR amounts invested on the environment and the financial performance. The correlation between the bank's financial performance and the amounts invested on education is 0.73, meaning a strong positive relationship between the two variables implying that higher investments in CSR activities in education lead to a higher net profit. On the other hand, the correlation coefficient between the amounts invested on the environment and the overall financial performance of the bank is -0.678 implying that there is a strong negative relationship between the two variables. Thus an increase in CSR investment for environment leads to a decrease in the financial performance.

The correlation coefficient between CSR investments in education and the overall financial performance for Diamond Trust Bank, Housing Finance group, I & M, KCB, National bank of Kenya, NIC bank and standard chattered are 0.743, 0.273, 0.659, 0.845, 0.687, 0.969 and 0.952 respectively indicating a strong positive relationship between the variables for the banks in the rank of NIC; Standard chartered, KCB, DTB, National Bank of Kenya, I&M and HF group indicating the weakest positive relationship.

The correlation coefficient between CSR investments in environment and the net profit after tax for Diamond Trust Bank, Housing Finance group, I & M, KCB, National bank of Kenya, NIC bank and standard chattered are 0.881, 0.13, 0.898, 0.044, 0.661, 0.798 and 0.851 respectively indicating a positive relationship between the two variables for the aforementioned banks with I & M bank having the strongest positive relationship of 0.898 and KCB having the weakest positive relationship of 0.044.

Table 5: Coefficients for Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-4.155	2.403		-1.729	.122
	CSR investments on education	16.331	6.849	.651	2.385	.044
	CSR investments on environment	6.093	5.494	.303	1.109	.300

a. Dependent Variable: Financial performance for Commercial Banks

Table 5 shows the coefficients of the regression model which was deduced as follows:

Financial Performance = - 4.155 + 16.331X_1 + 6. 093X2.

CSR investments on education were found to be significant as indicated by the sig value of 0.044 while that of CSR on environment was found to be insignificant as indicated by the p value of 0.300. A sig value of below 0.05 indicates that the relationship between the variables is significant. The sig value of

0.044 for education means that the CSR investments for education significantly affects the financial performance of the commercial banks. A sig value of 0.300 means that CSR on environment does not significantly affects the financial performance.

Testing the Goodness of Fit for the Model

Table 6:

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.929[a]	.862	.828	2.60666

a. Predictors: (Constant), CSR investments on environment , CSR investments on education

As shown in table 6 above, R is 0.929 indicating a very strong relationship between CSR education, environment and the financial performance. R square is 0.862 meaning that 86.2% of the financial performance can be explained changes in CSR investments on education and Environment. This means that the results of the model can be relied upon.

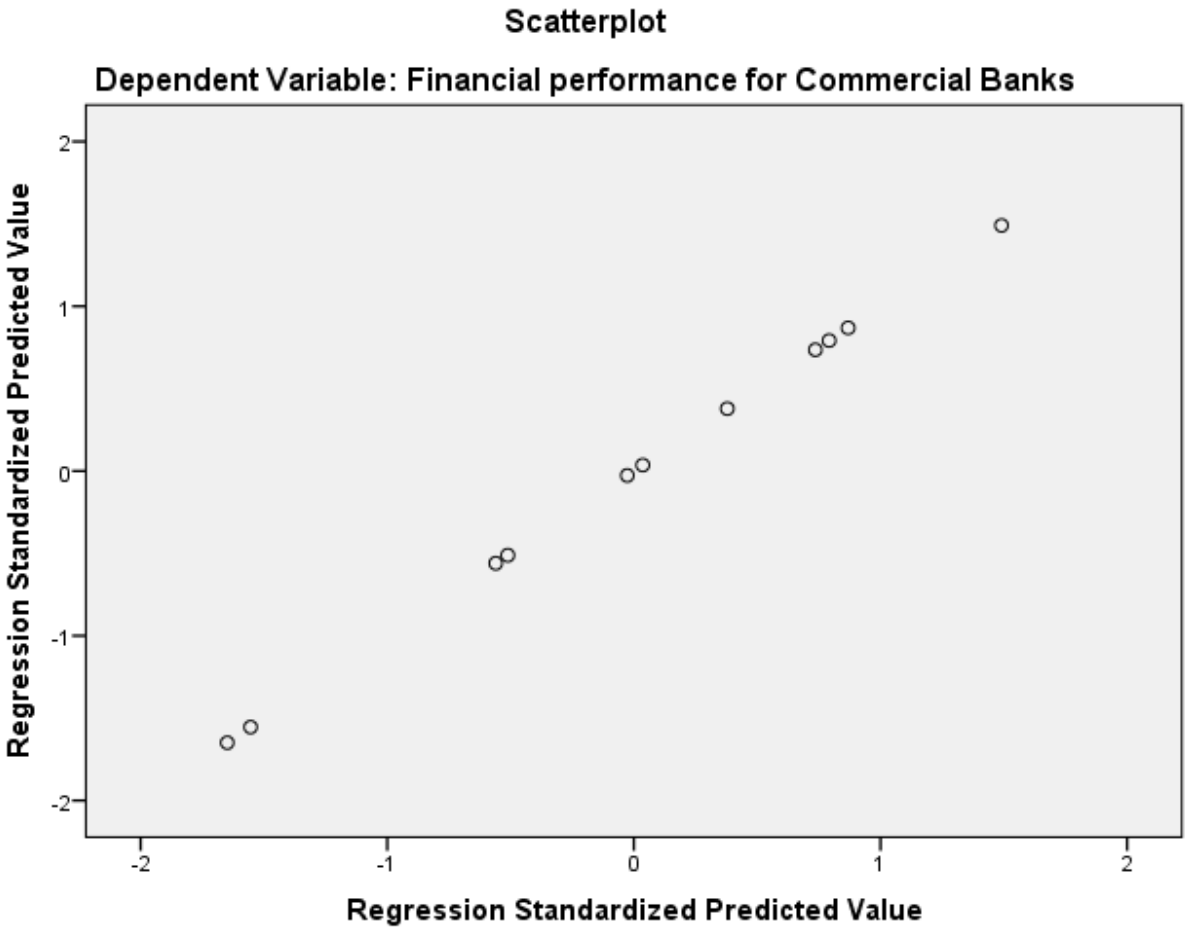
Table 7: ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	339.943	2	169.971	25.015	.000[b]
	Residual	54.357	8	6.795		
	Total	394.300	10			

a. Dependent Variable: Financial performance for Commercial Banks
b. Predictors: (Constant), CSR investments on environment , CSR investments on education

Overall of this study demonstrate that the relationship between corporate social responsibility and financial performance is significant as indicated by the results F (2, 8) = 25.015, P = 0.000. The relationship between the variables are presented graphically on figure 1 below.

Figure 1:



Discussion

The main aim of the study was to determine the effect of corporate social responsibility on the financial performance of commercial banks listed in Nairobi Stock Exchange. There was a positive relationship between the financial performance of the commercial banks and the CSR investments in education and the environment. Thus, commercial banks should make deliberate budgetary allocations for corporate social responsibility. The education programs carried out by the banks as well as the initiatives undertaken by the banks to conserve the environment contribute to financial success of the banks, thus get high returns. The desire of firms to behave morally and ethically should, therefore, be a daily endeavour as customers are continuously placing high value on social and moral responsibility. Thus, customers are more likely to associate themselves with firms which demonstrate efforts to support societal needs.

The best performing banks in Kenya have been investing sufficiently in CSR and this makes them more attractive to investors, volunteers, and sponsors. The commitment to being a good corporate citizen comes along with high rewards from the customers, government favours, tax exemptions and attraction of capital. This study, therefore, demonstrated a link between CSR and Financial performance of the listed banks in Kenya. Some banks have also established independent foundations

to spearhead the CSR activities across their areas of operations. The results of this study, therefore, agrees with the findings of Okwoma (2012), Kipruto (2010), Wambui (2012) and Obusubiri (2006) that CSR investments affect the financial performance of firms.

Recommendations

1) It is recommended that corporate managers should do a cost-benefit analysis while determining the amount of money to invest in CSR. Thus although social investments are good for the society, the banks are also expected to meet the needs of the shareholders. There is a need for managers to maintain a balance between the extreme of CSR investments and financial returns. It is therefore very important for managers to select the most appropriate CSR portfolio which maximizes satisfaction in meeting the needs of the society and those of the shareholders.
2) More studies be conducted on smaller banks and microfinance institutions as well as other industry players such as communication sector, manufacturing sector, mining industry, to ascertain whether or not such institutions can enhance profitability through CSR activities.

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Does Gender Matter in Agro-Food Manufacturing Sector? Perceptions of Micro and Small Scale Food Processors in Kenya

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Abstract

This article is motivated by manufacturing and food security as critical components of the Big Four Agenda guiding development by Kenyan government today. However, gender asymmetry in the two sectors seems to frustrate the desired achievements. The research question "Does gender influence processing of advantageous food products among micro and small enterprises in Kenya?" guides the study. To answer this question, the study adopts a mix of constructivism and Longwe framework to survey micro and small food manufacturing enterprises registered in county governments of Busia and Nairobi, Kenya. Data was collected using both primary through interviews and literature review through refereed journals, reports and books. The enterprises are sampled by fisher sampling techniques in Nairobi and snowballing in Busia. The heads of the enterprises are interviewed by drop and pick semi structured questionnaires. The structured part is on a seven-point likert scale. Out of 132 entrepreneurs interviewed, 130 correctly filled the questionnaires that were analyzed using descriptive and inferential techniques. Explanatory study design was applied by both Pearson's Correlation and Logit regression to determine the effect of gender on manufacturing advantageous foods in Kenya. Results showed more men-owned food processing enterprises than women-owned. There was results also an inverse correlation between gender and manufacturing advantageous food products. However, there is not enough evidence to demonstrate that gender significantly influence manufacture of advantageous food products (Wald (1) = 1.339, p= 0 .247, sig < .05, 2 tailed). However, attitudes indicating gender inequality among micro and small food processing entrepreneurs are still existent. The study recommends diffusion of gender equality norms by international and regional actors in developing countries. Thus, National and county governments of Kenya should mainstream gender in food processing policies and programs. Further studies should be conducted to determine the effect of gender on other manufacturing sectors in Kenya. Other related studies could be done on the age of women, marital status and parity on food processing sector.

Key Terms: Gender, Micro and Small Agro-Food Processing, Advantageous Food Products

Background of the Study

Everyday 925 million people, sleep hungry globally despite gender analysis showing that women are able to feed the world (Oxfarm GB, 2012). This bitter irony is a reflection of gender inequality in food value chain. Achieving food insecurity today and in future requires deliberate evaluation and remodeling of the current agricultural value chain models currently driven by gender inequalities. Processing of food is a critical phase in food value chain that makes food reach people in right quantity and quality at all times. This phase of food value chain suffers competitive vulnerabilities because of gender asymmetry grounded on culture and traditions. Gender in food value chain refers to socially and culturally constructed roles assigned to women and men on the basis of their sex in agricultural sector, from farm to plate. It defines

behavioral relationships between the two sexes as well as economic roles they play at household, community and national level in food production, processing and marketing. Connell (2005) observed multidimensionality in gender inequalities experienced; ranging from owning economic assets, cultural authorities to interpersonal and personal emotions. The antithesis of gender inequality is gender equality which is an ideal international norm enjoying supports of many states currently.

Gender equality in food-processing implies inclusion and full involvement of men and in value addition and manufacturing phase of food value chain. The struggle to realize gender equality can be traced first from *Universal Declaration of Human Rights* in 1948 and later on between 1975 and 1985 which became the UN Decade of Women that globalized feminism. Gender equality also found prominent focus in the *International Covenant on Economic and Cultural Rights* (ICESCR) in 1976. The covenant yielded a gender sensitive framework lased with indicators to guide party states to realize gender equality in economic, social, cultural and work-related environment. Gender equality also found support in the *Convention on the Elimination of All Forms of Discrimination against Women* (CEDAW). CEDAW recognized discrimination against women as an obstacle between women and their participation in political, social, economic and cultural life of their countries, societies, families and their own development. The convention pushed party states to condemn all forms of discrimination and violence against women. In 1995 the world converged in Beijing, China and agreed to promote women participation in all spheres on equal pedestal with men.

Besides international framework, gender equality has found backing regionally. Between 1990 and 2000 the European Union (EU) put more focus on gender equality among member states. In the move towards equal society, EU diffused gender equality among its members and beyond on three fields: work/family reconciliation, equal opportunities and social policies (Lewis, 2006). Studies on emergent gender regimes reported a lot of success by EU due to its growing polity and deepened power presence over states throughout the world and various policy domains (Walby, 2004). In Africa, the *African Charter on Human and People's Rights*, *Protocol to the African Charter on Human and People's Rights* (the Maputo Protocol) and *Declaration on Gender Equality in Africa* all recognize the adverse effect of gender inequality. The treaties push party states to combat gender inequality through effective legislative, policy and standards that would guarantee women full participation in the development agenda. Kenya has adopted most of these international and regional norms on gender through its *Kenya Constitution 2010*, *Kenya Vision 2030* and various legislative frameworks. However, gender equality is yet to be realized in Kenya (Gicheru, 2013).

Women participation has significantly increased since 1980s, particularly in production phase of agriculture whis is a major player in the Keya economy. However household chores and cultural norms have restricted their full participation at value-addition phase and ultimate benefits (World Bank, 2009). Gender differences in various phases of food value chain arise from productive and reproductive roles of male and female persons in a community. Gicheru (2013) described the Kenyan agriculture as having

gender disparities in access to economic resources, technologies, services and inputs. The landscape favored men to women. Thus women were mostly farm laborers who owned no land. On market end, they had low membership in marketing cooperatives and engaged mostly in sale of fresh and highly perishable farm produce.
In advent of globalization, climate change, food security and stiff competition from free trade markets; food manufacturing has become an important phase and constituency of agricultural value chain. Food processing must be gender inclusive and technologically enhanced to produce high quantity, quality and value added products that can face hi-tech food commodities from overseas. Once this is done a country would be on the right path to food security, creating more jobs and meaningful incomes for small holder farmers.

Research Problem

Does being male or female affect processing of advantageous food products? Despite women being excluded in critical phases of food value chain, no studies have demonstrated whether or not gender determined competitiveness in food processing in Kenya. It is this gap that the study seeks to address. Focusing on gender issues in food processing does not only address equality between men and women in the industry, but also fixes the structural changes aimed at reducing food insecurity and poverty. The desired state of food security, where all people have access to right quality and quantity of food demand that both men and women participate in all phases of food value chains. However, this is not the reality in most parts of the world. For example, technologies fabricated for food value-addition generally favour masculine tasks (World Bank, 2009). This disparity makes women benefit dismally from agricultural labour and ineffective in addressing starvation, unemployment and poverty in Kenya (Gicheru, 2013). By addressing this problem, the study contributes immensely to improvement of manufacturing sector in agriculture. This resonates to the country's clarion call to create jobs through revival of manufacturing sector and increasing food security in *the Big Four Agenda* and *Kenya Vision 2030.*

Research Objective, Question and Hypothesis

The study investigated the influence of gender on processing advantageous food products among micro and small enterprises in Kenya. To enhance the rigor and specificity of the study, the objective is transformed into question and hypothesis.

- Does gender influence processing of advantageous food products among micro and small enterprises in Kenya?
- H_0: Gender has no significant influences on processing of advantageous food products among micro and small enterprises in Kenya.

Literature Review

In order to allow theory and data collection to inform each other (Lewis & Nicholls, 2014), the study incorporated review of existing literature on gender and agricultural

value chain focusing on gender empowerment frameworks and evidence that shed light and built into answering the research question. The areas of focus were: gender, processing of advantageous food products, theoretical and conceptual frameworks that anchored the study.

Theoretical Framework

This study adopted a mix of constructivism and Longwe frameworks to answer the research question. Constructivist framework looked into gender as a socio-cultural construct and norm that could be changed, diffused and adopted by various social systems. Various institutions of power and influence such as United Nations (UN), regional bodies such as EU, East African Community (EAC) and states can force diffusion and adoption of these international norms in local social, interpersonal and individual contexts (Krook & Irue, 2010). One of these constructivist frameworks that successfully empowered women in Africa is Longwe. Longwe framework is a tool developed by Sara Hlupekile Longwe in Lusaka, Zambia. It guided planners in increasing gender equality and women empowerment; taking equal place as their men counterparts in development and control of factors of production (March, Smyth, & Mukhopadhyay, 1999). According to the framework, poverty was a consequence of women oppression and exploitation and not lack of production. And that the escape route out of poverty was developing people; making them take charge of their own lives to escape from poverty (Anant, 2016). Longwe framework suggested five trajectories through which the social construction could be effectively delivered. These include welfare, access, conscientisation, participation and control. Welfare referred to women in food proceeding accessing material livelihood resources e.g. food, income and healthcare. Access meant that women reached and used factors of production as men did. It implied access to land, labour, credit, training and marketing facilities. Concientisation, on the other hand, was about making men and women realize that women lacked access to land, labour, capital, entrepreneurship and technology

This study adopts Longwe framework to enhance results to the research question because of being African and widely accepted as an empowerment tool for women in a situation of discriminatory practices and rules that oppressed women (Longwe, 2002). Gender as a cultural construct, could be changed and work be fairly and agreeably be assigned to both sexes. No sex should be rendered a lesser being either economically or politically. The theory advocated for women mobilization into grouping to fight for their emancipation. This would enable them to meaningfully be involved in all phases of food value chain, that is; decision making, policy making, planning, implementation and evaluation. Finally, control related to equal authority over the factors of production and distribution of benefits from the food value chain.

a) Empirical Review

Globally women are recognized as critical players in food production; producing 50% of the foods. However, they encounter gender specific barriers such as lack of effective technologies, credit for processing and their incomes are culturally meant for family survival with little economic value. A study on Canadian farm women revealed that

though women played critical role in agriculture, poverty is still feminized. Canadian farm women disproportionately accessed education, credit and income compared to men (Roppel, Desmarais, & Martz, 2006). In west Asia, Lebanese women encountered gender specific barriers such as land ownership, credit access and women unfocussed extension programs (United Nations, 2001). While in Andean region and Latin America cultural, economic and social conditions enlarged developmental inequalities between women and men. More women are part of poor households with most of them having no income and those who were employed earned relatively lower than their men counterparts. In 2011, women in Peru received 75% of the men's wage while in Bolivia and Ecuador, it was at 80% and 96% respectively (Polar, Babini, & Flores, 2015).

Longwe (2002) found discrimination against women in developing countries an enormous problem which in sub-Saharan Africa is exacerbated by patriarchic ideologies engrained in cultural practices and norms whose custodians were men. This, she explains, gives men priority over control and access to factors of production. Gender issues have been overlooked and persistent gender inequalities obstruct women to progress (Spence, 2010).

b) Processing Advantageous Food Products

Food processing is the changing of raw agriculturally-based inputs into finished human food products. Processing of food is the next frontier and demand-end strategy meant to industrialize agriculture. It reduces post-harvest pilferage and improves food quality and shelf life of food commodities as well as widening the distribution area. The sector has transformed lives economically by creating employment and increasing incomes for farmers (Rottger & Da Silva, 2007). In France, the Netherlands, Poland and UK, this sector developed towns and enhanced spatial distribution of economic transactions and wealth (Leeuwen, 2007). In Taiwan, food processing was employed to address bad effects of international free trade phenomenon and stiff competition from foreign food commodities (Council of Agriculture, 2002). While inIndia, the food processing sector grew by 8.4%. The sector has transformed India to be one of the largest food exporters globally. Consequently, the government of India has embarked on improving the food processing industry so as to curb food wastage through establishing mega food parks, widespread agri-modernisation initiatives and drawing food maps for processing and exportation (The Swedish Trade and Invest Council, 2015).

Since 1970s, Micro and Small Enterprises(MSEs) also known as *Jua Kali* sector have received a lot of focus in Kenya as fast creators of skills, employment and source of livelihoods for both urban and rural populations. The sector contributed 76.5% of jobs, according to the *Government of Kenya Economic Survey, 2005*. Women-owned MSEs were about 612,848; accounting for 47.4% of the entire *Jua Kali* sector (International Labour Organisation, 2008). The sector permeated agriculture in form of small scale production and agro-processing. Though agro-processing is gaining fast growth, it is dominated by foreign multinationals with focus on oil, fruits, soft drinks, beer, dairy, meat and cereal processing (Oloo, 2010). This exposed micro, small and indigenous entrepreneurs to competitive vulnerabilities. At manufacturing level, only 6.6% of the employed people were women earning an average of KES 4,344 per month compared to KES 7,627 earned

by men (ILO, 2008). Gender-lensed studies in *jua kali* sector further revealed that women-owned enterprises faced capital and regulatory obstacles (Naituli, Wegulo, & Kaimenyi, 2006). In agro-processing, women-owned enterprises in Kenya lacked access to appropriate technologies, entrepreneurial trainings and marketing (Muluku-Mutuku, Ali-Olubandwa, & Odero-Wanga, 2006). These glaring gender disparities in manufacturing and the recent call by Kenya government to focus on food security and manufacturing forms the basis for the need to address integration of woman in food processing.

c) Conceptual Framework

Conceptual framework is a diagram showing processes, concepts and how they relate. In an orderly manner, it indicates causative and resultant key issues in the problem; hence giving a concrete and clear mental picture of the whole study (Mvumbi & Ngumbi, 2015). In this context, the diagram depicting key concepts of the study and how they relate is as shown in fig.1 below.

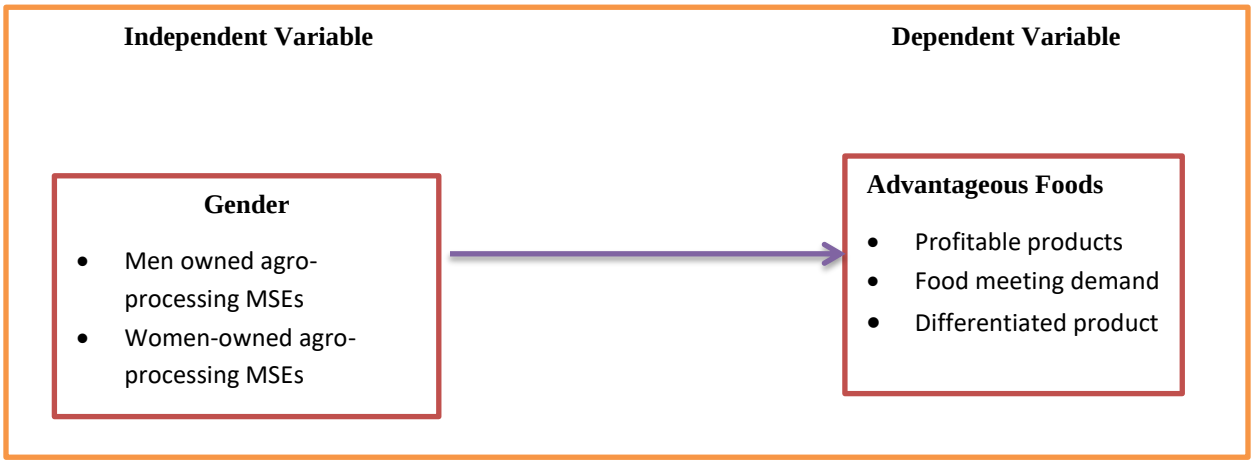

Fig.1: Gender and Processing Advantageous Food Conceptual Framework
Source: Author, 2018

Fig. 1 above shows key variables that the study examined namely; gender of entrepreneurs and advantageous products among micro and small food processing sector. Gender is binomial; that is the entrepreneurs are either male or female. Advantageous foods are characterized by increasing income (profitability), meeting market demand and being differentiated. The study sought to demonstrate whether being a male or female accounted for variance in the manufacturing of profitable, demand-focused and unique products among micro and small food processors.

Research Design and Methodology

This study adopted explanatory design to investigate the extent to which gender (control variable) caused variance in processing of advantageous food products (predictor variable). The design uses Pearson's product moment correlation to explain

the relationships (Heppner, Wampold, & Kivlighan, 2008). It further uses logit regression to account for change in dependent variable caused by independent variable. The study sampled micro and small scale entrepreneurs involved in processing foods using a sample frame from the lists of permitted firms by County Governments of Busia and Nairobi. Due to poor data record, snowballing was used in Busia. Nairobi had enough data. Therefore, fisher sampling was used. A total of 188 entrepreneurs were sampled, but 132(70.2%) returned the filled questionnaires for analysis.

Data was collected using semi-structured questionnaires. The structured part was spread on a 7-point Likert scale. The questionnaire was piloted in Kisumu County. Validity and internal consistency of constructs in the questionnaire was tested using Cronbach's Alpa test to show how items in a set are closely related (Molla & Bissdoff, 2012). The study processed 31 cases, n=23(74.2%) of which were found valid. A Cronbach's alpha reliability statistics of 0.97 was gotten indicating excellent reliability of the instrument and the scale used for it.

After collection, data was summarized and analyzed using an amalgam of descriptive and inferential techniques because of their ability to trade off the weaknesses and strengthen of each other. Descriptive technique made sense out of data collected by summarizing it into central tendencies, dispersion, means, variances and frequencies. Inferential statistics employed Pearson correlation and binomial logistic regression analysis to determine the relationship between gender and processing advantageous food products in micro and small scale enterprises. Whereas Pearson correlation determined the nature and strength of relationship, binomial Logistic Regression (Logit) model showed the contributory variance in processing advantageous foods caused by gender. Logit also indicated the Pseudo R^2 that aided in establishing the fitness of the model. The equation of Binomial Logistic Regression was expressed as:

$$\mathbf{Log[p/(1-p)] = b_0 + b_1X_1 + \varepsilon}$$

Where:

p	= the probability that the advantageous product is high, p(Y=1)
p/(1-p)	= the "odds ratio"
X_1	= being women-owned or man-owned
e	= stochastic error

Hypothesis testing followed to measure the reasonableness of the claim. A procedure of four steps was followed. The steps included: stating the hypothesis in an alternative format; setting the criterion or level of significance of judging the claim (α to be 0.05 or $p < 0.05$ as a criterion of its judgment); deciding the nature on sampling distribution of the test statistics if the hypothesis is true; and deciding on accepting or rejecting the hypothesis based on the set criterion (Myers, Well, & Lorch, 2010).

Finally, the study determined the fitness of the model. It adopted Cox and Snell R Square and Nagelkerke R Square because scholars advised that more than one test are important in establishing goodness-of-fit to enhance each others accuracy (Hooper, Coughlan, & Mullan, 2008).

Findings and Discussions

(a) Gender in food processing industry

The study examined effect of gender on performance of Kenyan agro-food processors. Kenya has had a long-standing cultural traditions and subjective social norms that defined gender roles which also influenced perceptions of the two sexes on using current technology for producing advantageous products. The survey results showed that most of the MSEs n=87, (65.9%) were men-owned with only n=43, (32.6%) women-owned. The results showed gender disparity in food processing sector. Muluku-Mutuku, et al (2000) observed similar findings during their study. Elsewhere Longwe (2002) attributed the low participation of women in micro and small food processing to existing socio-cultural obstacles. The observed gender divide in food processing could potentially imply that women were technology averse which is not the case. They perceived themselves with low esteem; that food processing was a reserve for men. It could also mean that the technology employed for processing foods was masculine in design and meant for men role (World Bank, 2009). The overall implications are that women in Kenya have missed out on economic opportunities that food processing sector unveils. The opportunities include skills development, employment, increased incomes for women and enhanced capabilities to counter stiff competition from overseas products (Leeuwen, 2007; Rottger & Da Silva, 2007).

(b) Advantageous food processing in Kenya

Advantageous food is defined by profitability, meeting market demand and uniqueness. These cues gave food products comparative advantage over rival products at the marketplace. The micro and small agro-food manufacturers interviewed agreed that on average n=130(98.5%) of their products were advantageous. The self-perception implies that the entrepreneurs were conscious of making products that would face globalization challenges of free trade and hi-tech products competition at the same time addressing nutritional needs of the market. The study responses resonate well with the report that predicted survivability of indigenous processing enterprises on making of profitable, market-focused and unique products (Council of Agriculture, 2002).

(c) Gender and food processing relationship

After determining gender and advantageous food processing, the study embarked on evaluating the relationship between the two variables. The study adopted Pearson correlation and logit regression techniques to measure the relationships. Pearson correlation examined the relationship between the criterion variable (processing advantageous product – Y) and the predictor variable (gender – x variable) as indicated in table 1 below

d) Table 1: Gender -Advantageous Product Pearson's Correlation

Correlations			
		Sex	Advantageous product
Your gender	Pearson Correlation	1	-.110
	Sig. (2-tailed)		.214
	N	130	130
Advantageous product	Pearson Correlation	-.110	1
	Sig. (2-tailed)	.214	
	N	130	132

Source: Author's Survey Data, 2016

Table1 shows that 130 responses were successfully analyzed using the Pearson's correlation technique and results showed a weak inverse (r = -0.110) relationship between gender and the advantageous food processing. The self-reporting responses indicate a slight gender bias in agro-food processing, favoring men (coded 1) to women (coded 0). This also meant that about 1.2 % (0.11^2) was the variance shared between the two variables. In other words, gender accounted for only 1.2% of the variance (0.11^2) in processing advantageous food products.

Further logistic regression was employed to predict advantageous products using gender using dichotomous data. Therefore, the responses that were generated as ordinal data on a 7 point Likert scale were transformed into binary or dichotomous data; that is 0 or 1. The values were expressed as indices of each respondent's highest score divided by the maximum expected score. All values below 0.5 were considered 0 and all values above 0.5 were considered 1. A simple regression was run using SPSS and table 2 below was generated.

g) Table 2: Gender - Product Wald Test

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	A2sex	-1.434	1.239	1.339	1	.247	.238
	Constant	5.888	2.138	7.585	1	.006	360.780

a. Variable(s) entered on step 1: A2sex.

Source: Researcher, 2016

The aims of regression analysis were: to describe the way in which processing of advantageous food product varied with gender among *jua kali* manufacturers and test the hypothesis. Regarding accounting for change in advantageous product processing the study put the variables into a model equation for easy interpretation as below shown.

Log [p/(1-p)] = 5.888 - 1.434X_1+ 1.239

According to the results in table 2, unit increase in gender roles accounted for a decrease in processing advantageous products by 1.434. The study also showed that if gender variable was rated 0, processing advantageous product would increase by 5.888.

Next was testing of hypothesis. The hypothesis to be tested was: H_0: gender *did not significantly influence the processing of advantageous food products in Kenya.* The table 2 results show *(Wald (1) = 1.339, p= 0 .247, sig > .05, 2 tailed)* at confidence level of 95% or P-value of 0.05 significance levels. The P value (0.247) is greater than the sig. value (0.05). The null hypothesis is upheld thus gender did not significantly influence the processing of advantageous food product among the MSEs in Kenya. There was hardly enough evidence to warrant significant influence on making advantageous foods by gender among micro and small agro-food processors. In other words, women and men had equal capabilities in processing advantageous foods. Roppel, Desmarais and Martz (2006) found similar findings among farm women in Canada and all gender covenants have upheld this to fact.

Despite the fact that gender did not cause significant influence on processing highly competitive food commodities in Kenya, the entrepreneurs (both men and women) in the *juakali* sector harbored an attitude and perception that favored men. According to many studies these feelings have permeated into individuals, societies and institutions, mostly in developing nations and have cost women progress and sustainable development (Polar, Babini, & Flores, 2015; Gicheru, 2013; Spence, 2010). To correct these perceptions in all phases of food value chain, Roppel, Desmarais and Martz (2006) observed that it is not a matter of chance but rather that governments, regional inistitutions and development partners must take a lead in developing and diffusing mission oriented policies that are inclusive and more market-oriented to mainstream gender in food processing. In Latin America and Caribbean, mainstreaming gender, led to 11% drop in maternal deaths, drop in poverty and increased food security and environmental sustainability between the year 2000 and 2010 (Polar, Babini, & Flores, 2015).

After hypothesis testing, the study finds out the reasonableness of the claim. This is done using likelihood estimates and pseudo R square tests as shown in table 3 below.

f) Table 3: Model Fit Test Results

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	27.098[a]	.011	.056

a. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001.

Source: Researcher, 2016

Maximum likelihood estimation (MLE) estimates the model fitness using the coefficients. The likelihood function (L) measures the probability of observing the particular set of highly advantageous product values in the sample. The higher the likelihood function, the higher the probability of observing the highly advantageous products in the sample. MLE involves finding the coeffients (***a***, ***B***) that made -2 times the log of the likelihood function (-2LL) as 27.098 as shown in table 3. The Cox and Snell Pseudo R^2 formula estimates the proportion of variance in advantageous product processing accounted for by gender predictor, the strength of association between gender and the advantageous product variables and if the model fitted the data based on log-likelihood. Because $R^2_{C\&S}$ could not reach a maximum of 1, statistics from the $R^2_{Nagelkerke}$ was applied to adjust for the realization of the maximum value. Based on the model, variation in the highly advantageous products ranged from 1.1% to 5.6%, depending on whether the Cox & Snell R^2 reference or Nagelkerke R^2 methods, respectively. The model fits the data because it has met the requirements of goodness of fit which is between Likelihood Ratio Index (LRI) of 0(model with no predictive value) and 1(model with a perfect fit).

Conclusion

To improve the state of food and manufacturing in Kenya, focus should be on women rights and their empowerment to close the gender gap. This is because this study has shown that both female and male agro-food processors have equal potential to manufacture advantageous foods that meet market demand and compete globally. However traditionally and culturally driven attitudes and practices still stifle women's participation at food processing phase. Efforts need to be enhanced to challenge cultural values that affect these two agenda. It is important, therefore, to bring women on board in food processing to exponentially enhance food security. For this to happen, reconstruction of individual and community mindsets is paramount. Regional institutions, states and development agencies must champion women empowerment. Specifically, the study suggests the following policy and practical interventions.

Policy interventions

1. Regional bodies like European Union (EU) and East African Community (EAC) with stronger infrastructure, polity and influence should cause diffusion and adoption of gender equality among states, especially in food value chain.
2. The two levels of government should create legal framework that mainstream gender in all phases food value chain.

Practical Interventions

1. The national and county governments through agriculture and industrialisation department should keep data of all food processing enterprises disaggregated by gender and size.
2. The governments should improve food processing sector through developing mega food parks and draw food maps for processing and marketing for export market.
3. The governments, nongovernmental organisations and private sector should provide credit and trainings targeting women in food processing.
4. The governments, nongovernmental organisations and private sector should mobilise women into welfare groups to conscientise the society on importance of gender balance in food value chain and participation in development.
5. Fabricators should come up with technologies that handle female tasks in the food processing industry.

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Influence of Media Training on the Competence of Journalists in Kenya: Perceptions of Standard Group Limited Managers and Senior Journalists

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Abstract

A number of researches have indicated that training institutions have failed to impart skills and knowledge to students that would be transferred to the industry upon graduation and employment, hence the quality of journalists graduating is wanting. The purpose of this study was to investigate the influence of media training on the competency of journalists in Kenya. Curricula were sampled from selected Kenyan universities and adequacy of training material investigated. Non-probability sampling procedure involving purposive and snow-ball sampling methods were used to identify the 9 participants comprising media managers and senior journalists in one media organization. Data was analysed thematically and presented in a narrative form in accordance with the themes. According to the SG media managers and senior journalists, journalists trained in Kenya lack practical skills required in the job market. Consequently, media houses are recruiting graduates in other disciplines such as English, Medicine, and Law while others have resorted to re-training the new recruits. It is recommended that media training institutions, regulators and other stakeholders should revamp existing curricula with the view to making them competency based.

Keyword: Influence of Media, Journalists, Perceptions Standard Group Limited, Managers and Senior Journalists.

Introduction and Background of the Study

Performance of media in Kenya is closely related to the level of journalism training where appropriate training provides students with knowledge and skills to write accurate, fair, balanced and impartial stories (Mbeke, 2010). In the 21st Century, there has been a move from traditional journalism to online journalism, bringing on board mixed news media which required professional journalism across many media platforms.

According to Haak, Parks, and Castels (2012), in a technology-driven environment of accelerated transformation, journalism has gone through a gradual transformation in the way it is produced, distributed and consumed by the audience. Haak et al. (2012) further argued that many journalists are of the view that journalism is facing a crisis because competition has increased, forcing media owners to overwork personnel in the news organizations to do more for less. This increase in workload however, is not comparable to investment in staff training.

The Kenyan media has not been left behind in the adoption of the new technologies. According to Mbeke (2010), a majority of media houses in Kenya have established internet services which they use to disseminate information and many of

them have websites where they engage in internet journalism including blogging. The new technologies have led to the rise of citizen journalism where the public collect and share new information (Mbatia, Busienei, & Ndonye, 2014).

However, despite the blooming technologies, a number of researches have indicated that training institutions have failed to impart skills and knowledge to students that would be transferred to the industry upon graduation and employment (Gichobi 2015). The media in Kenya is thus criticized for its one sided reporting and sleazy tabloid style of pornographic content (Lando, 2013). The critical question to this research is to examine what the training institutions and media houses in Kenya are doing to salvage the industry, gain the trust of the public and continue to mentor young up-coming journalists (Wefwafwa, 2014).

Blom and Davenport (2012) observed that many researchers in and out of the journalism discipline are skeptical about the significance of the journalism degrees conferred and their lack of "great prestige" in comparison to other disciplines like the law schools, medicine and engineering schools.

Problem Statement

A study done by Wefwafwa (2014) on training standards in Kenyan media colleges established that, they lack common journalism training standards; henc, the quality of journalists graduating is wanting. Part of the reasons for this low journalism practice standards is inadequate training, inexperienced lecturers, ineffective regulation of the training institutions and inadequate funding (Ireri, 2017).

Berger (2009) noted that complaints have been made by the media stakeholders that many training institutions offer low quality courses, consequently, flooding the industry with "half-baked professionals". Due to this short fall, recruiters from media companies are not always contented with the qualifications of recent graduates and that skills acquired by the journalism trainees often do not meet the expectation of employers (Kaane, 2014). This has been echoed by Linus Kaikai the Kenya National Televison (NTV) Managing Editor who emphasizes that media schools should invest in producing fully qualified journalists who do not need further training upon joining the job market (Gichobi, 2015).

According to Lohner, Banjac, and Neverla (2016), Media Council of Kenya (MCK) is the body mandated in part to register and accredit journalists by certifying their competence has not articulated the official standards that are the basis of quality training of journalists in universities in Kenya.

As a stop gap measure, media houses have opted to retrain their new staff before they are fully assimilated into the media house. The question then arises, whether or not it is the responsibility of media house' to retrain or to work with market ready graduates; A case in point was the arrival of China Global Television (CGTV) in Kenya in 2012, which saw local stations such as National Television (NTV0, Kenya Television Network (KTN), Mediamax and K24 lose well trained and talented broadcast journalists. An immediate result was the reorganization of the affected stations with some stations pulling some of its programming and KTN's ratings

plummeting. Some media houses have had to counter-poach so as to fill in the gaps of journalists who leave (Wasserman, 2015).

This research sought to identify the shortfalls of journalism graduates from the perspective of a media house and make an assessment of the approaches which can be adopted by journalism training institutions of higher learning in meeting thedemands of media houses.

Research Questions

1) Were Kenyan journalists competent in relation to their training?
2) How adequate were the training facilities for media training in universities in Kenya?
3) In what ways did industry regulations influence journalism practice in Kenya?
4) How did institutional curricula influence professionalism of journalists in Kenya?

Training of Journalists

Journalism has shifted from the basic publishing or broadcasting into interactive dialogue with the audience, often in real-time as events continue to transpire and evolve. In fact, Krachvuk (2011) observed that journalism is no longer about publishing anymore; rather it entails communicating and having a conversation with the audience. Due to this rapid evolution, journalists are now faced with a challenge to understand and make use of all these new media tools and this can be daunting especially with no proper training. New media journalism now requires journalists not only to make pictures but also to shoot videos and create multimedia content.

Krachvuk (2011) argued that in order to be marketable in the job market, every journalist should have a certain set of skills he or she can use. These include: ability to use software for graphics and video editing and blogging and familiarity with the basics of hypertext mark-up language (HTML), cascading style sheets (CSS) and viral marketing (Kravchuk, 2011). This means that journalism trainers and the media industry need to equip their learners and staff with hands-on skills that will make them relevant in the industry and not declare them redundant as is the case now being witnessed in several media houses in Kenya where a number of staff have been laid off.

According to UNESCO (2013), communication training and education in Africa is an import from North America and Western Europe and so is inspiration for teachers, curricula and textbooks. Most of the trainers are Western educated, curricula a replica of the Western models, and most books written and published in the West. Courses offered in journalism training curricula in Africa vary from one area to another. Emphasis is laid on the skills training with print and broadcast journalism, advertising and public relations dominating the curricula in East and Southern Africa. In West and Central Africa, as well as in South Africa, the curricula generally combine

both the theoretical and practical courses. Courses offered range from certificate to diploma courses, Bachelors, Masters and PhD programmes (UNESCO, 2013).

Competency of Journalists

According to UNESCO (2007), the practice of journalism requires a spectrum of competencies which include: competency of general knowledge and intellectual capability, research, writing, editing, design and production; ability to use the tools of journalism practice and adaptation to new technologies and be innovative in the formulation and dissemination of information; must have a professional understanding, including a background in ethics; the importance of journalism in society, the history of journalism, organization of the news media, as well as laws and ethics that apply to the journalism practice.

Clarke (2014) developed a pyramid for competent journalists whose cornerstones were anchored on news judgment and reporting. The foundation also included language and analysis while the central stone was technology, in between was audio-visual knowledge and numeracy and near the top civic and cultural literacy and at the peak ethics. According to Clarke, his pyramid of competence reaches the peak with a grounded understanding of mission and purpose of journalism.

Figure 1: Pyramid for Competent Journalists
Source: Clarke (2014)

Clarke (2014) argued that journalism is an initiative that creates wealth that can be used to influence better dissemination of information. Even though conflicts between professional and commercial interests exist and are almost unavoidable, all involved in the enterprise must have a clear vision of the mission and purpose as to why they exist. According to Godkin (2008), unlike the established professions such as medicine, engineering, law and others, any standard of journalistic competence must be centered on the practical application rather than theory as displayed by Lave and Wenger's situated learning theory.

Adequacy of Facilities in Media Training

One of the challenges faced by media trainers in Kenya is deficiency of contemporary equipment and resources, which inadvertently compromises quality. According to Mbeke (2010). Many journalism schools in Kenya have not adopted the new journalism approaches such as e-journalism, citizen journalism and digital photo processing. Mbeke (2010) maintained that the School of Journalism and Mass Communication at the University of Nairobi does not have a single studio for training broadcast journalism and that only a few universities namely; Daystar University, United States International University and Kenyatta University are well equipped with studio facilities for training broadcasters.

The cost of training is also high and therefore discouraging for many young students aspiring to pursue careers in the media. Private training institutions seem to have better facilities than government ones (Mbeke, 2010) yet, the need for specialized journalism training is important. It is also critical to take note of current concerns such as gender and development in journalism training in Kenya in order to enhance the quality of journalism products.

Curriculum Development and Design

Davenport and Blom (2012) argued that in order to effectively carry out the respected assignment of preparing students to be successful and competent journalists, educators should make critical decisions on the core journalism curriculum and other courses that all journalism students must undertake to graduate, no matter their intended area of specialization. The media industry has been in constant motion with new develop compelled widespread discussions about the responsibilities in higher education for training journalists, trainers and educators to continually experiment on innovative ways to create the ultimate and super curriculum to serve their undergraduate students, at the same time, they also struggle to find the right formula to implement and integrate skills and theory classes.

Role of Regulation in MediaTraining

A number of institutions are responsible for ensuring regulation of the media and journalism practice in Kenya. However, regulation of training institutions is unclear. Media training is somehow unregulated and the standard of journalism education varies significantly even though the UNESCO Model Curricula for Journalism Education is taken into consideration by several institutions (Lohner, Banjac, & Neverla, 2016).

The Media Council of Kenya is the body that sets media standards, regulates and monitors compliance. According to AMWIK (2014), The Media Council Act 2013 is an Act of Parliament that gives effect to Article 34 (5) of the Constitution which provides for Freedom of the Media. The Media Council Act, 2013 empowers the Council to consider and approve applications for accreditation by training institutions that want to offer journalism programmes. This is to ensure that such institutions

include the basic minimum in the training curricula as prescribed by the MCK in conjunction with other relevant authorities.

However, MCK has raised a concerns that the level of funding by the government is inadequate to enable it run its operations (Cheploen, 2016).

Theoretical Framework

This research is anchored on Situated Learning Theory. According to Collins, Brown, and Newman (1988), situated learning also known as situated cognition is a learning theory propagated in the late 1980s by Jean Lave and Etienne Wenger and later expanded by John Seely Brown and his fellow researchers. This theory is based on the assumption that knowledge should be offered in an authentic context that should involve its application (Aydede & Robbins, 2009). The authors opine that learning should not be seen primarily as transmission of abstract and contextualized knowledge between individuals, but rather be a social process within pre-determined conditions to include activity, context and culture.

According to Lave and Wenger (1991), training can make use of the two main ideologies of situated cognition into classroom practice: Firstly, the trainer should present an authentic context and secondly, encourage mutual interaction and collaboration. The founders of the theory believe that rich contexts can replicate the learners' view and understanding of the real world and expand on the knowledge being transferred to them in different circumstances.

The theory of situated learning necessitates the introduction of new modes of practice in how instruction is designed and conducted both in schools and other instructional settings. The dynamic of instruction must be designed in such a way as to accommodate negotiation of situational intent between teacher and student, who together must deal with the identifiable resources and conditions of an immediate instructional context (McLellan, 1996).

Methodology

This study adopted a case study design. Yin (2009) described a case study as an empirical inquiry that investigates a phenomenon in detail and this is done within its real-life context especially when the borders between the phenomenon being investigated and its context are not clearly evident. The case of a local media house helped to reveal any issues experienced by media managers and senior journalists. Standard Group Kenya offered the typicality of conditions experienced in other media houses in Kenya.

The choice of this case study was guided by Zainal (2007) who described a case study as a method that enables researchers to closely scrutinize data within a specific context and that in most cases; a case study method selects a small geographical area or a limited number of individuals as the subjects of the study.

This study was situated in an instrumental case study where the case itself was secondary to understanding a particular situation or phenomenon. Besides, in instrumental case study, the focus is more likely to be known prior to the study and

designed around established theory. Lastly, a collective case study involves exploration of multiple instrumental case studies (Stake, 2005).

This study targeted media managers and senior journalists at the Standard Media Group. Equally, relevant documents such as curricula from the University of Nairobi, Daystar University and Riara University were analyzed. The University of Nairobi was chosen because it is among the first public universities to offer journalism, Daystar was among the first in private universities while Riara University started offering the journalism programme in early 2017. 12 participants from the Standard Group were interviewed.

Result and Discussion

Results for data on perceptions on the competence of Kenyan journalists, adequacy of training facilities, influence of industry regulations on journalism, and the influence of institutional curricula on journalism training are presented in this section.

Competence of Kenyan Journalists

Participants identified various competency related issues in the media industry which emanate from training. Through the lenses of news judgement, language and analysis, technology and audio-visual knowledge, all the participants from radio, Television, online and print sections commented on the fact that Kenyan journalists are not competently trained to handle the rigorous work environment.

Overall, the findings from media managers and senior journalists indicated that media training in Kenyan schools was wanting and that they were churning out graduates that could not perform optimally in the industry once employed. The Kenyan new recruits were not competently trained; raising issues as to whether the students were taught by people who had experience in the media. These findings are in line with report of Ireri (2017) on mass communication training in Kenya, where 91% of the participants sought additional training. This could be due to the lack of qualified teachers which was likely to create a feeling among Kenyan journalists that they needed further training.

With consideration to UNESCO's model curricula, competencies and the findings of this research, Kenya's journalism training appeared not to meet the minimum requirements for impactful training. According to UNESCO (2013), one of the bases for journalism training is the internal capacity of a school which covers infrastructure, curriculum, qualifications, experience of teachers and opportunities for media production.

Media houses were forced to re-train the new recruits especially on issues that could be taught in school such as house policies. But media houses did not however re-train the graduates afresh as it was expensive. This has been the outcry by media practitioners that the new recruits were not properly trained as expressed by the General Manager of Nation Media Group, Linus Kaikai, that media schools should invest in producing fully qualified journalists who do not need further training upon joining the job market (Gichobi, 2015).

Adequacy of Facilities in Media Training Schools

In relation to adequacy of facilities, communication scholars such as Mbeke (2010) and Ireri (2017) have documented lack of modern equipment and resources for media training in schools. Their argument is that the kind of journalism training which occurs in Kenya is outdated. This was confirmed by the participants who indicated that they did not have the facilities to aid in media training. whereas Mbeke (2010) opined that private universities are better equipped to offer media training; some of the participants trained in private universities reported that the facilities were not adequate.

Two participants who trained abroad reported that they had the required facilities hence the training was more effective and hands-on. One participant did not know how to operate a camera even though he had gone through four-year training in communication in Kenya but when he went abroad he was taught how to use a camera within a few weeks of enrolment. The participants generally observed that Kenyan media training institutions were sufficiently to investing in training facilities.

Due to inadequacy of facilities, students encountered some equipment for the first time when they got employed. A respondent lamented that most of the students were so 'green' that some of them could not handle basic equipment such as computers yet they had graduated with diplomas or degrees in media. This is contrary of some of the competencies outlined by UNESCO (2007) that journalists in all media houses should know how to operate both Macintosh and Windows desktop and laptop computers, use word processing and picture editing programs, and create a simple data base of their work. With the new technology and globalization Kenyan journalism students and graduates cannot compete at par with their counterparts from other countries such as Brazil where journalism schools adjusted to the technological changes by installing laboratories, creating new subjects and purchasing new equipment (Tarcia, 2008).

Influence of Industry Regulation on Journalism

Participants were of the view that the regulators both in the training and in the industry have not executed their mandate as required. One of the predicaments of the Media Council of Kenya was that the organization had only managed to register journalists and issue press cards as reported by one of the participants. MCK had also managed to offer some training to media practitioners but the organization had not managed to regulate training in the journalism schools as it was stipulated as one of its roles. The Media Council Act, 2013 empowers the Council to consider and approve applications for accreditation by educational institutions that seek to offer courses in journalism. This is to ensure that such institutions include the basic minimum in the training curricula as prescribed by the MCK in conjunction with other relevant authorities (AMWIK 2014).

MCK prepared and launched a standardized curriculum for media training in middle level colleges in Kenya in 2016 but more than a year later, the organization has

not given any directions as to how the curriculum should be implemented. A respondent argued that MCK does not have the capacity to play its role effectively, indeed, this was confirmed by Cheploen (2016) that the council had complained that the government had not funded it adequately to enable it carry its operations.

The commission for University Education Kenya was also faulted for not having the capacity to carry its mandate. The argument was that CUE seem not to consult with the professionals in the media industry to obtain advise on requirements for media training. For this reason, universities are designing programmes which get approved but they do not have the basic facilities and experienced to offer the training.

There was a suggestion that other organizations such as Communication Authority of Kenya (CAK), Kenya Bureau of Standards together with the Ministry of Education (KEBS) should play a role in ensuring training standards in media schools should be adhered to. It was suggested that KEBS should give an approval on the media equipment imported into the country. CAK has been advocating for broadcast of local content on Kenyan media but if the students are not being trained on how to come up with the local content, then the media houses suffer.

Influence of Institutional Curricula

According to the findings, there were gaps in the training curricula of journalism. The units offered did not seem to serve the purpose of instilling the right skills and expertise in the students. Studies reveal that countries such as the US redesigned their curricula and developed new courses to prepare students for practicing news in multiple media platforms (Castaneda et.al 2005). Lanerolle and Harber (nd) suggested that the core curriculum should move away from the print bias that has dominated most journalism teaching, to a more 'media-neutral' position where there is a balance in the need to prepare students for the job market and also to prepare them for the constant change in the media industry due to new developments.

According to most of the participants, students were given more theoretical classes as compared to practical sessionsdue to inadequacy of facilities even though the curricula indicate that these units should be taught practically. Students therefore graduated without gaining the much needed hands-on skills and they had to be retrained once they got employed. According to CUE guidelines, university curriculum is often designed by the individual departments with the more experienced lecturers giving their input regarding the content to be included in the curriculum. The findings corroborate Mwebi (2015) argument that the curriculum development process at the university level in Kenya is facing a myriad of challenges in this century where university expansion and enrolment has reached an all-time high.

According to UNESCO (2007), for journalists, competency in the national language and the language they use in their work is essential. In many countries, and for journalists hoping to work beyond their national borders, competency in English and other languages is recommended. The findings reveal that most of the Kenyan

journalism students are not competent in language especially English hence media employers especially in print prefer to hire graduates of English Literature. The University of Nairobi, Daystar University, and Riara University offered one unit in English; and unit in Kiswahili.

A respondent who studied Communication and Literature revealed that the units he studied in Literature helped him improve his creative writing skills. The units were Introduction to Prose, Creative Writing, and Stylistics. This had been revealed by Philip Ochieng that Kenyan reporters are not the most educated in the dominant language of Journalism-English (Wanjohi, 2015).

The findings revealed that journalism schools are not up-to date with the new developments in technology which are shifting the way news is produced and consumed by the audience. Participants advised that media schools should train more on Online Journalism, Social media management and data mining and management. A study by Kwanya (2014) revealed that the World Wide Web and social media have taken the center stage in journalism leading to rise of new media concepts such as online journalism, citizen journalism, community journalism and civilian journalism and that journalists need new media skills which can be learnt from webmasters and those newspapers need not hire journalists but senior content producers who can create multimedia content and write articles as well.

Specialization or beat reporting is crucial in news reporting. Media houses prefer to hire graduates of areas such as Medicine, Law, and Business among other key areas to report on the relevant disciplines competently. In contrary, Mbeke (2010) observed that most training institutions offer courses that are general in nature. It is therefore necessary to mainstream topical issues and concerns such as gender and development in journalism training in Kenya in order to enhance the quality of print, reporting, and broadcasting.

In accordance to UNESCO (2007) on the competency of journalists, a specialized knowledge of at least one subject area is important to journalism. This was reiterated by His Highness the (Aga Khan, 2017) that journalists should specialize in areas such as economics, agriculture, religion and report well on them. The University of Nairobi has elaborate units in the beats of health, business, education among others. Daystar University appears not to offer any specialized units while Riara University offers a unit called Specialized Reporting, although, it is impractical for students to master any of the beats in one semester.

The period it took to train journalists was challenged. Undergraduate courses should take four academic years as per the CUE requirement. The duration for diploma programmes is not clear as some take one year while others two years. The proposed standardized middle level training curriculum should take a minimum of three years. At the University of Nairobi, students are taught for three hours over a duration of fifteen weeks which makes forty-five credit hours per unit. At Riara University, out of the fifty-three units on offer, eight of them which were heavy on practical had been given four credit hours per week therefore giving a total of sixty hours per trimester. The arguments by the participants was that the course content for

some of the units need to be re-looked into particularly in reference to a unit called writing for media at Daystar University where students were expected to learn how to write for broadcast, print and online within a semester.

A respondent suggested that students should produce broadcast programs every semester; and take a number of other units every semester. This would potentially lead to students being overloaded. This was mentioned by Lanerolle and Harber (n.d) who gave an example of Witswatersrand University in South Africa which collaborated with Multichoice and experimented on the idea of having students making short programmes that would be broadcasted on one of the DSTV mobile broadcast channels. The course demonstrated the challenge of having students undertake practical work in more than one medium simultaneously; the stress would sometimes be too much that it compromised the students' learning. Nevertheless, the students will have enough portfolios to show case to their potential employers and this gives them an upper hand in job searching.

Conclusion

Overall, the study revealed that journalists trained in Kenya are not competent and lack practical skills relevant to their tasks once employed. Due to this reason, media houses are recruiting graduates of other disciplines such as English, Medicine, and Law among other key areas. Some media houses have resorted to re-training the new recruits to enable them perform their duties. Journalists are of the opinion that training schools should do better by investing in the right infrastructure to aid in media training. On the other hand, universities are introducing journalism programmes yet they have not done appropriate research to find out what is required in terms of facilities and trainers. The regulators have also failed to play their role by ensuring there is quality in journalism training. Universities, regulators and media houses need to intervene so as to salvage the journalism industry and redeem its name.

Recommendations

The study made the following recommendations:

1) Media trainers need to be in touch with what is currently happening in the industry and impart the right skills to the students.
2) The trainers need to have some media experience so as not to teach the students from books but from the knowledge they have acquired from the industry.
3) The trainers need to be more rigorous in training so that the students get used to the pressure of working in the media and beating strict timelines.
4) Training institutions should invest in the right facilities to enable students get practical skills.
5) Training institutions should ensure that they admit manageable numbers of students per class so that they all have an opportunity to learn how to use the equipment and software. Small numbers ensure maximum attention is given to the students and interaction becomes easy.

6) Training institutions should collaborate with the media industry through short programmes where students and the media professionals interact and have meaningful discussions, offer internships, and apprenticeship opportunities to the students. The professionals can also mentor the young upcoming journalists so that there is continuity in professional dissemination of information. Collaborations with the industry will also ensure that students have access to the facilities that are being used in the media houses.
7) Trainers should be at the fore front in coming up with new innovations to aid in media training and dissemination of information. This can be through carrying out research in new areas. A suggestion was given for schools to give skills on Virtual Reality which is the next big thing in the world.
8) Universities should form associations and partnerships with players in the industry so as to evaluate the methods of training and address any difficulties encountered in training.
9) Training institutions should involve experts in curriculum development so that they do not just replicate curricula of other universities but rather do intensive research and understand the needs of the industry and what new areas to include in the curricula.
10) Universities should carry out curricula reviews in conformation to CUE requirements, reviews will ensure that new market trends are captured.
11) There is a need for regulators both in the training and in the industry to play their active role in ensuring journalists are competently trained. They should carry out research on requirements of the industry and ensure schools meet the requirements before they are allowed to offer journalism programmes. MCK should ensure it rolls out the proposed standardized curriculum for middle level colleges and together with other bodies such as CUE instill the same standards in the training of journalists at the universities.
12) Media houses should have an interest to find out how training is done in schools and offer solutions on the best practice rather than resorting to hiring graduates of other programmes who do not have any media training. Media houses also have an upper hand in redeeming the media industry right from the training; this could be through their willingness to collaborate with training institutions and offering internships to students. At the end, it will be a win-win situation whose effect will roll down to the audience whose media needs will be met.

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Effect of Credit Risk on Financial Performance of Commercial Banks in Kenya.

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Abstract

Commercial banks play a vital role in the modern-day economies. The core business of the banking sector worldwide is creation of credit to deserving and deficit units of the economy, a role that also happens to be the main income generating activity for the banks. This activity comes with huge risks; both to the lender and the borrower. Banks are particularly subjected to a wide array of risks in the course of their operations. These risks generally fall into three categories namely: financial, operational, and environmental. Of these risks experienced, credit risk is of great concern to banking management and regulators as this can easily lead to bank failure. This study investigated the effect of credit risk on financial performance of commercial banks in Kenya. The study sought to operationalize credit risk through capital to risk weighted assets, asset quality, loan loss provision as well as loan to advance ratios while financial performance was measured by return on equity (ROE). Secondary data was extracted from audited financial statements of all the 44 commercial banks under the purview of Central Bank of Kenya (CBK) for the 10-year period covering 2008 to 2017. The study adopted longitudinal research design using an in-depth analysis of entities over a lengthy period of time. Regression analysis were used to estimate the relationship between the independent and dependent variables. The F and t ratios will be used at 95% confidence level to determine the significance or otherwise of the overall model and the respective coefficients of the independent variables respectively. Findings of the study will be useful to academicians and management of commercial banks as well as policy formulators.

Keywords: Credit Risk, Financial Performance, Commercial Banks.

Introduction and Background of the Study

Kenyan banks are inevitably exposed to credit risk because they grant credit facilities as they accept the deposits. Credit risk is the possibility of losing the outstanding loan partially or totally, due to credit events (default risk) (BCBS, 2001). Credit risk is the exposure faced by banks when a borrower (customer) defaults in honoring debt obligations on due date or at maturity (Coyle, 2000). Kargi (2011) indicated that credit creation is the main income generating activity for the banks. As a result, adequate management on loan processing is critical for the growth and survival of the banks otherwise the credit activity may lead to financial distress.

Central Bank of Kenya (CBK) supervision annual report 2013 indicated that the ratio of non-performing loans to gross loans increased from 4.7% in December 2012 to 5.2% in December 2013. Later the ratio increased from 5.2 % in December 2013 to 5.6 % in December 2014 and CBK was monitoring closely institutions that were experiencing deteriorating asset quality. The report also pointed out a decrease in sector's capital adequacy, as measured by the ratio of total capital to total risk weighted assets in the same year. The increasing level of non- performing loan rates in banks books, poor loan processing, undue interference in the loan granting process, inadequate or absence of loan collaterals among other things are linked with poor and ineffective credit risk management that negatively impact on banks performance. It is therefore crucial to analyze whether the credit risk indicators are affecting the financial performance of the banks in the study attempting to make a modest contribution to literature on credit risk.

According to Mudge (2000) a consistent framework for evaluating firm wide risk and returns across diverse financial activities is key to evaluating the benefits of potential mergers among banking firms. Brown and Manassee (2004) observed that credit risk arose before financing of business ventures. Banks and other intermediaries can transfer the payment delays and the credit risk among producers, or between producers and outside investors (Demirguc-kunt&Huzinga, 2000). Afriyieet al. (2012) examined the impact of credit risk on profitability of rural and community banks in the Brong Ahafo Region of Ghana and reported a significant positive relationship between non-performing loans and rural banks' profitability showing higher loan losses but banks still earn profit. Kithinji (2010) analyzed the effect of credit risk (measured by the ratio of loans and advances on total assets and the ratio of non-performing loans to total loans and advances) on return on total asset in Kenyan banks. Results showed that the bulk profits of commercial banks is not influenced by the amount of credit and non-performing loans, implying that there are other variables besides credit and non-performing loans impacting on banks' profit.

Commercial Banks in Kenya

According to CBK supervision report of December 2013, 30 of the 44 commercial banks are domestically owned and 14 are foreign owned and that foreign banks account for about 34% of the banking assets as at 2013. The Kenyan financial system is dominated by commercial banks as financial intermediaries that act as conduits between the surplus economic units and the deficit economic units (Beck, Demirguc-Kunt& Levine, 2009). According to Rose (2002), a commercial bank is simply a business corporation organized for the purpose of maximizing the value of the shareholders' wealth invested in the firm at an acceptable level of risk. Even if the institution is member-owned or has a philanthropic motivation, the principle of earning a profit still applies. Obtaining a positive net income is imperative for permanency and sustainability. What may differ between a for-profit and a not-for-profit institution is the degree of profit accumulation and use of those profits.

Commercial banks are licensed and regulated pursuant to the provisions of the Banking Act and the Regulations and prudential guidelines. They dominate Kenyan Banking arena hence closer attention is paid to them while conducting off-site and on-site surveillance to ensure compliance with the laws and regulations. The banking industry has been earmarked as a key pillar to the achievement of vision 2030 (a long-term strategy to achieve sustainable growth by year 2030) through increased savings, encouragement of Foreign Direct Investment (FDI), safeguarding the economy from external shocks as well as propelling Kenya to become a leading financial center in Eastern and Southern Africa.

Government of Kenya statistics reported an alarming 45% annual average increase in number of economic crimes (GOK, 2011) leading to loss of a staggering Kshs 1.7bn in the three months August to October 2010 with Commercial banks losing Kshs 761Milion in the first six months of 2010 through fraud, according to the Central Bank of Kenya (PwC, 2011). The Government of Kenya earmarked the banking sector as one of the key pillars to the achievement of vision 2030. Thus within the Medium Term Plan (2008-2012) under vision 2030, some of the target areas include development of a safe and reliable payments system to ensure smooth transfer and settlement of funds between customers and banks as well as between banks. To this end, use of mobile phone networks, internet, payment cards, operational resilience and security will be pursued in order to increase trust, integrity and confidence in the ICT based payment systems (Government of Kenya, 2008). In comparison with other East African economies, Kenya's banking sector has for many years been credited for its size and diversification. Private credit to GDP, a standard indicator of financial development, was 23.7% in 2008, compared to a median of 12.3% for Sub-Saharan Africa. Based on the same indicator Kenya is ahead of Tanzania which has 12.3% and Uganda with 7.2% (Beck, Demirguc-Kunt& Levine, 2009).

Finance Distress Theory

Baldwin and Scott (1983) purported that when a firm's business deteriorates to the point where it cannot meet its financial obligation, the firm is said to have entered the state of financial distress signalled by violations of debt payments and failure or

reduction of dividend payouts. Whitaker (1999) defines entry in financial distress as the first year in which cash flows are less than current maturities' long-term debt. The firm has enough to pay its creditors as long as the cash flows exceeds the current debt obligations. The key factor in identifying firms in financial distress is their inability to meet contractual debt obligations.

However, substantial financial distress effects are incurred well prior to default. Wruck (1990) stated that firms enter into financial distress as a result of economic distress, declines in their performance and poor management especially on risks. Boritz (1991) depicts a process of a financial distress that begins with an incubation period characterized by a set of bad economic conditions and poor management which commits costly mistakes. The relevance of the financial distress theory emanates from liquidity and credit risks facing a firm. In the case of commercial banks, it is defined by inability to provide cash to depositors and loans to borrowers as and when the demand may constitute a liquidity crisis. Credit risks in banks lead to financial distress and must therefore be addressed. Loan portfolio management is an important determinant of the firm's liquidity. The banks should thus manage the credit and liquidity risk in order to avoid financial distress. The foregoing instigated the question as to what is the effect of the credit risks on the financial performance.

Credit Risk and Financial Performance

The main purpose of a bank existence is to accept deposits as well as to grant credit facilities, therefore inevitably exposed to credit risk. Credit risk is the most significant risk faced by banks and the success of their business depends on accurate measurement and efficient management of this risk to a greater extent than any other risks (Gieseche, 2004). According to Chen and Pan (2012), credit risk is the degree of value fluctuations in debt instruments and derivatives due to changes in the underlying credit quality of borrowers and counterparties. Coyle (2000) defined credit risk as losses from the refusal or inability of credit customers to pay what is owed in full and on time. This risk interchangeably called counterparty risk is capable of putting the bank in distress if not adequately managed.

Empirical evidences and results of various studies show a mixed trend on the effect of credit risk on bank performance. Thus while some established a negative relationship between credit risk and bank performance, others found a positive relationship.

Hosna et al. (2009) studied the relationship between non-performing loan and capital adequacy ratios and profitability for four Swedish banks covering a period of 2000 to 2008. The study showed that rate of non- performing loan and capital adequacy ratios was inversely related to ROE though the degrees varied from one bank to another. Such inverse relationships between profitability, performance and credit risk measures were also found in other studies (Achou and Tenguh, 2008; Kolapoet al., 2012; Musyoki and Kadubo (2011).

Kithinji (2010) analyzed the effect of credit risk measured by the ratio of loans and advances on total assets and the ratio of non-performing loans to total loans and advances on return on total asset in Kenyan banks from 2004 to 2008. Results showed

that the bulk of the profits of commercial banks are not influenced by the amount of credit and non-performing loans. The study provided a rationale to consider other variables that could impact on bank's performance and a longer period of study to capture detailed picture of the banks' performance. This study included the impact of liquidity and market risk as components of the financial risk.

Afriyieet al. (2011) examined the impact of credit risk on profitability of rural and community banks in the BrongAhafo Region of Ghana. Using financial statements of ten rural banks five years period 2006 to 2010. Using panel regression model. In the model, of Return on Equity (ROE) and Return on Asset (ROA) were used as profitability indicators while Non-Performing Loans Ratio (NLPR) and Capital Adequacy Ratio (CAR) as credit risk management indicators. There was a significant positive relationship between non-performing loans and rural banks' profitability revealing that, there are higher loan losses while the banks still earned profit. He reported a relationship between the credit risk management and profitability of selected rural banks in Ghana.

Kargi (2011) evaluated the impact of credit risk on profitability of Nigerian banks. Financial ratios as measures of bank performance and credit risk were collected from annual reports and accounts of sampled banks from 2004-2008 analyzed using descriptive, correlation and regression techniques. Results showed that credit risk management has a significantly impacted on the profitability and concluded that banks' profitability is inversely influenced by levels of loans and advances and that, non-performing loans and deposits thereby exposed them to great risk of illiquidity and distress. Comprehensive analysis of credit risks including capital to risk weighted asset ratio needed to be considered hence the current study considered these pertinent variables in its analysis.

Kolapoet al. (2012) using panel model approach carried out an empirical investigation into the quantitative effect of credit risk on performance of commercial banks in Nigeria over the 11-year period (2000-2010) from the five commercial banks. Traditional profit theory was employed to formulate profit, measured by Return on Asset (ROA), as a function of the ratio of non-performing loan to loan and advances (NPL/LA), ratio of total loan and advances to total deposit (LA/TD) and the ratio of loan loss provision to classified loans (LLP/CL) as measures of credit risk. Panel model analysis was used to estimate determinants of profit function. Results showed that the effect of credit risk on bank performance measured by the Return on Assets of banks is cross-sectional invariant and that profitability is reduced by increase of non-performing loan and loan loss provision and that the effect of credit risk is similar across all the banks considered in the study. However, an increase in total loan and advances increased the profitability.

Poudel (2012) explored various parameters pertinent to credit risk management as it affects banks' financial performance in Napel using parameters such as default rate, cost per loan assets and capital adequacy ratio. Correlation and regression models were used to analyze the data. The study revealed that all these parameters have an inverse impact on banks' financial performance. t-test results showed significant

negative relationship between return on assets and independent variable which are default rate and capital adequacy ratio.

Afriyieet al. (2012) examined the impact of credit risk indicators on profitability of rural and community banks in the BrongAhafo Region of Ghana using study used the financial statements of ten rural banks in the period 2006 to 2010 for analysis. Panel regression model was employed for the estimation where the definition of Return on Equity (ROE) and Return on Asset (ROA) were used as profitability indicators while Non-Performing Loans Ratio (NLPR) and Capital Adequacy Ratio (CAR) as credit risk management indicators. There was a significant positive relationship between non-performing loans and profitability revealing higher loan losses but banks still earned profit showing that rural banks do not have sound and effective credit risk management practices. Their study did not consider other risk factors that affect that affect the bank's profitability. Onaolapo (2012) analyzed the relationship between credit risk management efficiency and financial health in selected Nigerian commercial banking sector. Secondary Data was collected from a six-year period 2004 to 2009. The study hypothesized negative relationship between Efficiency of Credit Risk Management, bank performance and operational effectiveness using regression analysis and unit root test used verify order of integration for each time series data employed. There was minimal causation between Deposit Exposure (DE) and performance but greater dependency on operational efficiency parameters. Test of stationary properties was conducted using Augmented Dickey Fuller (ADF) which indicated that all variables were non-stationary while the pair wise Granger causality suggested that Deposit Exposure performance influence does not hold for the Nigerian Commercial banking sector. The study captured most variables or measures of credit risk management except the asset quality. Other advanced methods such as generalized method of moments least needed to have been used to analyze the data.

Ogboi and Unuafe (2013) examined the impact of credit risk and capital adequacy on banks financial performance in Nigeria. The study used time series and cross sectional data from 2004-2009 obtained from selected banks annual reports and accounts in Nigeria. Secondary data was obtained from published financial statement of six out of twenty-one banks operating as at December 2009 selected by purposive sampling technique. Panel data model was used to estimate the relationship between loan loss provisions (LLP), loans and advances (LA), non-performing loans (NPL) and capital adequacy (CA) which were the independent variables and return on asset (ROA) as the dependent variable. Results showed sound credit risk management and capital adequacy impacted positively on bank's financial performance with the exception of loans and advances which was found to have a negative impact on banks' profitability during the period.

Elsewhere Marshal and Onyekachi (2014) carried out an empirical investigation on the effect of credit risk and performance of banks in Nigeria over the 15 years' period on five banking firms. Data was collected from annual reports and accounts statements/sheets of the banks and time- series and cross sectional data and estimated using panel data regression techniques. There was a positive relationship between

Ratio of non- performing loans to loan and advances (Log NPL) and banks performance (Log ROA). Banks in the study carried minimal non- performing loans in their loan portfolio and as such this did not conform to our *apriori* expectations. There was a positive relationship between ratio of loan and advances to total deposit (Log LA) and banks performance (Log ROA). The conclusion was that increase in loan and advances increases banks performance through interest income generated from loan and advance.

Results and Discussion

Model Specification

Return on equity was considered as a measure for financial performance and was therefore, used as the dependent variable whereas capital to risk weighted assets, asset quality, loss loan provision and loan and advances were considered as independent variables. The study assumed that the independent variables and the dependent variable had a general multiplicative Cobb Douglas functional relationship shown in model 1.

ROE = f (CRWAR, LLPR, AQR, LAR) (1)

Upon linearization and parameterization, the long run model was specified as:

$ROE_{it} = \beta_0 + \beta_1 CRWAR_{it,} + \beta_2 LLPR_{it,} + \beta_3 AQR_{it} + \beta_4 LAR_{it} + \alpha_i + \varepsilon i,$ (2)

And the short run model as:

$ROE_{it} = \beta\ 0 + \lambda\ ROE_{it-1} + \beta 1 CRWARit + \beta 2 LLPRit + \beta 3 AQRit + \beta 4 LARit + ai + \varepsilon it$ (3)

Where:

i=1, ...,43, t =1,2.....10, In which ROEi, t represents the performance of Bank i at time t, β0 represents the model constant or intercept, βi represents the coefficients of the independent variables. *ROEi, t*-1 is lagged bank performance, $CRWAR_{i,\ t}$ is the capital to risk weighted assets ratio of bank i at time t, $LLPR_{i,\ t}$ is the Loss Loan Provision ratio of bank I at time t, $AQR_{i,t}$ is the Asset Quality ratio of bank i at time t, and $LAR_{i,t}$ is the Loan and Advances ratio of bank i at time t, αi is the bank specific effect that is assumed to be normally distributed with a constant variance and $\varepsilon\ it$ is the idiosyncratic error term which is assumed to have a normal distribution.

Summary Statistics of Data

Table 1: Summary Statistics

Variables	Count	Mean	Std. Dev.	Min	Max
ROE	416	0.178	0.170	-0.909	0.500
CRWAR	415	0.242	0.143	0.057	1.102
AQR	396	0.166	0.305	0.002	4.110
LLPR	406	0.061	0.154	0.001	2.669
LAR	411	0.747	0.278	0.205	3.102

Data presented on Table 3.1 show that the number of observations per variable varied. This may be explained by the unbalanced nature of the panel data used in the analysis. The data additionally show that the overall mean return on equity, core capital to risk weighted asset ratio, asset quality and loan loss provision were 17.8,

24.2, 16.6 and 6.08 per cent respectively. Therefore, the banks were positively profitable, adequately capitalized and experienced some relatively high levels of deterioration in asset quality over the period of study.

Table 2: Pair-Wise Correlation Between Credit Risk Components and Return on Equity

Variables	ROE	CRWAR	AQR	LLPR	LAR
ROE	1				
CRWAR	-0.251(0.000)	1			
AQR	-0.521(0.000)	0.163(0.001)	1		
LLPR	-0.389(0.000)	0.246(0.000)	0.846(0.000)	1	
LAR	-0.073(0.159)	-0.181(0.000)	-0.034(0.499)	-0.031(0.531)	1

Key: P-values in parenthesis

Data presented on Table 3.2 shows that return on equity is significantly negatively correlated with all the components of credit risk except for loans and advances. This is at variance with the findings of Kolapoet al. (2012) who reported positive relationship between profitability and loan and advances. Thus in the regression analysis it was expected that the coefficients of core capital to risk weighted assets, asset quality and loan loss provision would be negative. However, from correlation analysis the study could not tell whether or not the coefficient of loans and advances would be significant and the nature of signage of its coefficient. Additionally, Table 2 shows that the correlation between asset quality and loan loss provision ratio is positive and near perfect. To avoid endogeneity problems loan loss provision was dropped from the regression analysis.

Empirical Findings

In this study, each long run model is presented separately and its post-estimation diagnostics discussed to establish reliability of findings. The study discriminates between the long run models using Hausman test and presents the naïve OLS and fixed effects estimates of the short run specification to establish the range where the coefficient of lagged return on equity should lie in the Generalized Method of Moments (GMM) specification. The study estimates and presents the GMM specification while presenting the instruments used and discussing the post-estimation diagnostics of the GMM model. Finally, the study presents a comparative summary of all the models and tests the hypotheses both in the short and in the long run.

The first long run specification of model 1 was the fixed effects model whose findings are shown in **Table 3.**

Table3: Fixed Effects Estimates for Model 1

Dependent Variable: ROE	
Explanatory Variable	Coefficient (significance)

CRWAR		-0.352***
AQR		-0.194***
LAR		-0.028
Constant		-2.826***
Post Estimation Diagnostics		
R-Squared	Within	0.087
	Between	0.4181
	Overall	0.2897
	Rho	0.589
F test (3, 320)		10.18***
chow test	F(41, 320)	9.47***

KEY p-value <0.01* P-value <0.05** P –value<0.1***

Data presented on Table 3.3 show that the F statistic is 10.18 and is greater than the critical value at one per cent level of significance. Therefore, the variables which are the credit risk components are jointly significant in explaining the variations in return on equity. The interclass correlation (rho) is 58.9 per cent implying that 58.9 per cent of the variations in return in equity are due to differences across the banks. The within and between R-square is 8.7 per cent and 41.8 per cent respectively. Thus, 8.7 per cent of variations in the return on equity are due to differences within individual banks and 41.8 per cent of the variations are due to differences between the banks. The overall R2 is 28.9 percent, indicating that the variables considered in the model account for about 29 percent change in the dependent variables, while about 71 percent change may be as a result of other variables not addressed by this model.
The chow test statistic is 9.47 and is greater than the critical value at one per cent level of significance. Therefore, the null hypothesis that the fixed effects are equal to zero is rejected at one per cent level of significance. Thus the option of specifying the model as a pooled OLS model over the fixed effects specification is rejected at one per cent level of significance. The second alternative specification of model 1 is the random effects model whose findings are shown in **Table 4.**

Table 3.4: Model 1 Random Effects Estimates

Dependent Variable: ROE	
Explanatory Variable	Coefficient (significance)
CRWAR	-0.381***
AQR	-0.242***

LAR		0.043
Constant		-3.051***
Post Estimation Diagnostics		
R-Squared	Within	0.086
	Between	0.434
	Overall	0.301
	Rho	0.515
Wald test (3, 365)		55.69***
Lm test	Chibar2	252.02***

KEY p-value <0.01*** P-value <0.05** P –value<0.1*

Data presented on Table 5 show that the Wald statistic is 55.69 and is greater than the critical value at one per cent level of significance. Therefore, the variables (credit risk components) are jointly significant in explaining the variations in return on equity in the random effects specification. The interclass correlation (rho) is 55.7 per cent implying that 55.7 per cent of the variations in return in equity are due to differences across the banks as per the random effects model. The coefficient of determinations, R-square shows the within and between values of 8.6 per cent and 43.4 per cent respectively. Thus, 8.6 per cent of variations in the return on equity are due to differences within individual banks and 43.4 per cent of the variations are due to differences between the banks. The LM test statistic is 252.02 and is greater than the critical value at one per cent level of significance. Therefore, the null hypothesis that the cross sections are not heterogeneous is rejected at one per cent level of significance. Thus the random effects specification is preferred over pooled OLS.

A comparison of the post estimation diagnostics between the Fixed and random effects specification revealedd that the conclusions are comparable. For instance, when POLS specification is compared with the estimated models it's rejected in both instances. In addition, the overall explanatory powers of the specifications are not significantly different; the fixed effect specification explains an overall explanation 29 per cent while the random effects model has an overall explanation of 30 per cent. However, the consistency in post estimation diagnostics does not eliminate the need to discriminate between the models. The Hausman test statistics to discriminate between the specifications are shown in table 5.

Table 5: Model 1 Hausman Test

Test statistic Chi(3)	P-value
12.99	**0.005**

Data presented on Table 5 shows that the test statistics have a chi statistic of 12.99 with three degrees of freedom and a corresponding p value of 0.005. Therefore, the null

hypothesis that the regressors and individual heterogeneity are strictly exogenous is rejected at one per cent significance level. Thus the FE specification is preferred over RE specification. Therefore, for the long run specification the fixed effects model should be interpreted.

To establish the bound where the coefficient of lagged profits would lie, the naïve OLS was estimated. The OLS estimates overstate the coefficient of lagged profits by attributing to it some explanatory power of the error term. Thus the OLS estimate provides the upper bound of the coefficient. The OLS estimates are shown in table 3.6.

Table 6: OLS Estimates for Credit Risk Components

Dependent Variable: ROE	
Explanatory Variable	Coefficient (significance)
ROE_{it-1}	0.604***
CRWAR	-0.199***
AQR	-0.137***
LAR	-0.091**
Constant	-1.344***
Post Estimation Diagnostics	
R-Squared	0.628
F statistic (4, 314)	132.31***

KEY p-value <0.01*** P-value <0.05** P –value<0.1*

Data presented on Table 6 show that the coefficient of lagged return on equity is 0.604. Therefore, the upper bound for the coefficient of lagged return on equity in the GMM specification of the short run model should be 0.604. To get the lower bound the fixed effect estimates of the short run specification are used. Fixed effect estimation understates the coefficient by denying the lagged dependent variable some of its explanatory power, thus providing the lower bound. The fixed effect estimates of the short run specification are shown in table 7.

Table 7: Fixed Effects Estimates for Credit Risk Components

Dependent Variable: ROE	
Explanatory Variable	**Coefficient (Significance)**
ROE_{it-1}	0.247***
CRWAR	-0.257**
AQR	-0.148***

LAR	-0.039
Constant	-2.075***
Post Estimation Diagnostics	
R-Squared	0.164
F statistic (4, 314)	13.34***

KEY p-value <0.01*** P-value <0.05** P –value<0.1*

Data presented on Table 7 shows the fixed effects estimates of the short run specification of model 1. The coefficient of lagged return on equity is 0.247. Thus the lower bound of lagged return on equity in the GMM specification should be 0.247. Specifically, if the estimate is λ, it should lie in the interval $0.247 \leq \lambda \leq 0.604$.
Roodman (2006) states that when the data feature a large numbers of countries (N) relative to the time period (T), the GMM-difference estimator proposed by Arellano and Bond (1991) and the GMM-system estimator by Arellano and Bover (1995) and Blundell and Bond (1998) work well. These two estimators are typically used to analyze micro panel datasets (Eberhardt, 2012). To obtain consistent estimates of the short run specification, one step system GMM is used. The estimates are shown on table 3.8.

Table 8: One Step System GMM Estimates

Dependent Variable: ROE	
Explanatory Variable	Coefficient (significance)
ROE_{it-1}	0.579***
CRWAR	-0.146
AQR	-0.086*
LAR	-0.168***
Constant	-1.187***
Post Estimation Diagnostics	
Hansen J test	40.5
AR (1)	-3.62***
AR (2)	-0.92

KEY p-value <0.01* P-value <0.05** P –value<0.1***

Data presented on table 3.9 show the one step system GMM estimates for the short run specification of model 1. Coefficient of the lagged return on equity is 0.579 and therefore, lies in the acceptable range of *ROE* - $0.247 \leq \lambda \leq 0.604$ established by the naïve OLS estimates and fixed effects estimates of the short run model 1. This points to consistency of estimates.

Table 3.9 further shows that the Hansen J statistic is 40.5 with a corresponding p-value greater than 0.1. Therefore, the null hypothesis of the validity of the over identifying restrictions for the instruments is not rejected at one per cent level of significance. Thus, the instruments employed by the model are appropriate and lead to precise consistent estimates.

In addition, Table 8 shows that the test of autocorrelation in the error terms. The AR(1), first order autocorrelation, test statistic is -3.62 and is greater than the critical value at one per cent level of significance. Thus, the null hypothesis that disturbance term (error term) has no first order serial correlation is rejected at one per cent level of significance. This is expected because of the dynamic specification of model 1 and therefore, points to correct specification. The test statistic for second order serial correlation in the error term is - 0.92 with a corresponding p-value that is greater than 0.1. Therefore, at one per cent level of significance the null hypothesis that there is no second order serial correlation in the disturbance term is not rejected at one per cent level of significance. This permits the use of instruments from the second lag and differences further supporting the argument of correct short run specification of model 1 using the one step GMM estimates.

To summarize the findings necessary to test the first hypothesis in the short run and in the long run. The findings in table 3 through 8 are summarized in Table 9.

Table 9: Effects of Credit Risk on Financial Performance of Commercial Banks in Kenya

Dependent Variable: ROE					
Variables	**Long Run Model**		**Short Run Model**		
	Fixed Effects	Random Effects	OLS	Fixed Effects	GMM
ROE_{it-1}			0.604***	0.247***	0.579***
CRWAR	-0.353***	-0.381***	-0.199***	-0.257**	-0.146
AQR	-0.194***	-0.242***	-0.137***	-0.148***	-0.0859*
LAR	-0.0281	-0.0489	-0.0907**	-0.0386	-0.168***
Constant	-2.826***	3.051***	-1.344***	-2.075***	-1.187***
Observations	365	365	319	319	318
R-squared	0.2897	0.2897	0.628	0.164	0.164
Hausman Chi	12.99***				
Wald		55.69***			
F-test	10.18***		132.31***	13.34***	44.01***

KEY p-value <0.01* P-value <0.05** P –value<0.1***

Data presented on Table 9 shows that the signage of the coefficients is comparable be it in the short run or in the long run. The magnitude of coefficients is comparable for the long run model but significantly differs in the short run specification as expected.

Based on the post estimation diagnostics and theory, only the fixed effects model and the GMM specification results should be interpreted in the long run and short run respectively.

The long run, the coefficient of capital to risk weighted assets is -0.353 with a p-value less than 0.01. Thus, the coefficient is significantly different from zero at one per cent level of significance. Therefore, the null hypothesis that core capital to risk weighted assets has a significant negative effect on financial performance of commercial banks in Kenya is not rejected at one per cent level of significance. The magnitude of the coefficient is 0.353; implying that a one per cent increase in the risk weighted assets ratio reduces return on equity by 35.3 percentage points in the long run holding other factors constant.

Since capital to risk weighted assets ratio explains strength of the bank, it improves the solvency of the bank and capacity to absorb the loan loss when CRWAR is high. The ratio is expected to increase when the banks increase the capital and reduce when the banks increase the risk weighted assets. Thus the former would reduce the return on equity as a result of holding excess capital while woud the latter will reduce the ratio as risk weighted assets comprise of the high loans that may lead to increase in profitability of commercial banks.

In the short run the coefficient of core capital to risk weighted assets is -0.146 with a p-value greater than 0.1. Therefore, the coefficient is not significant at either 10, five or one per cent. Thus in the short run the null hypothesis that core capital to risk weighted assets has a significant negative effect on financial performance of commercial banks in Kenya is rejected at one per cent level of significance. Thus in the short run growth in core capital to risk weighted assets does not influence financial performance of commercial banks.

Data presented on Table 9 further show that in the long run the coefficient of asset quality is -0.194 with a p value less than 0.01. Thus, the coefficient is significantly different from zero at one per cent level of significance. Therefore, the null hypothesis that asset quality has a significant negative effect on financial performance of commercial banks in Kenya is not rejected at one per cent level of significance. The magnitude of the coefficient is 0.194. This implies that one per cent deterioration in asset quality reduces return on equity by 19.4 percentage points in the long run holding other factors constant.

In the short run the coefficient of asset quality is -0.0859 with a p-value less than 0.1. Therefore, the coefficient is significant at 10 per cent. Thus in the short run the null hypothesis that asset quality has a significant negative effect on financial performance of commercial banks in Kenya is not rejected at 10 per cent level of significance. The magnitude of the coefficient is 0.0859. Thus in the short run deterioration in asset quality by one per cent causes a decline in return in equity of 8.6 percentage points holding other factors constant.

Results showed a significant negative relationship between non-performing loans to total loans and commercial banks' profitability revealing that, there are higher loan losses causing declines in banks' profit. These results are expected as banks take

deposits and use the same to advance loans and the costs associated with these loans such as insurance costs reduce the profitability margins of the bank. Thus increase in the portfolio at risk may be caused by increase in loan books and hence an upward increase in insurance costs. Return on equity (ROE) is the reward to the shareholders for the funds they have invested with the banks after other financiers and costs, including liabilities such as taxes have been paid. Therefore, increased portfolio at risk will reduce the revenue and increase the cost associated as indicated by analysis of non-performing loans. The correlation between non-performing loans and return on equity cannot be ignored.

An increase in the doubtful assets, which does not accumulate income, obliges financial entities to assign a significant portion of its gross margin to provisions in order to cover expected credit losses, consequently profitability is expected to be affected. These results concur with findings of Kargi (2011) that banks' profitability is inversely influenced by the levels of non-performing loans and deposits thereby exposing them to great risk of illiquidity and distress. These results are also consistent with reports of Kolapoet al. (2012), Ruziqa (2013), Claudine and Felix (2008) that return on equity (ROE) measuring profitability was inversely related to the ratio of non-performing loan to total loan of financial institutions thereby leading to a decline in profitability. This indicates that, Kenyan commercial banks are required to improve on sound and effective management practices on default.

With respect to loan and advances table 9 shows that in the long run the coefficient of loans and advances is -0.0281 with a p-value greater than 0.1. Therefore, the coefficient is neither significant at 10, five nor one per cent. Thus in the long run, the null hypothesis that loans and advances have a significant negative effect on financial performance of commercial banks in Kenya is rejected at one per cent level of significance. Therefore, other things being equal in the long run changes in loans and advances do not influence financial performance of commercial banks in Kenya.

In the short run the coefficient of loans and advances is -0.168 with a p-value less than 0.01. Thus, the coefficient is significant either one per cent hence in the short run the null hypothesis that loans and advances have a significant negative effect on financial performance of commercial banks in Kenya is not rejected at one per cent level of significance. The magnitude of the coefficient is 0.168. Thus in the short run a one per cent increase in loans and advances causes a decline in return on equity of 16.8 percentage points holding other factors constant.

The above results are expected because loans and advances are risky assets and their large share in bank's assets means a growth of the bank's exposure to risks. Thus, a high value of this indicator could also mean a possible weakening of the bank's assets quality with a negative effect upon profitability which is proxied by ROE. The effect of loan loss reserve to gross loan on profitability is negative as earlier literature by Kolapo et al. (2012) and Sufian (2009) which indicated that profitability will be reduced as banks use more profit as buffer against their loan loss. In order to reduce

loan loss so as to reduce reserve ratio and increase the profitability, prudential credit management is required.

To jointly test whether the components of credit risk negatively influence financial performance of commercial banks in Kenya F test was used. The test has a null hypothesis that all the coefficients of the components of credit risk are jointly equal to zero. Data presented on Table 9 shows that in the long run the F statistic is 10.18 and is greater than the critical value at one per cent level of significance. Therefore, in the long run null hypothesis one that credit risk has a significant negative effect on the financial performance of commercial banks in Kenya is not rejected at one per cent level of significance.

In the short run the F statistic is 44.01 and is greater than the critical value at one per cent level of significance. Thus in the short run null hypothesis one that credit risk has a significant negative effect on the financial performance of commercial banks in Kenya is not rejected at one per cent level of significance. Thus credit risk influences financial performance of commercial banks in Kenya both in the short run and in the long run.

The results of this study are in line with the study's prior expectation, credit risk is negatively and significantly related to bank performance. This implies that bank increased exposure to credit risk reduces profits. This may result from the fact that health of a bank's loan portfolio may be reflected by changes in credit risk and affect the performance of the institution as indicated by Cooper et al. (2003).

The findings of this study concur with studies by (Afriyieet al. 2011; Hosnaet al., 2009; Ogboi and Unuafe, 2013; Marshal and Onyekachi, 2014) who explained that there exists a significant negative association between credit risk components and financial performance. The study by Kithinji (2010) gave evidence that profits of commercial banks are not influenced by the amount of credits or loans. The results may be explained since an asset or loan become irrecoverable, in case of outright default or the risk of delay in servicing of loans and advances. Thus, when this occurs or becomes persistent, the performance, profitability, or net interest income of banks is affected. Duca and McLaughlin (1990) concluded that variations in bank profitability are largely attributable to variations in credit risk, since increased exposure to credit risk is normally associated with decreased firm profitability. These observations trigger a discussion concerning commercial banks that are exposed to high- risk loans leading to accumulation of unpaid loans and hence lower the profitability. From the study a conclusion can be made that not the volume of loans but the quality of loans made.

Summary, Conclusion and Recommendations

This study sought to determine the effect of credit risk on financial performance of commercial banks. All other factors held constant only 28.97% of the variation in profitability can be explained by change in credit risk. The findings revealed that bank

credit risk has a significant negative effect on the financial performance of commercial banks in Kenya both in the short run and in the long run. This implies that bank increased exposure to credit risk reduces profits. This may result from the fact that health of a bank's loan portfolio may be reflected by changes in credit risk and affect the financial performance of the commercial banks. This indicates that poor asset quality or high non-performing loans to total asset related to poor bank performance. Thus, it is possible to conclude that banks with high asset quality and low non-performing loan are more profitable than the others. The capital may also be reduced by increase of loan loss provision which affects the profitability.

From above findings, it is recommended that management of Kenyan commercial banks should enhance their capacity in credit analysis, appraisals and loan administration. Clear credit policies and lending guidelines should be established. Management should also make sure that the terms and conditions are adhered to in loans approval. The study noted that credit risk though significantly affect the financial performance may not be the major factor that affect determinants of Kenyan banks profitability. Further research needs to be carried on other bank risks and factors.

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Enhancing Small and Medium Enterprises Credit Access and Performance through Technological Integration

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Abstract

Small and Medium Enterprises in Kenya face innumerable challenges that affect their financial performance. These challenges include but not limited to lack of financiers, market information gaps, and poor financial management practices. These challenges can be solved through technological integration of the key market participants, especially financiers and suppliers. The purpose of this study was to establish a technological mechanism that brings together SMEs, financiers, and suppliers in a single technological platform with a view to improving business access to finance and profitability. The objective of this study was to establish a technological platform that integrates key market participants. A desk research was applied whereby online research on technological integration of market participants and SMEs financing and performance were analyzed. Results showed that technological integration of SMEs and key market players (creditors and suppliers) would enable the SMEs to access credit easily, provide perfect information on prices of commodities, promote fair competition, increase profits and minimize opportunity cost. Besides, it would help creditors assess credit worthiness of SMEs by reviewing their transactions and reduce credit default risk and help creditors and suppliers access larger market. The paper recommends development of an application and an online system tailored to SMEs needs, creditors and suppliers in order to harness full benefits of technological integration.

Keywords: Small and Medium Enterprises, Technological Integration, Financial Performance, Creditors, Suppliers.

Introduction and Background

Access to finance is one of the most significant challenges that SMEs face during their establishment, growth, and survival especially in emerging economies. According to a research conducted by ADB bank on OECD countries, access to finances is one of the longest hurdles that SMEs experiences (OECD, 2017). SMEs in Sweden-one of the most vibrant global economies with efficient public administration have good access to finance even though finding customers is a major challenge 70% of SMEs accessed finance in 2014 while in Europe only 15% of SMEs failed to access Finances (Schwab, 2014). Low interest rates and good credit terms are responsible for this large number of SMEs accessing credit. In United States, SMEs make up 99% of the total firms and employ 50 percent of private sector employees (Lugaresi, 2015). Their access to Credit has remained high due to improved credit terms, growth of online lending platforms, crowd funding and Angel investment. In South Africa, SMEs access to bank credit requires sufficient collateral and acceptable credit histories (Otchere, Senbet & Simbanegavi, 2017). This Indicates that access to credit is a global concern. Kenya being an emerging economy exhibits a financial system that strives to

minimize risk while maximizing returns (Tissot & Gadanecz, 2018). This is similar to Chile, Colombia and Serbia. SMEs operate in a system characterized by high business risk due to lack of perfect information about future consumer trends (OECD, 2012). The financial providers and SMEs operate in a "counter current" like chain whereby, the former aims at maximizing benefits and at the same time minimizing default risk while the latter (SMEs) sources credit from the cheapest provider at any given level of risk. The ability to secure credit is affected by the failure of SMEs to adopt international financial reporting standards and keeping of financial records mainly due to lack of financial literacy (OECD, 2012). The financial providers evaluate the financial records and business transactions when determining credit worthiness of SMEs.

Statement of the Problem

Despite the immense contribution of SMEs to the economy, the sector continues to experience multiple constraints that limit their ability to grow. The government of Kenya and non-governmental institutions have braced up for the challenge and through various strategies are helping the SMEs to access finances. Despite this attempt, access to finances remains a major problem to SMEs and majority of these enterprises have not accessed credit (Kauffmann, 2005) due to their inability to raise collaterals as required by financial institutions (Njue & Mbogo, 2017). In order to address this gap, this paper evaluated how technological integration can increase performance of SMEs and enable them to access credit. There is scanty information on how technology can be used to enable the SMEs access credit. For instance, development of a technological platform that links together financiers, suppliers and SMEs in retail sector would be plausible. The platform stores all the historical data between suppliers and SMEs and help financial providers to monitor operations of the SMEs.

Research Objectives

The study sought to evaluate:

1. how technological integration increases performance of SMEs and
2. how technological integration can increase ability of SMEs to access credit.

Theoretical Review

Trade off theory, a financial theory based on capital structure which states that business balances cost and benefits before determining how much equity or debt will be acquired to finance business operations (Harris & Raviv, 1991) has been used in this study. It is based on establishing a balance between tax savings of debt and dead weight costs of bankruptcy. This theory holds that financing firms using debts is advantageous because of tax benefit associated with debt finance. Nonetheless, debt financing exposes the business to various forms of financial and non-financial challenge. Financial distress consists of bankruptcy while non-financial distress consists of costs that are related to bankruptcy such as stockholder infighting and staff leaving. According to Myers & Majluf (1984), firms following trade-off theory set a debt-to-value ratio target and moves gradually towards the target. This target is determined by balancing shields against costs of bankruptcy. Debt financing among SMEs vary depending on their profitability. Thus Profitable SMEs with tangible asset accesses credit as they have collaterals for debt. Pecking order theory, an alternative to the tradeoff theory postulates that there exists asymmetry of information between management and the outside investors. This asymmetry emanates from the ability of management to access information

that is not in disposal of the investors. Myers & Majiluf (1984) observed that firms that are successful in terms of consistent and high profit rarely use debt financing. Lastly is the resource based theory that emphasizes on the efficient and innovative utilization of resources. This theory explains how a firm sustains its competitive advantage internally. The logical explanation of this theory clarifies the causal relationship that exists among production capability, firm resources and performance and holds that firms can improve the bundle of resources that it controls. Besides, firms exhibit heterogeneous properties if they are in the same industry. The competitive advantage of the company is derived from the firm's ability to exploit and assemble an appropriate combination of resources. These resources can be intangible or tangible and represent firms input in process of production such as equipment, capital, patents and skills of individual employees. The setoff available resources tend to become larger as company's competitive effectiveness and capabilities increase.

Technology and Performance of SMEs in Kenya

Kenya government is exploring myriad ways to enhance performance of SMEs by leveraging on ICT through e-commerce. Realization of economic growth cannot be done without integration of SMEs and technology (Gure & Karugu, 2018). Access to technology and finance remains a major issue of concern. According to a study conducted by Gathogo and Ragui (2013) on the effects of capital and Technology on performance of SMEs in the manufacturing sector in selected firms in Thika Municipality, only 12% and 15% of the respondents integrated technology in their operations. 46.5% obtained financing from family and friends while 47.5% from personal savings. This shows that only a few SMEs have access to credit from depository institutions which is the main source of credit. Over the years, Kenya has witnessed gradual increase in the rate of growth in information technology. This has earned the country a global recognition (Niebel, 2018). Growth in technology is owed to innumerable factors which are overlapping. The main source of inspiration is Kenya's policy framework which is the main driver of the shift (Ayo& Mbarika, 2017). These policies are diverse and focus on development of applications by leveraging of mobile platforms, development of ICT infrastructure, and creation of local content. Over time, the number of Kenyans accessing internet has grown to 77.8% internet penetration after a total population of 37.7 million accessed internets out of the total population of 48.5 million people. This means that 77.8% of the total population has an access to internet (Odero & Mutula, 2017). In Africa, Kenya ranks second after Nigeria in internet penetration and 90%penetration of smartphone. This has brought about rise in e-commerce and made it possible for consumers and business to transact online. The e-commerce appears as a blooming business but in real sense it is at its embryonic stage especially for owners of business who try to sell their products electronically via different platforms. According to a study conducted by Migiro (2006) while evaluating the diffusion of ICTs and e-commerce adoption in manufacturing SMEs in Kenya, 6.6% of SMEs possess and use computers and only 2% of these use computer with internet access and established that SMEs perception on the importance of e-commerce and Internet was mixed. 27% of respondents said that internet is very important, 61% that it is important while 6% said it is somewhat important. 70.2% of the respondents believed that internet will be very important in future, 11% said it is important, and 14% said it would be somewhat important in future. 1.6% of the respondents were indifferent while 3.6% said it was not important at all. He further noted that convenience and efficiency, necessity to access business information, keeping up with current industrial trend, and attainment of customer satisfaction are major key drivers of doing business via internet.

There was a great expectation since 2014 that mobile transactions and ecommerce would rise by 50% (Waithaka& Mnkandla, 2017). Globally, the consumer base has grown to 580 million users making ecommerce an important tool for businesses (Laudon& Traver, 2017). Kenya has witnessed development of online platforms such as Shop soko, Jumia and OLX. These sites have mobile apps that makes it easier for consumers to access products and place their purchase online. It also makes it easy for sellers to meet their consumers (Laudon & Traver, 2017). Optimization of mobile ecommerce, purchasing and registration has been a key challenge in e-commerce and therefore development of mobile applications is a major stride made by businesses. A study conducted by Adeya (2005) among artisans in remote areas of North Africa and Middle East established that use of e-commerce allowed knowledge to producers and enabled them access high income markets and market their products. In addition, adoption of technology among SMEs would enable them to compete at a global scale. Despite the advantages associated with technological integration, there has been a debate on whether adoption of technology can improve performance of SMEs. According to a study by Ongori (2009) on the role of information communication technologies adoption in SMEs 72% of SMEs adopt technology because of competition, 69% because of information intensity, 68% because of access into international market, 65% because of structural sophistication of the business and 60% quick service delivery to suppliers/customers. The study also observed that 70% of the respondents perceived cost as a major barrier to adoption of ICT by SMEs, lack of external skills and internal skills accounted for 64% and lastly 63% of SMEs felt that the cost of ICT was too high. Complimentary investments in skills, innovation and organization are a major requirement in the use of and investment in ICT. Martin and Namusonge (2014) while evaluating the influence of innovation on Small and Medium enterprises growth in Nakuru County Kenya established that 63% of respondents agreed that firm's realize higher profit from adoption and investment in technology. 36% of respondents did not believe that businesses can achieve higher profit by investing in technology. 43% of the SMEs that had adopted and integrated technology in their operations recorded higher profits compared to the SMEs that had not adopted technology. There was a perceived link between technological integration and growth of business. Thus, SMEs that integrated technology had realized increase in customer base, sales and overall profit. Little scholarly work has been done on this area. Even if major studies point out that the SMEs are able to access a larger market, implementation and operation of online business by SMEs may be difficult due to high cost for organization charges and training. Besides, greater cost is incurred in investing in software and hardware solutions (Niebel, 2018). A study conducted in OECD countries revealed a contrary observation that benefits derived from ICT are more significant compared to cost and that ICT integration improved performance of the firm by expanding range of production, improved firm performance, increased SMEs market share, better response to customer demands and customized products among others (OECD, 2016).

Technology and Credit Access among SMEs

Conventional financial constraints that face SMEs are being addressed through use of conventional SME finance policies (Mutula and Brakel, 2006). Incorporation of technology has transformed the SMEs businesses by mitigating risks, accessing market opportunities, investment in new technologies and meeting supply orders (Usman, et al, 2015). Mitigating these conventional challenges sometimes presents new risks and challenges to the business. Use of conventional policies may result in wastage of resources and failure to address

emerging issues. Gathogo and Ragui (2013) on the effects of capital and Technology on the performance of SMEs in the manufacturing sector in Kenya in selected firms in Thika Municipality established that technology influenced effectiveness of SMEs, performance and overall cost of operations. 55.7% of the SMEs performance was affected by technology to a very great extent, 27% to a great extent and 17.1% of the respondents indicated that technology had no effect on their performance.

The cost and risk of financial services tailored to SMEs sometimes is high due to information asymmetry (Berger and Udell, 2006). This reduces access to finance and increases the cost of financial services. Information asymmetry can be addressed technologically to reduce the cost of financial transactions (Moro and Fink, 2013). Credit worthiness of enterprises can be accessed through analysis of alternative data sets such as transactional data and cell phone histories (Usman, et al, 2015). Cignifi Company operating in Ghana, Brazil, Mexico and US uses airtime usage to determine credit score of the users (Gabor and Brooks, 2017). This kind of application can open more doors to SMEs and help them access finances without collaterals. Borrower credit worthiness can be accessed through use of internet by expanding the digital footprints. In addition, it can be used to prevent identity fraud and spot such cases (Usman, et al, 2015). Use of electric approaches to manage transactions such as contracts, invoices, and payments avails important data that enable SMEs to access financial services as firms are able to determine their credit worthiness. Chile Compra is another example of a platform that has opened up ability of SMEs to access public sector procurement (Gabor and Brooks, 2017). Factoring transactions and supply chain with SMEs can be facilitated through signature laws and electronic security.

Methodology

This is a descriptive study using desk research that employed secondary data. The study reviewed government publications, relevant books, studies, journals, dissertations and websites to obtain information on technological integration and contribution of technology to financial access and performance of SMEs. The information obtained was reviewed to draw meaningful conclusions and recommendations.

Findings and Conclusions

Technology Integration and Performance of SMEs in Kenya

Review of literature indicate myriad benefits that businesses or SMEs gain as they progress from simple to enabling technologies. Use of technology increases visibility of business enterprises, avail information to the SMEs, enable them overcome the traditional barriers of trade and facilitate financial transactions. Flexibility of business is one of the key area that is influenced by technology. Performance of SMEs that have adopted technology in the market is better as they are able to differentiate their services and products (Gathogo and Ragui, 2013). The effect of technology on performance is positive both directly and indirectly (Ollo-Lopez and Aramendia-Muneta, 2012). This is determined by the sectors and extent to which it can support business sustainability. Use of technological platforms such as e-commerce can greatly cut the cost of physical transportation that businesses incur while advertising, banking and buying goods and services. It is worth noting that these benefits are experienced after the business adopts an appropriate technology. The Impact of technology on broad terms can be

classified into four namely; impact in performance, growth, expansion and development of new product. Performance is one of the major dimensions that is affected by technology. The aspects of performance that are directly attributed to technology include competitiveness, effectiveness and efficiency, innovation and other intangible benefits. Nevertheless, this performance as pointed out by Santos and Brito (2012) can be defined in two ways; financial performance and strategic performance. These dimensions can be represented by specific performance scopes such as growth, profitability, market value, employee satisfaction, customer satisfaction, social performance and environmental performance. Customer satisfaction, environmental performance, employee's satisfaction and social performance is related to strategic performance while market value, growth and profitability is related to financial performance. There are various indicators of this performance; strategic and financial. In terms of profitability, SMEs would register an increase in net income, return on investment, assets, equity and general addition in economic value. In terms of market value, the SMEs will register increment in growth of assets, market share, number of employees and net income (Santos and Brito, 2012). Employees satisfaction would be indicated by investment in training and development of employees, good organization climate, launch of new products and services and lastly reduced employee turnover. It is worth noting that some of these benefits may not be experienced instantly but would be experienced in long run. In terms of customer satisfaction, the SMEs would be characterized by provision of a large number of services and products, reduction in the customer complaints, retention of new customer, increased in retention rate, general satisfaction of customers and introduction of new services and products. Environmentally, the SMEs would be able to use materials that are recyclable, reduce re-usage and recycling, and launch projects that protect the environment predominantly through improvement in corporate social responsibility. Socially, the SMEs would be able to increase the number of social and cultural projects, employ minorities, reduce the number of lawsuits, and engage regulatory and customer care agencies. Adoption of technology and integration of SMEs activities would impact on other parties such as suppliers, financiers and the general economy. Krifa-Schneider and Matei (2010) noted that adoption of technology can contribute to increase in gross domestic product. The overall effect is however subject to the type of technology adopted and the degree to which the small businesses have adopted them. Improvement in operational performance and communication is positively related to better performance (Bayo-Moriones, Billion & Lera-Lopez, 2013).

Technology Integration and Credit Access among SMEs

Analysis of literature indicate that despite the contribution of SMEs to growth of economy, access to finance is a challenge and hindrance to their success where they access finances, they are often charged high rates of interest, face stringent collateral requirements and shorter maturity. This is because SMEs have been beheld as expensive to work with and high risk businesses. There are innumerable ins and outs provided by research as the main origin of justification why SMEs have struggled in obtaining capital. These include poor record keeping, over reliance on internal financing, high risk and turnover, poor or weak management, lack of track records, lack of assets to use as collateral, lack of connections in financial system, high cost of obtaining loans that fit their needs and poor knowledge of financing options. The lenders are mainly concerned with histories and profiles of the borrowers (Tissot and Gadanecz, 2018). Lack of access to SMEs histories and credit profile is one of the main hindrances making banks reluctant to offer them loans due to high risks. One of the major ways of addressing this constraint is online lending. Technology has enabled

seamless transfer of information between different users within a short period of time. Advanced analytics in collaboration with global communication networks have leveraged to address the main common barriers to lending to SMEs. Technological developments in capturing and analysis of data and reporting can unleash the hidden potential of online lending that can address the existing SMEs financing gap (Usman, et al, 2015). The assessment of credit worthiness of SMEs can be done by analyzing first and third party information followed by simplification of online forms and making them accessible online. Credit worthiness of SMEs can be gauged within a short period of time and the disbursement of funds can be done instantly. The SMEs borrowing position can be used as a major determining factor of repayment schemes which is subject to modification over time. The loans obtainable online can be tailored to meet the needs of SMEs as they typically do not involve large capital reserves. Cash flow problems that SMEs experience over time can consequently be addressed using small working capital loans. A review of traditional loans requirements show that in order to obtain financing; borrowers are required to provide securities. This creates a stumbling block to SMEs as they are unable to provide collaterals. Online loans do not need collateral and this is likely to increase the rate of credit access. Integration of SMEs within a technological platform that captures their transaction data can therefore increase their access to credit. According to world economic forum, increasing the rate of credit access to private sector by 50% is likely to increase the rate of gross domestic product by 2%. This shows the reason why both government and non-governmental institutions should endeavour in developing mechanisms that will enable the SMEs to access credit. There are myriad benefits associated with increasing SMEs access to credit. They would register increased growth as evidenced by various researches which indicates that increasing funds by 10% to SMEs would result to 14.62% growth in firms experiencing financial constraints and 3.82% to stable firms (Rahaman, 2015). It also increases market competition for corporate lending thus providing economic value to SMEs. Besides, it would also reduce information asymmetry among SMEs which has been a major cause of failure of SMEs to access credit. Lastly, it would reduce systematic risk by spreading it across a broader financial ecosystem. Technological integration in Kenya is still at infancy and more should be done to enable SMEs tap benefits that are attributed to SMEs.

Conclusion

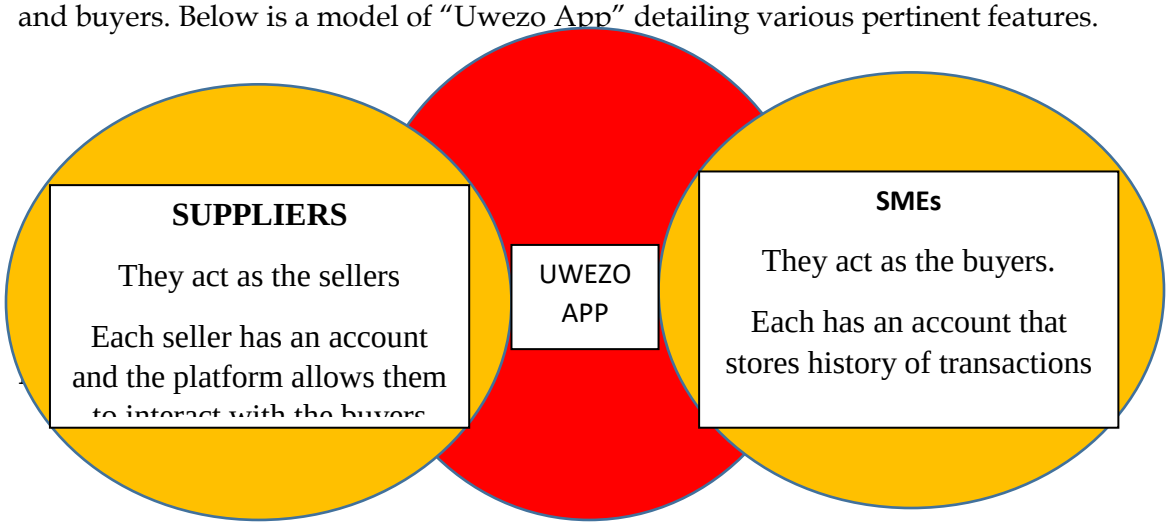
Based on the above analyse, it is concluded that technological integration is important as it helps SMEs to improve profitability and access to credit. Besides, it helps in improving their performance, growth, expansion and development of new products. On the basis of profitability, the SMEs would register an increase in net income, return on investment, assets, equity and general addition in economic value. On the basis of market value, the SMEs would register increment in growth of assets, market share, number of employees and net income. These benefits cut across the business and would be experienced by all the facets of SMEs.

Technology integration would also increase the ability of SMEs to access credit. This is important especially in technological developments such as capturing data, analysis of data and reporting which can unleash the hidden potential of online lending. Analysis of the first and third party information followed by simplification of online forms and making them accessible online would enable the SMEs to access credit tailored to their needs.

Recommendations

1. The government should reduce taxes imposed on technological gadgets in order to reduce their market prices hence making them available to SMEs

2. SMEs should be trained to acquire technological skills which is a major hindrance to adoption of technology among them.
3. The depository and lending institutions should tailor their policies to meet the SMEs requirements.
4. Financial literacy should be provided to SMEs through training on record keeping, financial management and benefits of technology.
5. Technological platform should be developed to link SMEs with Suppliers, financiers and buyers. Below is a model of "Uwezo App" detailing various pertinent features.



The Uwezo App is a technological platform that brings together the SMEs and Suppliers. It features an interactive platform that allows SMEs to access Supplier's information such as goods available, prices, delivery time and terms of payment. The SMEs place order via the app and Suppliers confirm upon receipt of the order and delivery of the products. The transactions are recorded in a permanent ledger that can be used by banking institution to view operations and transaction history of the buyers or sellers. Each seller or buyer cannot have a multiple account.

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Youth Empowerment through Recycling of Textile Products in Kenya.

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Abstract

Global statistics show that growth of apparel market from 2012 to 2017 is on upward trend. It is thus estimated that apparel market increased by approximately 5.46 percent in 2017 compared to 2016. Fast fashion has thus taken Centre stage with improved global economic levels. Consequently, millions of metric tons of used clothes and textiles are available annually especially from the developed nations. While the majority of these clothes end up in landfills, a considerable size is exported to markets in developing countries. When the apparels and clothing are worn out, they cause environmental pollution on disposal. Textiles particularly present problems in landfill as synthetic products do not decompose, whilst woolen garments decompose and produce methane, which contributes to global warming. However, recycling of these apparels and textiles can be used not only to solve the problems of environmental pollution, but also to provide an economic opportunity for millions of jobless youths in the developing world as well as clearing and forwarding from warehouses. In Kenya, recycling industry is developing fast. This study sought to establish ways through which the youth in Kenya could take advantage of this large resource to create employment, the source of used clothes used as raw materials in the recycling industry, items made from recycled clothes and finally the movement of these products in the market. Results showed that recycling industry in Kenya is dominated by handcrafts, skills men and women and that they are mainly done on small scale. Most of the enterprises sampled in this study were family owned and employed less than 20 people. Items produced included Ciondos (local Kenyan baskets), dusters, moppers, pupils' school bags and floor mats. These products are sold in local supermarkets and open-air markets by vendors around the cities and major towns in the Kenya. Prices depended on quality, size of items and target market. Most enterprises reported making between Ksh. 20,000 and Ksh. 40,000 monthly depending on production. It is recommended that the government through the ministry of youth should empower entrepreneurs through training on new technology, financing and provision of tools and equipment to support recycling industry.

Keywords: Textile Products, Textile Recycling, Youth Employment, Empowerment Postconsumer Waste.

Introduction and Study Background

Banerjee, et al (2016) estimated that in 2017, the apparel market increased by approximately 5.46 percent compared to 2016. Cororaton and Orden (2008) observed that the total textile fibre demand increased by 0.4% to 65.1 million tons in 2009 while in 2010, total textile fibre demand increased by 4.6 million tons to 69.7 million tons. This new record consumption level surpassed the previous record in 2007 by 2.0 million tons. In line with this demand, Doeringer and Crean (2006) asserted that fast fashion has taken centre stage with improved global economic levels. Consequently, millions of metric tons of used clothes and textiles are available annually especially from the developed nations (Haggblade, 1990; Hawley, 2006; Claudio, 2007). According to Hawley (2006), the apposition of a throw-away society with the realization that natural resources are threatened is a vivid illustration of the confounding problem of contemporary lifestyle. There is thus need to focus on the problems associated with fast fashion and contemporary lifestyle where a lot of clothes are disposed after a short while.

While the majority of these clothes end up in landfills, a considerable size is exported to markets in developing countries (Brooks and Simon, 2012). When the apparels and clothing are worn out, Claudio (2007) noted that they cause environmental pollution from whichever methods are used to dispose them. However, recycling of apparels and textiles can be used not only to solve the problems of environmental pollution, but also to provide an economic opportunity for millions of jobless youths in the developing world. Data from the International Trade Commission indicate that between 1989 and 2003, American exports of used clothing more than tripled, to nearly 7 billion pounds per year. According to a new report from the Council for Textile Recycling, (CTR), (Goudeau, 2014) the average American throws away 70 pounds of clothing every year collectively approximated to 3.8 billion pounds of waste.

Sustainable consumption as an aspect of consumer behaviour, involves pre-purchase, purchase and post-purchase components. The disposal component is a relatively new area of research. Essentially this final component of consumer behaviour is about whether clothing is re-used, recycled or simply discarded or destroyed. Textile recycling originated in the West Riding of Yorkshire about 200 years ago when the "rag and bone" men went door-to-door to collect rags, metal and any other household articles. Today, many consumers dispose of their clothing to charity shops, where donations are sorted and are then either sold, sent to developing countries where they are re-used or sent to a recycling plant and made into fillings or cleaning rags. Linen, cotton and viscose can be made into paper pulp and wool can be recovered and felted or re-spun. Textile reclamation businesses recycle both natural and man-made fibres and 50 per cent of all the textiles we throw away are recyclable. The advantage of re-using and recycling has both environmental and economic benefits. Textiles present

particular problems in landfill as synthetic products do not decompose, whilst woollen garments decompose and produce methane, which contributes to global warming. In the UK, Nathan's Waste savers collects goods from charity shops and more than 1,000 textile banks; they sort and process more than 350,000 kg of material every week of which 98 per cent is reused or recycled.

Birtwistle and Moore (2007) investigated how consumers dispose of fashion products and how possible it was to increase sustainable consumption of textiles. The research identified the influences in increased purchase behaviour and the tendency to keep clothing for a shorter time. Using focus groups and key informant interviews, the study identified consumers' lack of understanding of how this behaviour affected the environment.

The process of apparel recycling impacts many entities and contributes significantly, in a broader sense, to the social responsibility of contemporary culture (Hawley, 2009). By recycling, Hawley, (2006) observed that companies can realize higher profits because they avoid charges associated with dumping in landfills while at the same time contributing to goodwill associated with environmentalism. However, in developing world where most of the used apparel are destined, the idea of apparel cycling is relatively new and hence technology associated with this process is still little known and used despite the fact that textiles are nearly 100% recyclable, and hence nothing in the textile and apparel industry ought to be wasted. This study sought to establish dynamics of apparel recycling in Nairobi as a means of addressing youth unemployment in Kenya.

This paper provides a systems perspective that depicts the textiles recycling processes and products in Nairobi. The study puts in perspective the different levels within the human system that are concerned with apparel recycling and provides synthesis of how systems theory provides a useful tool to project future trends for the textile and apparel recycling process particularly in developing world.

Theory (Kimemia to be called upon to explain)

This study was guided by the System theory, a multidisciplinary study of systems to investigate phenomena from a holistic approach. It is used to explore and explain behavioral patterns from Used clothing in the market Conversion to new products Landfill (Adams el al, 2013) The theory allows for the understanding of individual behavior in the context of the environment and situational factors and offers a unified framework for analysis of social reality at a higher level.

Research Methods

This study was carried out in Nairobi County - Kenya. The study targeted individuals, families, groups and companies involved in textile recycling. Descriptive survey research design was used since it helped in collecting wide-ranging, in-depth data and thorough examination of the dynamics of textile recycling as a means of addressing youth unemployment in Kenya (Bogdan and Biklen, 2007). Using five (5) companies,

ten (10) groups and fifty (50) individuals involved in textile recycling, this study employed an interview guide to collect data from respondents. Two people in top management – the company executive officer and Human resource manager were each purposively sampled from the five companies and groups making 30 respondents. The total sample was 80 respondents. The companies, groups and individuals were randomly selected across the county. Qualitatively Data was collected and analyzed according to the themes in the objectives of the study. Quantitative data was analyzed descriptively using frequencies, percentages. Data was presented in charts and tables.

Results

This section presents data analysis, presentation and interpretation. This study sought to establish the source of used clothes that are used as recyclable raw materials, items made from recycled clothes and finally the marketing of the products.

Demographic details of the respondents were determined and presented in Table 1.0.

Table 1.0: Demographic Details of the Respondents

Characteristics		Frequency	Percent
Age	Below 25 years	17	21.3
	25 - 35 years	24	30.0
	35 - 45 years	32	40.0
	above 45 years	7	8.8
Gender	Male	43	53.8
	Female	37	46.3
Highest Education level	Primary	8	10.0
attained	Secondary	34	42.5
	College	38	47.5
Type of enterprise	Individual	50	62.5
	Groups	20	25.0
	Companies	10	12.5

Data in Table 1.0 shows that majority (40%) of respondents were between 35 – 45 years old, 30% 25 – 35 years while 8.8% were above 45 and that 21.3% of respondents were below 25 years of age. 58% of people involved in textile recycling industry were males. The study also showed that there were more male (53.8%) than females were who involved in the textile recycling industry. 38% of respondents had attained college education while 10% of them had primary school certificate. 62.5% of the respondents were involved in individual enterprises, 20 (25.0%) were from groups while 10 (12.5%) were from companies involved in fabric recycling.

Source of Raw Materials

Table 2 below shows the source of raw materials used by respondents

Table 2: Sources of Waste Clothes Used as Raw Materials in the Recycling Industries.

Source	Respondent type	Individual		Total	
		Frequency	Percent	Frequency	Percent
Importation	Companies	9	50.0	18	22.5
	Groups	8	44.4		
	Individuals	1	5.6		
Second hand clothes vendors	Companies	10	13.9	72	90.0
	Groups	20	27.8		
	Individuals	42	58.3		
Door-to-door collection of waste textiles	Companies	2	4.8	42	52.5
	Groups	6	14.3		
	Individuals	34	81.0		
From dump sites	Companies	0	0.0	11	13.8
	Groups	2	18.2		
	Individuals	9	81.8		
Charity shops	Companies	2	33.3	6	7.5
	Groups	4	66.7		
	Individuals	0	0.0		

***Multiple Responses Allowed (n = 80)**

The results in Table 2 above show that 90% of the textile recyclers obtained used clothes from second hand clothes dealers, 52.5% carried out door -to -door collection of used clothes that were no longer needed while 22.5% of them imported second hand clothes to be used as raw materials in their recycling industries. The study also showed that 13.8% of the recyclers collected the waste clothes from dump sites across the cities and major town where they were located while 7.5% obtained from charity shops.

Affordability of the Raw Materials

The study sought to establish if the sources of the waste textiles obtained were affordable. The responses are presented in Table 3.

Table 3: Affordability of Second Hand Clothes Used as Raw Materials in Industries as Perceived by Respondents

Industry Type	Inexpensive		Expensive		Very expensive		Total	
	freq	Percent	freq	Percent	freq	Percent	freq	Percent
Companies	8	80.0	2	20.0	0	0.0	10	100
Groups	10	50.0	6	30.0	4	20.0	20	100
Individuals	10	20.0	32	64.0	8	16.0	50	100

The study showed that most (80%) companies perceived second hand clothes used as raw materials as inexpensive while 64% of the individual recyclers felt that the clothes were expensive. On the other hand, half of the groups considered the materials inexpensive.

Items made from the recycled textiles

Data on items made from the recycled clothes are presented in Table 4 below

Table 4: Items made from Recycled Textiles

Items	Type of industry	Freq	Percent
Ciondos	Individual, groups	41	51.3
Floor mat	Groups, companies	32	40.0
Dusters	Companies	46	57.5
Jewelry box lining	Companies	29	36.3
Car seat stuffing	Groups, companies	9	11.3
Automobile insulation	Groups, companies	9	11.3
Wiping clothes	Individuals, Groups	63	78.8
Paving materials	Companies	38	47.5
Carpet padding	Companies	16	20.0
Baseball and softball filing	Companies	21	26.3
School bags	Individuals, groups, companies	76	95.0
Industry conveyor belts	Companies	8	10.0
Sewing machine belts	Companies	8	10.0

***Multiple Responses Allowed (n = 80)**

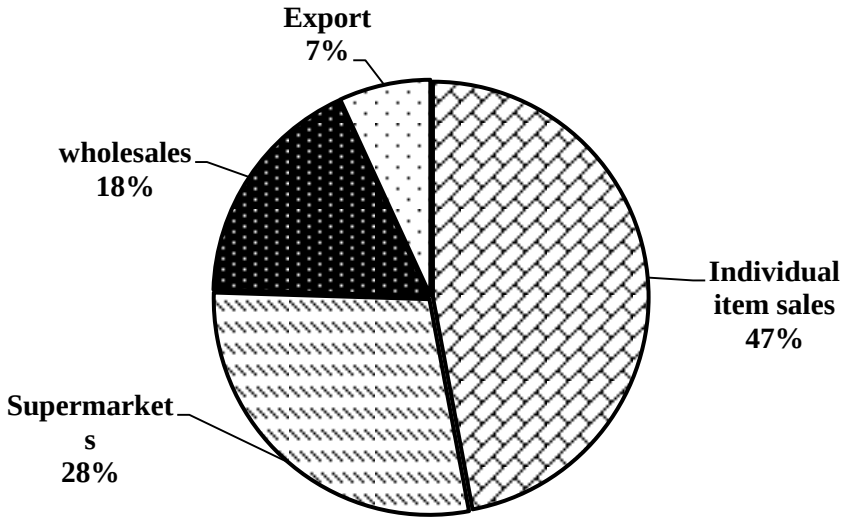
The study showed that 41(51.3%) of the respondents made *Ciondos,* 80% made wiping clothes, 11.3% produced car seats and automobile insulation while 10% made industry conveyor belts and sewing machine belts. More than half of respondents made dusters.

Market for produced items

The study investigated the market for the items, income from the sales of the items and the perception of the respondents on the influence of the industry on the livelihoods.

Data on market for the items produced from the recycled textiles are presented on figure 1 below.

Figure 1: Market for products of recycled material



Results showed that the majority (47%) of respondents sold the items individually to customers while 28% sold to the supermarkets. 18% of the items were sold to wholesalers while 7% was exported to other countries in the region.

Income from Sales of the Items

Level of income from sale of recycled items were given as monthly income as; Below Ksh. 20 000; between 20 000 and 60 000; between 60 000 and 100 000 per month. Results as presented on figure 2 showed that most (42%) of enterprises made between Ksh. 20 000 and 60 000 while 37% of the enterprises made between 60 000 and 100 000 shillings monthly from sale of goods manufactures from old fabrics.

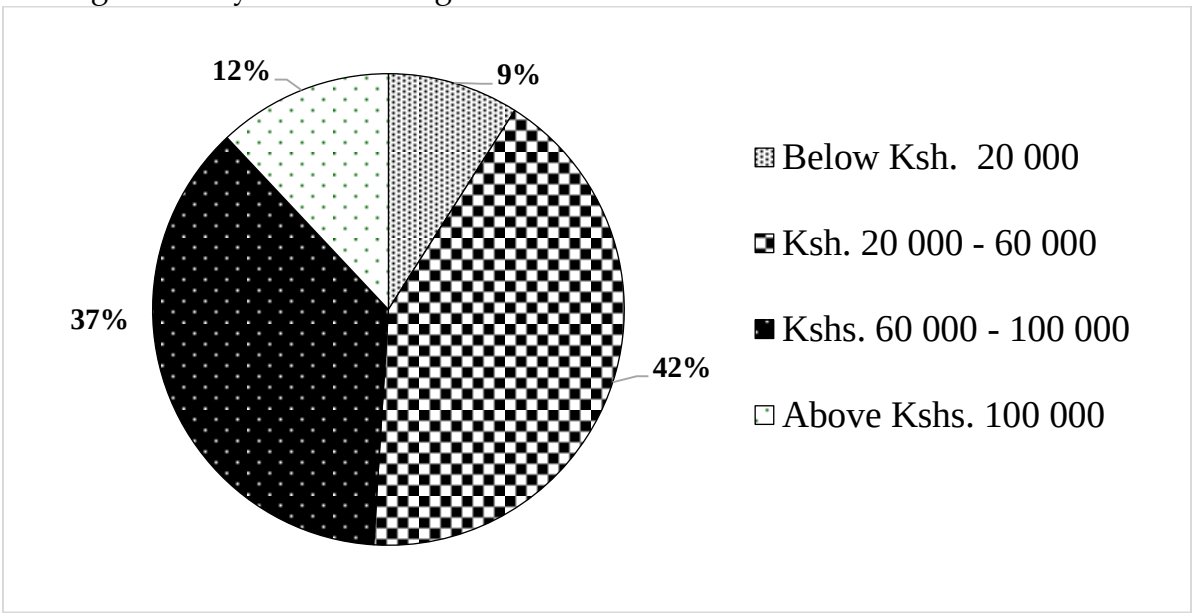


Figure 2: Income from Sale of Products made from Recycled Items

Discussions

Most textile recyclers obtained their raw materials from second hand clothes dealers and door -to -door collection of used clothes from the public. This shows that most of the dealers in the recycling industry were not able to import used clothes for their recycling activities. Thereby indicating that most of the dealers were economically weak. However, drawing from the local sources, 80% of the companies perceived raw materials as inexpensive and a maturity of those who viewed raw materials as expensive were individuals and groups.

Wiping clothes were the most made items by the respondents followed by dusters (57.5%) and *ciondos* (51.3%). On the contrary only 11.3of respondents produced items of higher value like car seats, automobile insulation, industry conveyor belts and sewing machine belts. This shows that most respondents did not have equipment that could allow them make advanced products.

Nearly half of the respondents sold the items individually to customers while only few sold to supermarkets and wholesalers. This shows that most of the enterprises produced less products that did not require bulky marketing and sales. 42% of the enterprises made between Ksh. 20 000 and 60 000 while 37% of the enterprises made between 60 000 and 100 000 Kenya shillings monthly from sale of goods manufactures from the old fabrics.

Conclusion and Recommendations

Local sellers of second hand clothes form a major source of raw materials for apparelrecycling industry in Kenya. The chain of getting the raw materials from the vendors and other local sources is generally expensive to most of individual entrepreneurs and groups. However, companies with higher returns got raw materials from imports from developed markets. Most of the items produced were made using local technology and hence of low value and quantity. The study recommends that the government through the ministry of youth should empower entrepreneurs in the fabric recycling industry through training on new technology in recycling and providing finances for tools and equipment. The government may also train the entrepreneurs on the need for forming and joining saccos that would enable them access finances.

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Competitive Strategies Adopted by Private Universities in Kenya.

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Abstract

Competitive strategy concerns what an organization does to gain sustainable competitive advantage. This paper sought to determine the influence of competitive strategies adopted by

Private Universities in Kenya to gain a competitive advantage over other players in the same industry. A case study approach was adopted to give in-depth understanding of the competitive strategies put in place by Private Universities in Kenya. Primary data was collected using an interview guide and secondary from audited financial reports and other publications at Privates University in Kenya. Content analysis was used to analyze data collected from interviewees. Results showed that Private Universities in Kenya have adopted product(course) differentiation, course cost leadership, customer(students)focus, use of internet to market, their products, offering e-learning, online registration and release of results, strategic alliances and partnerships, horizontal and vertical integration such as acquiring other colleges to ease competition, product (curriculum and course reviews) development through introduction of new courses, concentrated growth, diversification, market development, and vertical integration.

It is recommended that Private universities should focus on strategies that benefit their organization through increased profitability at the least cost possible through employment of differentiation strategies and broaden their scope through student and course focus strategies.

Keywords: Diversification**,** Course, Focus, Competitive, Strategy, Private University, Product development.

Introduction and Study Background

Over the past years, public universities in Kenya have faced many challenges among them challenges are: enrollment beyond their capacity to plan and finance, fiscal challenges beyond their control, decline in quality beyond their anticipation, and weak management practices. To help solve some of these problems, private universities have increasingly emerged and gained ground in Kenya as an alternative to higher education provision (Oketch, 2003).

Thus as the number of private universities continue to grow, so does the competition for market survival intensifies. With the development and progress of civilization, competition has become more complex and firms have engaged in various activities to minimize their operating costs while maximizing profits. Thus, the core competencies of the organization are reflected in their commercial activities and the most competent wins a large chunk of market share and leads the industry (Poddar and Gadhawe, 2007).

This study sought to determine the various competitive strategies that Private universities in Kenya adopt in order to gain a competitive advantage over other players in the same industry. Poddar and Gadhawe (2007) defined competitive advantage as the advantage that one firm has, relative to competing firms in the industry. It is the advantage a firm has over others, which helps the firm to fight out others in the race and trap the consumers. The competitive advantage can be in any form or manner, which helps the firm to enlarge and retain the market share by offering consumers greater value, through lower prices or by providing greater benefits and services that justify higher prices.

Competitive strategy is thus the search for a favourable competitive position in an industry, the fundamental arena in which competition occurs (Porter, 1985). It aims to establishing a profitable and sustainable position against the forces that determine industry competition. Johnson, et al (2011) observed that competitive strategy is concerned with how a business achieves a competitive advantage in its domain of activities while Porter (1996) argued that strategy is about being different. Thus it means deliberately choosing a different set of activities to deliver a unique mix of value.

Research Problem

As competition intensifies in the education sector, players are forced to craft superior strategies to help them gain a competitive edge against their competitors.

Kagwira (2004), looked at the extent to which Kenyan Universities practice education marketing and the study revealed that it is practiced to different extent. The study explored the various strategies but it did not address how these strategies help the institutions achieve competitive advantage.

In the above studies, it is evident that the researchers have not really narrowed down to focus on the competitive strategies adopted by private universities despite their rapid growth in the past few years. This study concentrated on the competitive strategies adopted by private universities in Kenya in order to survive in this era of great competition.

Specific Objectives

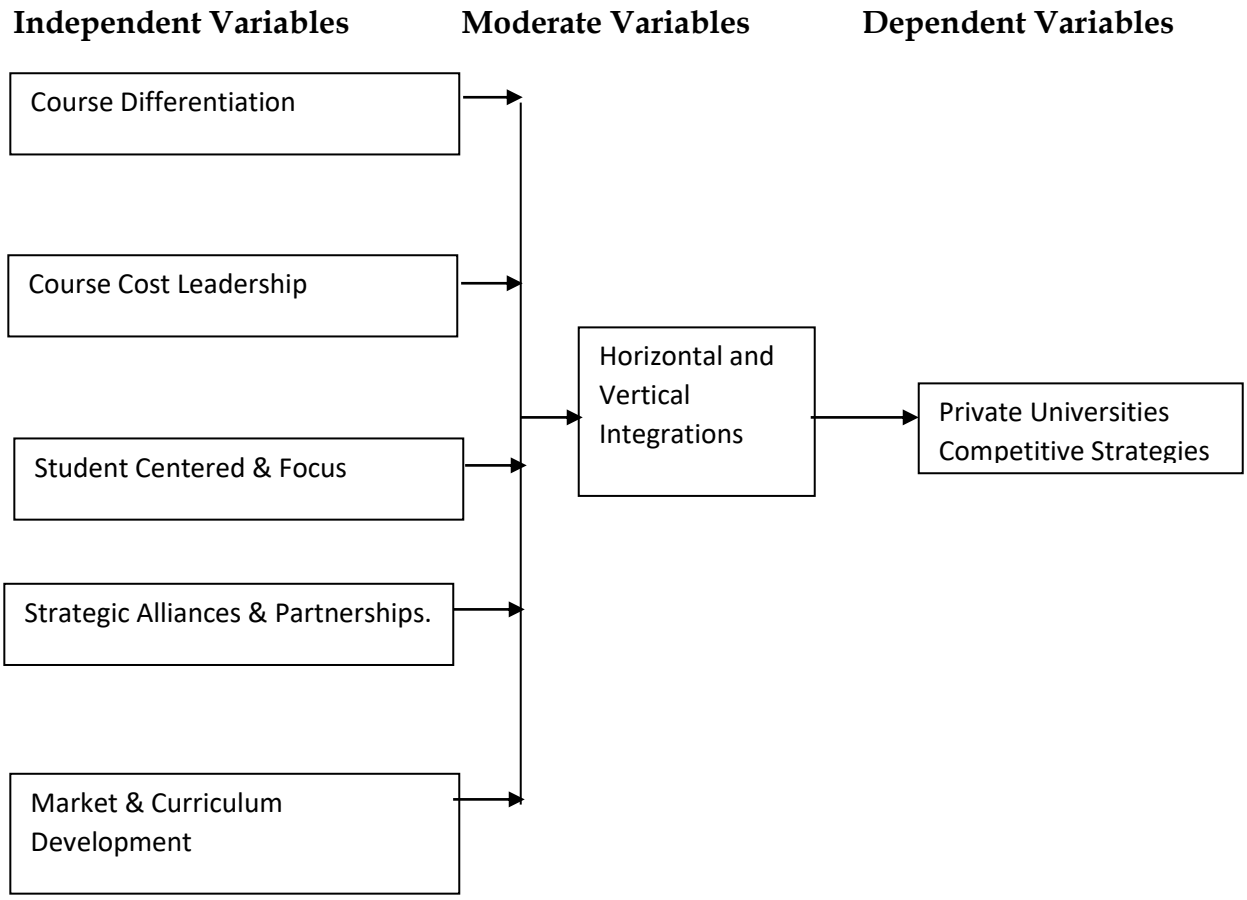
- To examine how course differentiation affects private universities competitive strategies
- To investigate how course cost leadership affect private universities competitive strategies
- To analyze how students centered focus affect private universities competitive strategies
- To examine how private universities strategic alliances, affect their competition
- To analyze how horizontal & vertical integration affect private universities competitive strategies.

Concept of Strategy

Strategic management is the art, science and craft of formulating, implementing and evaluating cross-functional decisions that would enable an organization to achieve its long-term objectives (David, 1989). It is the process of specifying the organization's mission, vision and objectives, developing policies and plans, often in terms of projects and programs, which are designed to achieve these objectives and then allocating resources to implement the policies and plans, projects and

programs.

Figure 1.0: **Conceptual Framework**



Theoretical Review

This study was guided by the resource based view theory to determinants of competitive advantage among private Universities in Kenya. The resource-based view (RBV), suggests that competitiveness can be achieved by innovatively delivering superior value to customers. The extant literature focuses on the strategic identification and use of resources by a firm for developing a sustained competitive advantage (Barney, 1991). International business theorists also explain the success and failures of firms across boundaries by considering the competitiveness of their subsidiaries or local alliances in emerging market. Local knowledge provided by a subsidiary or local alliance becomes an important resource for conceptualizing value as per the local requirements.

Resource Based Theory

Resources are inputs into a firm's production process; can be classified and into three categories as: physical capital, human capital and organizational capital. A capability is a capacity for a set of resources to perform a stretch task of an activity. Each organization is a collection of unique resources and capabilities that provides the basis for its strategy and the primary source of its returns. In the 21st-century hyper-competitive landscape, a firm is a collection of evolving capabilities that is managed dynamically in pursuit of above-average returns. Thus, differences in firm's performances across time are driven primarily by their unique resources and capabilities rather than by an industry's structural characteristics. The Resource based view theory is used to explain how private Universities gain competitiveness through innovatively delivering superior value to customers, they focus on the strategic identification and use of resources for developing a sustained competitive advantage.

Porter's Generic Strategies Theory

i) *Course Cost Leadership Strategy*

This is **Porter's generic strategies theory** known as cost leadership (Malburg, 2000). This strategy focuses on gaining competitive advantage by having the lowest cost in the industry (Porter, 1987, 1996; Cross, 1999). In order to achieve a low-cost advantage, an organization must have a low-cost leadership strategy, low-cost manufacturing, and a workforce committed to the low-cost strategy (Malburg, 2000). The organization must be willing to discontinue any activities in which they do not have a cost advantage and should consider outsourcing activities to other organizations with a cost advantage (Malburg, 2000). For an effective cost leadership strategy, a firm must have a large market share (Hyatt, 2001). There are many areas to achieve cost leadership such as mass production, mass distribution, economies of scale, technology, product design, input cost, capacity utilization of resources, and access to raw materials (Malburg, 2000).

ii) ***Course Market Focus Strategy***

The basis for competitive advantage is either lower costs than competitors serving that market segment or an ability to offer niche members something different from competitors. Focusing is based on selecting a market niche where buyers have distinctive preferences. The niche is defined by geographical uniqueness, specialized requirements in using the product or by special attributes that appeal to members, (Stone, 1995).

iii) ***Course Differentiation Strategy***

Differentiation strategies are marketing techniques used by a firm to establish strong identity in a specific market; also called segmentation strategy. Using this strategy, a firm will introduce different varieties of the same basic product under the same name into a particular product category and thus cover the range of products available in that category. Differentiation strategy can also be defined as positioning a brand in such a way as to differentiate it from the competition and establish an image that is unique, (Davidow & Uttal, 1989). Differentiation strategy aims to build up competitive advantage by offering unique products which are characterized by valuable features, such as quality, innovation, and customer service. Differentiation can be based on the product itself, the delivery system, and a broad range of other factors. With these differentiation features, firms provide additional values to customers which will reward them with a premium price.

iv) ***Horizontal and Vertical Integration Strategy***

Horizontal integration is used when a firm's long term strategy is based on growth through the acquisition of one or more similar firms operating at the same stage of the production-marketing chain (Pearce and Robison, 2000). Such acquisition eliminates competitors and provides the acquiring firm with access to new markets. Vertical integration involves the firm expanding the firm's range of activities backward into sources of supply or forward toward end users (Thompson, Strickland and Gamble, 2005).

Study Population

According to Cooper and Schindler (2000), a population is the total collection of elements about which we wish to make inferences. The population of interest in this study comprised of all the twenty-seven private universities which are operating under either interim or full charter in the republic of Kenya. This was therefore a census study.

Data Collection

Primary data was collected using semi-structured questionnaires and each item on the semi-structured questionnaire addressed a research question.

It contained easy to analyse semi-structured questions using statistical techniques and facilitate comparisons to be made across groups. The semi-structured questionnaire was self - administered and copies were dropped to respondents and picked at later date.

The semi-structured questionnaire was divided into three parts. The first part gathered data on the demographic aspect of the university. This included title, gender and length in years of the respondent serving in that post, the university name, schools in the university, years of operation and the number of campuses it has. This information helped to determine the weaknesses and strengths of the university.

The second part sought to establish the strategies employed by the Private universities to gain competitive advantage in the industry. This helped to determine the extent to which some strategies are used as opposed to others. The last section examined the challenges encountered by the Private universities in using each of the competitive strategies highlighted.

Data Analysis

Data analysis generally involved reducing accumulated data to a controllable size, developing summaries, looking for patterns, and applying statistical techniques (Cooper and Schindler 2000). Data was described and analyzed using descriptive statistics such as frequencies, percentages, mean and standard deviation. Measures of dispersion were used to describe the spread of the data using measures such as range and standard deviation.

Data Analysis, Interpretation and Presentation

Of 27 targeted respondents, 25 respondents filled and returned the questionnaires which making a response rate of 92.6 %. Descriptive statistics was used to analyze the data. In the descriptive statistics, relative frequencies were used in some questions and others were analyzed using mean scores with the help of Likert scale ratings in the analysis.

Table 1 Summary of the Respondent's Gender

Gender	Frequency	Percent
Male	17	68.0
Female	8	32.0
Total	25	100

Competitive Strategies Employed by Private Universities

Table 2: Strategies Used by Private Universities to Remain Competitive in the Market

Application of Competitive Strategy	Mean	Std Deviation
Use of student centered focus	3.8551	.69985
Use of course cost leadership	3.9420	.74254
Course differentiation	3.9855	.72480
Use of concentrated growth such as concentrating on one key area of expertise	3.6739	.60609
Use of course development such as introduction of new courses	3.6957	.56165
Use of market development (such as opening new campuses in new cities and counties and international markets)	3.5725	.55220
Use of vertical integration (such as acquiring high schools)	3.5128	.64215
Use of horizontal integration such as acquiring other colleges to ease Competition.	3.7029	.83193
Use of strategic alliances and partnership.	3.7681	.83962
Use of diversification either in related or unrelated areas.	3.6522	.86572
Use of internet to market, offer e-learning, online registration and release of results.	3.7884	1.11264

Challenges faced by Private Universities

Table 3: Summary of Challenges faced by Private Universities

Challenge	Mean	Std Deviation
Meeting Commission of Higher Education (CHE) requirements	4.4710	.97556
Students strike which affect duration of courses and diminish public Confidence	4.4130	.64760
Increased competition from other universities	3.7464	.70516
Staff turnover	3.7319	.71009
Lack of enough space	3.6232	.88954
Maintaining reasonably low fees	4.1232	1.19276
Imitation of courses by other universities	3.7319	.58621
Students offered by other universities inability to differentiate a university's courses from those offered by other universities	3.5507	.62866
Change in market needs	3.5435	.70576
High fee default rate among students	4.0362	.75850
Huge financial requirement to establish and run the university	3.9203	.86338
Competition arising from foreign and public universities.	4.1522	.80057

From the findings on the challenges faced by private Universities for them to remain competitive in the market, the study revealed that those faced to great extent were: meeting Commission of Higher Education (CHE) requirements as shown by mean of 4.4710, Students strike which affect duration of courses and diminish public, confidence maintaining reasonably low fees, competition arising from foreign and public universities high fee, default rate among students, huge financial requirement to establish and run the university, competition from other universities, staff turnover and imitation of courses by other universities in each case, lack of enough space. Students inability to differentiate your courses from those offered by other

universities and change in market needs as shown by mean values in table 3. Other challenges included market regulation by the government, competition from well-established public universities, lack of student funding by HELB, lack of government support for private universities and shortage of qualified personnel.

Conclusion

The study concluded that Private Universities in Kenya have responded to competition adopting various strategies to remain competitive in the market namely; These were: course differentiation, course cost leadership, customer/student centred & focus, use of internet to market, offering e-learning, online registration and timely release of results, strategic alliances and partnership, horizontal and vertical integration such as acquiring other colleges to ease competition, product development such as introduction of new courses, concentrated growth, diversification, market development, and vertical integration.

Additional challenges include meeting Commission for University Education (CUE) requirements, students strike, maintaining reasonably low fees, high fee default rate among students, huge financial requirement to establish and run the university, increased competition from other universities, high staff turnover, lack of space and change in market needs, among others.

Recommendations

1) Private Universities should continually put in place competitive strategic responses to change environment to ensure survival. Through focus strategy they should expand into new markets and identify products that can help them compete within the established markets. This will be done by identifying the segments in the market that suits their products and services.
2) Through the already established relationship between competitive strategies and performance improvement in response to increased competition, the strategies put in place should be effective to ensure sustainability

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Embracing Innovative Technology for Low Cost Housing: A Kenyan Perceptive

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Abstract

In the recent past, all sectors of the economy have been evolving through adoption of new technologies. Despite the fact that many economic sectors in Kenya have embraced e –commerce, housing sector still lags behind. This study sought to investigate factors influencing adoption of e – commerce in housing sector by determining knowledge of e-commerce benefits, technical and IT skills and cost of implementing e-commerce among 100 house owners in Nairobi County of Kenya. Simple random sampling was employed to select the respondents. Descriptive research design was used to explain the phenomenon while correlation was used to establish relationship among variables. Results showed that knowledge of e-commerce benefits, IT knowledge and skills and cost of implementing the e-commerce, significantly influenced adoption of e-commerce technology in the Kenyan housing sector. IT infrastructure and technical skills was found to have less influence in adoption of ecommerce in the housing sector. More training should be done to house owners, youths and youth enterprises to invest in housing sector while IT specialists and web developers should develop and market a website where both commercial and residential tenants seeking housing can easily access them.

Keywords: Cost, Technology, Knowledge, Infrastructure, Technical Skills.

Study Overview

The advent of the technological era has delivered a latent opportunity for entrepreneurs and other small and medium enterprises to create more value-adding activities (Jones, Hecker, &Holland, 2003). The current world is run is by technology and therefore it is widely acceptable that businesses should embrace e-commerce for them to remain competitive (Van Akkeren & Cavaye 1999). E-commerce is a technology that facilitates buying and selling of goods and services using the online platforms. In Kenya the housing sector comprises government and private owners, who supply housing services to tenants. The services offered in this sector falls under two main categories namely; residential and commercial housing. Although housing is one of the major problem experienced in many countries due to increased human population. Less attention has been given to use of technology to improve access and secure houses.

Locally, in keya there are the country has three well-known brands that offer e-commerce services namely: Jumia, KiliMall and OLX. The three mentioned brands mainly deal with retails products, electronics, cars and fashion products. Although internet connectivity in Kenya is almost hitting 60% only 30% of Kenyans are willing to buy goods and services online (Muli, 2018) and less attention has been given to adoption of e-commerce in the housing sector despite the increasing rate of population and associated housing problem.

In Kenya, retail and hotel industry are leading in adoption of e-commerce. The "shop online" trend has significantly reduced time spent when shopping and created convenience for people with tight schedules. Despite the challenges associate with the online shopping, Kenyans are still convinced that, e-commerce is the way to go; however, adoption of e-commerce in the housing sector is very low despite its enormous benefits. This study investigated the factors influencing the adoption of e-commerce in the Kenyan Housing sector by determining the extent to which knowledge of e-commerce benefits, IT knowledge and skills, IT infrastructure and technical skills as well as the extent to which the cost of implementation of e-commerce among house owners influenced adoption of e-commerce in the Kenya housing sector.

Theoretical Framework

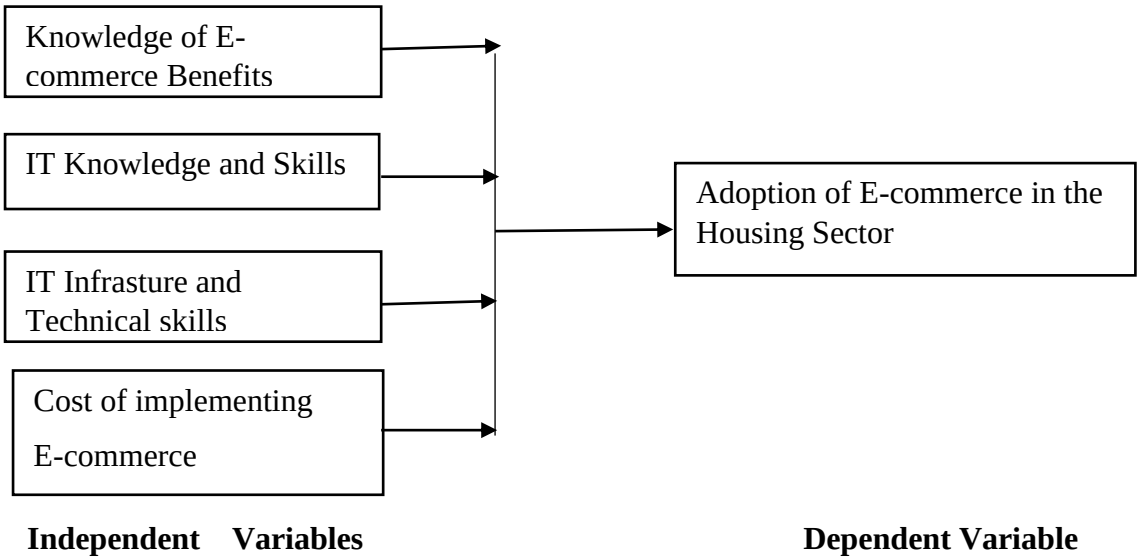
The study was grounded on three main theories as explained. First is the resource-based theory. According to the resource based theory, organizations with more strategic resources derive more competitive advantage over organizations that do not. This theory argues that organizations achieve competitive advantage over their competitors from value creation and implementation of the various organizational strategies through effective use of its core resources (Barney, 2014). This theory helped in derivation of the first and the fourth objective of the study (knowledge of e-commerce benefits and cost of implementation). The second theory was the theory of Planned Behaviour (TPB). This theory was developed by Ajzen in the year 1991 to explain behaviour for technology-related services and products. The theory suggests behavioural intention is a central factor in human behaviour is, which is affected by attitude towards behaviour, subjective norm, and perceived behavioural control (PBC) (Ajzen, 1985, 1991, 2002). Subjective norm expresses the perceived organizational or social pressure of a person

who intends to perform the behaviour in question. PBC reflects a person ' s perception of the ease or difficulty of implementing the behaviour in question and it concerns beliefs about the presence of control factors that may facilitate or hinder their behaviour. This theory was used to develop the second objective of the study IT knowledge and skills. Diffusion of Innovations Theory was the last theoretical model and it was developed by E.M. Rogers in 1962. It originated in communication to explain how, over time, an idea or product gains momentum and diffuses through a specific population or social system. The end result of this diffusion is that people, as part of a social system, adopt a new idea, behavior, or product. The key to adoption is that the person must perceive the idea, behavior, or product as new or innovative. It is through this that diffusion is possible. The theory was used to develop the first objective of the study.

Conceptual Framework

A conceptual frame work is a diagrammatic representation of the relationship of the various dependent and independent variables that are going to be investigated (Taylor, Bogdan & DeVault, 2015).

Figure 2.1: Conceptual Framework



Empirical Review

Karime (2013), examined the factors influencing adoption of e-commerce among youth entrepreneurs in Nakuru Town, Kenya. The study used a sample of 198 youth entrepreneurs. It was established that a number of entrepreneurs had adopted various aspects of e-commerce and that perceived benefits, security/privacy concerns and internet access significantly influenced adoption of e-commerce. Adoption rate was expected to be high since the target population was the youth aged between 18 to 35 years. Macharia (2009) investigated factors affecting adoption of e-commerce in SMEs in Kenya and reported that Small and Medium-sized Enterprises (SMEs) were rapidly adopting the electronic commerce (e-commerce), to enable them to compete with their larger counterparts. However, the benefits have not been realised in SMEs in developing economies like Kenya due to the slow adoption of e-commerce. The study established that there was a positive relationship between costs of e-commerce implementation, Information Technology (IT) skills and training, with e-commerce adoption by Small and Medium Enterprises (SMEs).

Kenneth, et al (2012) examined the factors affecting adoption of electronic e-commerce among small medium enterprises in tours and travel firms in Nairobi, Kenya focusing on the effect of leadership styles, infrastructure, resources, and competition on the adoption of e-commerce among SMEs in Kenya. Three hundred and fifty tours and travel firms were sampled. Results showed majority of Tour and Travel firms had adopted

e-commerce in their daily transactions and that infrastructure, leadership style, competition, resources and positioning on the adoption of electronic commerce significantly influenced adoption of e-commerce among the travel agencies.

Alrousan (2015) examine the adoption of E-commerce by travel agencies in Jordan and reported that travel agencies that had not adopted e-commerce were regarded as slow adopters of e-commerce, lagging far behind the developed countries. Results showed that compatibility, trialability, employees' IT knowledge, top management support, manager's attitude, and customer pressure were insignificant predictors of any of the e-commerce adoption levels.

Aljowaidi (2015) carried out a study to examine the factors that were influencing adoption of e-commerce among Saudi retailers and reported that lack of government initiatives, legal frameworks, inadequate external ICT infrastructure, and low e-readiness among local trading partners, poor physical infrastructure, and lack of e-payment methods were barriers to adoption of e-commerce. This study investigated factors affecting adoption of e-commerce in housing sector in Kenya.

Methodology

The study used descriptive and correlational research design. The descriptive research design was use to explain the phenomenon of e-commerce adoption while correlational design was used to establish the relationship between the selected variables and the dependent variables. 100 landlords were randomly sampled from Nairobi County, Kenya. Primary data was collected using questionnaires with open and closed ended questions and interview. Questionnaires were administered through drop and pick procedure. Data was cleaned and analyzed using SPSS version 23 and results presented in form oftables.

Results and Discussion

Table 1: ***Age of the Respondents***

Tables 1 and 2 below presents distribution of respondents by age and level of education respondents respectively

Age	Number of Respondents	Percentage
20-30 years	1	1.1%
31-40 years	4	4.2%
41-50 years	8	8.4%
51-60 years	20	21.1%
61-70 years	27	28.4%
71 years and above	35	36.8%
Total	**95**	**100%**

Table 2: Level of Education for the Respondents

Age	Number of Respondents	Percentage
Primary level	30	31.6%
Secondary level	33	34.7%
Diploma	17	17.9%
Degree	10	10.5%
Postgraduate level	5	5.3%
Total	**95**	**100%**

The findings revealed that majority of the house owners had not gone beyond secondary school level about 66.2% of the respondents.

Knowledge of E-commerce Benefits

76% of respondents strongly agreed that knowledge of e-commerce benefits influenced adoption of e-commerce in the housing sector (table 3). Multiple regression analysis was carried out on the measures and *R*2 value of 0.522 as obtained for the measures of knowledge of e-commerce benefits (Table 4). There was a strong positive relationship between benefits of e-commerce and it adoption (r=0.72). These results indicate that knowledge of e-commerce benefits influences 52.2 % of the decision to adopt e-commerce in the housing sector.

Table 3: Descriptive Analysis of Benefits of E-commerce Knowledge

Knowledge of E-commerce

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Agree	76	76.0	80.0	80.0
	Agree	19	19.0	20.0	100.0
	Total	95	95.0	100.0	
Missing	System	5	5.0		

Total	100	100.0		

Table 4: Regression Analysis of Benefits of E-Commerce Knowledge

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.0.722[a]	.522	-.008	.487

a. Predictors: (Constant), Knowledge of E-commerce

IT Knowledge and Skills

Table 5: Descriptive Analysis of IT Knowledge and Skills

IT Knoweldge and Skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	strongly agree	60	58.3	63.2	63.2
	Agree	27	26.2	28.4	91.6
	Neutral	8	7.8	8.4	100.0
	Total	95	92.2	100.0	
Missing	System	8	7.8		
Total		103	100.0		

Table 6: ***Regression Analysis of IT Knowledge and Skills***

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.751[a]	.5625	-.001	.454	.737

a. Predictors: (Constant), IT knowledge and Skills

b. Dependent Variable: Adoption of Ecommerce

58.3 % of respondents strongly agreed while (26.2%) agreed that IT knowledge and skills significantly influenced adoption of e-commerce in the housing sector. Regression analysis model was carried out on the measures and *R*2 value of 0.5625 obtained (Table 6). These results indicated that IT Knowledge and Skills influenced 56.25 % of the decision to adopt e-commerce in the housing sector. Thre was a strong relationship between IT knowledge and skills to adoption of e-commerce, r= 0.751e analysis also showed that the relationship between IT knowledge and skills to adoption was very strong r= 0.751

IT Infrastructure and Technical Skills

Majority of the respondents 53% strongly disagreed that IT infrastructure and Technical Skills influenced adoption of e-commerce in the housing while 37% disagreed (Tables 7 and 8). From regression analysis it was clear that IT infrastructure and Technical skills only influenced 11.8% decision on adoption of e-commerce in the housing sectors. Thus there was a weak positive relationship between the variable and adoption of e-commerce r = 0.343.

Table 7: Descriptive Analysis of Infrastructure and Technical Skills

It Infrastructure and Technical Skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	1	1.0	1.1	1.1
	neutral	4	4.0	4.2	5.3
	disagree	37	37.0	38.9	44.2
	strongly disagree	53	53.0	55.8	100.0
	Total	95	95.0	100.0	
Missing	System	5	5.0		
Total		100	100.0		

Table 8: Regression Analysis of Infrastructure and Technical Skills

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.343[a]	.118	.088	.429	.867

a. Predictors: (Constant), It Infrastructure and technical skills, Knowledge of ecommerce benefits, IT knowledge and skills

b. Dependent Variable: Adoption of Ecommerce

Cost of Implementing E-commerce

Table 9: Descriptive Analysis of Cost of 1mplementing E-commerce

Cost of implementing e-commerce

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	71	71.0	74.7	74.7
	Agree	22	22.0	23.2	97.9
	neutral	2	2.0	2.1	100.0
	Total	95	95.0	100.0	
Missing	System	5	5.0		
Total		100	100.0		

Table 10: Regression Analysis of Cost of Implementing E-commerce

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.85[a]	.7225	.016	.450	2.747

a. Predictors: (Constant), Cost of implementing e-commerce

b. Dependent Variable: Adoption of Ecommerce

71% of the respondents strongly agreed that cost of implementing e-commerce significantly influenced adoption of e-ecommerce in the housing sector. Regression analysis showed that 72.25% adoption decision was influenced by the cost aspect while 27.75% indicated that adoption of e-commerce was influenced by other factors (Table 9

and 10). There was a strong positive relationship between cost and adoption of e-commerce r=0.85.

Conclusions and Recommendations

Results of this lead to a conclusion that knowledge of e-commerce benefits, IT knowledge and skills, cost of implementing e-commerce significantly influenced adoption of e-commerce in the Kenyan housing sector. There is need to educate house owners on the benefits that are likely to accrue as a result of adopting e-commerce and that youth be encouraged to invest in housing sector through utilization youth funds and well as mobilization of resources through table banking initiatives. It is also recommended that IT web developers should take this opportunity to develop and market a website where commercial and residential tenants can seek housing facilities. The website should have photos of the houses, their prices, and location, contact of the owners or the caretaker and a reservation system.

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Effect of Training and Development on Organizational Performance

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Abstract

The purpose of this study was to find out the impact of training and development on organizational performance. Organizations have been spending a substantial portion of their budgets on training and development in the belief that this would translate to an increase in employee productivity. This study was carried out in three companies namely Kenya Power, KenGen and Mumias Sugar Company using a descriptive survey design was adopted in the study. The study population was 5866 employees in the three companies. Results showed that training and development had a significant effect on organizational performance. It is recommended that organizations should provide training and development as important ingredients to improving organizational performance..

Keywords: Development, Employee Performance, Organizational Performance and Training.

Introduction

Training and development is crucial for survival of any organization in the competitive world. Because employees give an organization competitive advantage, there is need invest in training and development to enhance employee productivity. According to Nda & Fard, (2013) there are long term and short term benefits accruing from investing in human capital. This would potentially improve their ability to adapt to the changing business environment and technology and increase their capacity to develop creative and problem solving skills (Falola, Osibanjo & Ojo, 2014).

General Electric for example invests approximately $1 billion each year for training and education programs for its employees (Noe et al, 2015). The justification for such expenditure can be realized through measurement of return on investment in the form of organizational performance. It would thus be important to establish the relationship between training and development and organizational performance in the second decade of the 21st century.

Problem Statement

Public enterprises were formed to meet commercial and social goals through promotion of general welfare of the people, to encourage investment in activities that require capital but take long to bring returns, avoid wastage and inefficiency, make revenue, create employment and to control prices of products. However, these public enterprises have been riddled with poor performance and inefficiency. There is therefore a need to enhance performance of such through training and development (Tzafrir, 2006) hence a choice for this study.

Objectives

- The objective of the study was to examine the impact of training and development of employees on organizational performance in three state corporations listed state corporations in the Nairobi stock exchange.

Literature Review

Training and Development

Training has been defied by different authors. According to Bernadin and Russell (2013), training refers to any attempt to improve employee performance on a currently held job or one related to usually through changes in specific knowledge, skills, attitudes and behaviors. Dessler (2017) define training as the process of teaching new or current employees the basic skills they need to perform the job. Elsewhere, Abiodun (2010), defined training is a systematic development of knowledge, skills and attitudes required by employees to perform adequately on a given task. While Armstrong (2009) defined training as the practice of equipping employees with skills, knowledge and abilities, with the aim of building organizational capabilities and organizational performance, employee training and development are seen as the most important formation of any competent management.
Development refers to learning opportunities designed to help employees grow. Such opportunities do not have to be limited to improving employees' performance on their current jobs but has long term focus to help employees prepare for future work demands while training focuses on the immediate period to help fix any current deficits in employee' skills (Bernadin & Russell, 2013).

Training programmes increase employee productivity and reduces job dissatisfaction that results in employee turnover (Huselid, 2010). and increases employees' productivity, commitment and lowers turnover. Companies may also assist their employees in career planning encouraging employees to take more responsibility for their own development, including the development of skills viewed as significant in the company (Doyle, 2009).

Barringer *et al.* (2005) compared rapid – growth and slow-growth firms and found that rapid – growth firms depend heavily on the abilities and efforts of their employees to maintain their growth oriented strategies. The fast – growth firms used training programs to achieve their objectives and emphasized employee development to a significantly greater extent than slow– growth counterparts.

Aragon-S´anchez *et al*. (2003) investigated the relationship between training and organizational performance of 457 small and medium-size businesses in the United Kingdom, the Netherlands, Portugal, Finland, and Spain. Results showed on-the-job training including training inside the organization using in-house trainers, were positively related to effectiveness and profitability.

Imran and Tanveer (2015) in a Pakistanian study reported a strong relationship between training and development and employee performance. Yousafzai, et al (2014) carried out a study on the impact of training and development on employee performance and productivity.

Falola, et al (2014) conducted a study in the Nigerian banking industry and results observed that training and development affects employees' performance and organizational effectiveness.

Nda and Fard (2013) in their study reported that training and development ultimately upgrade not only the productivity of employees but also of the organization.

Elsewhere Githinji (2014) conducted a study in Somalia and observed that training positively enhanced employee enthusiasm and engagement in innovation with better performance. Ombui, et al (2014) conducted a study in research institutes in Kenya and observed a significant relationship between training and development and employee performance.

Organizational Performance

Organizational performance is the achievement of organizational goals in the pursuit of business strategies that lead to sustainable competitive advantages (Gephardt and Van Bureu, 2008). There are many indicators other than pure financial figures that indicate an increase in organizational performance (Huselid, 2010). One such indicator is the actual behaviour of employees, through the way they affect turnover and labour productivity (Huselid, 2010).

This study investigated the impact on employee training and development on organizational performance using the following hypothesis;

H0: There is no significant effect of training and development on organizational performance in listed state corporations in Nairobi stock exchange.

Conceptual Framework

The various variables under study were conceptualized to be related as shown below:

Research Methodology

This study employed survey research design to establish the relationship between employee training and organizational performance among three companies. The study was conducted in three companies trading on the Nairobi Stock Exchange namely: Kenya Power, Kengen and Mumias Sugar. Descriptive survey design was used to allow the researcher to gather information, summarize, present and interpret data for purpose of clarification. Of the 5866 employees in the three state corporations, 361 respondents were randomly sampled; using stratified sampling technique 126 from Kengen, 122 from Kenya power and 1123 from Mumia Sugar Company.
Stratified random sampling was used to group the employees into two so that each gender was included in the sample.

Data analysis and Presentation

Data was analyzed using descriptive and inferential statistics. To test the hypotheses, F-test was used. Multiple regression was applied in analyze the effect of training and development on organizational performance. The following model was adopted:

$Y= \beta_0 + \beta_1 X_1 + \varepsilon$

where:

Y = Organizational performance

X_1 = Training and development

β_0 is a constant which denotes organizational performance that is independent of training and development
ε is a random variable introduced to accommodate the effect of other factors that affect organizational performance
The model was first subjected to correlation to establish whether the variable was significant. F-test was further computed for the individual variables' coefficients to determine its significance in the model. Null hypothesis was accepted or rejected based on the p-value obtained. The test was done at α =0.05 level of significance.

Results and Discussion

To investigate the effect of training and development of employees on organizational performance, nine items were analyzed. Reliability test of items on training and development achieved a Cronbach Alpha of 0.8363 indicating a strong internal consistency. Data presented on Table 1 revealed that, workshops and seminars were always held for employees in the organization to improve their skills (mean = 4.01, standard deviation 0.68), the organizations rarely provided employees with formal job training either on or off the premises (mean =3.69, standard deviation 1.24), employees in the organization always received intensive/extensive training on specific skills; task or firm - specific training (mean = 3.65, deviation 1.05), employees in the organization had always been trained on a variety of jobs or skills and could perform more than one job (mean = 3.53, standard deviation 1.07) and the core group of workers in the organization had off-the-job training in the past year and had improved communication and team work (mean = 3.52, standard deviation 1.01). Based on the results, those firms that embraced training and development had positive effects on organizational performance.

67.2% of the respondents reported that employees in the organization were rarely trained on skills related to their jobs. However, 72.1% reported having always received intensive/extensive training on company-specific skills (task or firm-specific training). 87.8% respondents reported that workshops and seminars were always held for employees in their organization to improve their skills. 61.5% indicated that the core group of workers in their organization had off-the-job training in the past year and that it improved communication and team work. 41.4% of the respondents agreed that they were fully satisfied with the organization induction/orientation/job related training as a result of training and development.

Table 1: **Employee Training and Development on Organizational Performance**

Opinion on statement	SD %	D %	N/O %	A %	SA %	Mean	Std
Employees in the organization are rarely trained in skills related to their jobs	7.0	18.8	7.0	44.9	22.3	3.57	1.22
Employees in the organization always receive intensive/extensive training in company - specific skills (e.g. task or firm - specific training)	3.1	17.4	7.3	55.4	16.7	3.65	1.05
Workshops and seminars are always held for employees in the organization to improve their skills	1.7	8.0	2.4	63.5	24.3	4.01	0.68
Employees in the organization have always been trained in a variety of jobs or skills and can perform more than one job	2.8	20.5	13.5	46.9	16.3	3.53	1.07
The core group of workers in the organization has had off - the job training in the past year and it improved communication and team working	3.5	15.4	19.6	48.6	12.9	3.52	1.01
Organization rarely provides employees with formal job training either on or off the premises	3.5	19.2	8.7	44.8	23.4	3.69	1.24
Employee training in the organization is always effective	4.0	17.8	18.5	48.7	10.9	3.45	1.03
Employer rarely provides employee with sufficient opportunities for training and development	6.7	25.6	9.1	41.8	16.8	3.36	1.22
Employees in the organization are fully satisfied with organizational induction/orientation/job related training	3.9	27.4	26.3	34.0	8.4	3.16	1.04

Reliability Alpha - Employee training and development = 0.8363
Ranked on a scale where 1 = SD- Strongly disagree; 2= D-Disagree; 3= N/O- No opinion; 4 =A-Agree; 5 = SA-Strongly agree. n = 291.

Respondents suggested that: organizations should have both international and local trainings, organize conferences, workshops and seminars, increase employees' salary, conduct job evaluation and enrichment. They felt that organizations should have personal development forms filled every six months by employees and team building activities and release them on study. Organizations should also give them study leave to pursue further training.

There was a significant relationship between organizational performance and training and development ($r=3.360$, p-value < 0.001). This implied that training and development independently explained 12.96% of the variation in organizational performance.

Using the study model $Y = ß_0 + ß_1X_1 + \varepsilon$, the equation for establishment of organizational performance in the regression formula therefore is $Y = 0.360X_1$. The model equation shows that

standardized organizational performance will increase by 0.360 units with one-unit increase in standardized training and development. The findings showed a positive impact of training and development on organizational performance.
Similarly, the F –test for this factor in the regression model was found to be significant $F_{(1, 284)} = 42.268$, p- value = 0.001.

Table 2: **ANOVA Table of Training and Development on Organizational Performance**

	Sum of Squares	df	Mean Square	F	Sig.
Regression	19.739	1	19.739	42.268	.000[a]
Residual	132.162	283	.467		
Total	151.901	284			

H0 was therefore rejected since the factor of employee training and development significantly influenced organizational performance. It was therefore concluded that training and development had a significant effect on organizational performance. These findings are consistent with the findings obtained in other studies (Imran & Tanveer, 2015; Nda & Fard, 2013; Githinji, 2014).

Conclusion

Training and development has a significant effect on organizational performance and was associated with 12.96% of the variation in organizational performance.

Recommendations

Organizations should strive to provide training and development as it is an important ingredient in improving organizational performance. To achieve this end, the following should be embraced:

i) Training should be based on a careful needs assessment.
ii) Employees at all levels should get equal training opportunities.
iii) Organizations should make training and development of their employees a continuous activity.
iv) Training should be thoroughly evaluated to inform future decisions.

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