

8th

INTERNATIONAL CONFERENCE ON BUSINESS MANAGEMENT AND ENTREPRENEURIAL DEVELOPMENT (ICBMED 2023)

THEME

**“Business Growth, Structural Change
and Economic Development in Periods
of Economic Crises”**

PROGRAMME

26 - 27 April, 2023



Virtual



9.00 a.m.

KEYNOTE SPEAKER

Mr. Kenneth K. Thompson
CEO, Dalex Finance and Leasing
Company Limited

CHAIRMAN

Prof. Abednego F. O. Amartey
Vice-Chancellor
University of Professional Studies, Accra

ICBMED 2023



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Prof. Abednego F. O. Amartei
Vice-Chancellor,
University of Professional
Studies, Accra



KEYNOTE SPEAKER

Mr. Kenneth K. Thompson
CEO, Dalex Finance and Leasing
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DAY 1: WEDNESDAY, APRIL 26, 2023

Conference Opening

- 09:00 - 09:05 Formal Welcome & Introduction of Chairman (MC)
- 09:05 - 09:20 Address by Chairman:
Prof. Abednego F. O. Amartey - Vice-Chancellor, UPSA
- 09:30 - 10:10 Keynote Address:
Mr. Kenneth K. Thompson, CEO, Dalex Finance and Leasing Company Limited, Accra
- 10:10 - 10:20 Remarks by Prof. John K. Mensah Mawutor
Pro VC/Chair-Editorial Committee
- Zoom Link: <https://wacren.zoom.us/j/67567592468>
Meeting ID: 675 6759 2468
- MC: Dr. Mercy Naa Merley Desouza

Paper Presentation Sessions

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	Session 2	<i>Business Strategy and Sustainability in Periods of Economic Crisis</i>
	Zoom Link	https://wacren.zoom.us/j/69722596399 Meeting ID: 697 2259 6399
	Session 3	<i>Business Strategy and Sustainability in Periods of Economic Crisis</i>
	Zoom Link	https://wacren.zoom.us/j/64261048043 Meeting ID: 642 6104 8043
	Session 4	<i>Empowering SMEs to Support Economic Structural Change</i>
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LUNCH/NETWORKING BREAK		

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	Session 7	<i>Business Strategy and Sustainability in Periods of Economic Crisis</i>
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15.00-16.30	Session 9	<i>Structural Reforms in Accounting and Financial Services</i>
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	Zoom Link	https://wacren.zoom.us/j/69722596399 Meeting ID: 697 2259 6399
	Session 11	<i>Information Technology and Digitalization</i>
	Zoom Link	https://wacren.zoom.us/j/64261048043 Meeting ID: 642 6104 8043
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DAY 2: THURSDAY, APRIL 27, 2023

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Zoom Link: <https://wacren.zoom.us/j/67567592468>

Meeting ID: 675 6759 2468

Paper Presentation Sessions

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	Session 15	<i>Empowering SMEs to Support Economic Structural Change</i>
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	Session 16	<i>General Management and Business Survival in Periods of Economic Crisis</i>
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Prof. Abednego Okoe Amartey - Vice-Chancellor, UPSA

MC: Dr. Mrs. Juliana Akushika Andoh

Zoom Link: <https://wacren.zoom.us/j/67567592468>
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ABSTRACTS

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Chair(s): Prof. Raymond Dziwornu & Dr. Andaratu Khalid

TAX REVENUE PERFORMANCE IN AFRICA: DOES MACROECONOMIC ENVIRONMENT MATTER?

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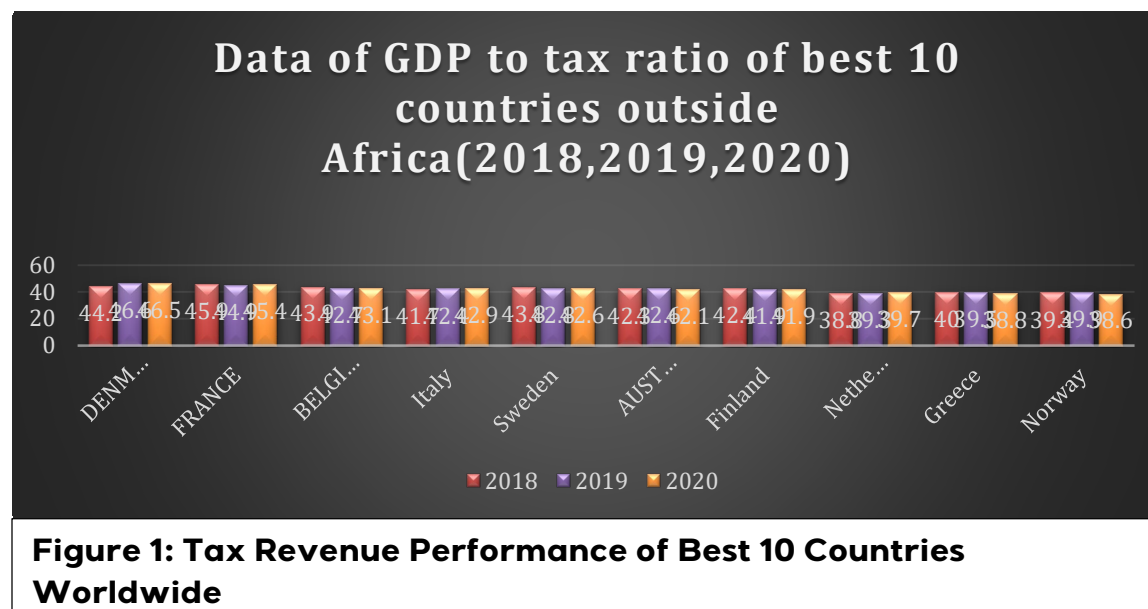
Abstract

The paper examines the dynamics of tax revenue and macroeconomic environment in Africa. Macroeconomic environment relates to the variables and they are operationalised in this paper using the exchange rate, interest rate, inflation and foreign direct investment. Tax revenue is also measured as tax revenue to gross domestic product (tax-to-GDP). The data are collected from World Bank, OECD, Global Economy, Central Banks and relevant agencies of selected countries. The data span is twenty-one (21) years from 2000 to 2020 among 54 African countries. The paper also controlled for political stability (PS), rule of law (ROL) and governance (GoV). The estimation reveals that depreciation of local currencies of Africa countries undermine tax revenue performance. Similarly, high interest rate erodes tax revenue targets in Africa. However, inflation and foreign direct investment have positive effect on tax revenue. The variance decomposition reveals that all the four macroeconomic variables are important catalysts for tax revenue performance. However, from the 3rd period, exchange rate and foreign direct investment became the dominant drivers of tax revenue performance. It is concluded that macroeconomic environment could shape tax revenue performance in Africa. African governments should pursue tax policies and interventions that attract foreign direct investments and structural transformation that strengthens local currencies so as to improve and sustain tax revenue performance. It is further recommended that governments in Africa should steer up policies to strengthen local currencies and reduce interest rate so as to deepen tax revenue performance.

Keywords: Tax revenue, Macroeconomic environment, Exchange Rate, Interest rate, Inflation and Foreign direct investment and Generalised Method of Moment (GMM)

Introduction

Taxation is one of the main sources of revenue for governments. Revenue from taxation contributes significantly to the socio-economic development of all countries, both developed and developing economies (Bersley & Lazuka, 2019; Ihuarulam, Sanusi & Oderinde, 2021; Michael, 2021). Despite the key role of taxation for proper functioning of governments and economic development, globally, tax revenue performance has continued to be poor. Worldwide, governments have struggled to even achieve 50% of gross domestic product (GDP) as tax revenue mobilisation. In Europe, where many of the developed countries are housed, they are still desiring for 50% tax-to-gdp. The high tax revenue mobilising economies in Europe are Denmark with tax-to-GDP of 46.5%, France of 45.4%, and Belgium of 43.1% as at 2020 (Eurostat, 2020; OECD 2022; Seidu, Queku & Carsamer, 2021). These statistics are still below the desired target. In South America, the leading tax revenue performing countries include Costa Rica of 22.9% and Colombia of 18.7% while in North America, Mexico with 17.9%, United State with 25.5% and Canada (34.4%) (OECD 2021). The averages of tax-to-GDP of 24 countries in Asian and Pacific stood at 21.0%, Latin America and the Caribbean (Lac) at 22.9%, and the OECD at 33.8% in 2020 (OECD, 2021). This shows how are challenging it is to developing high tax revenue performing culture. Figure 1 depicts the tax revenue performance of the best 10 countries in the world and none of them can boost of more than 50% of the GDP.



Although tax revenue mobilisation remains a challenge for governments worldwide, the situation in the Africa region is more troubling. Some large economies such as Nigeria mobilised just 6% for 2019 and 5% in 2020 and several others within the single digit

threshold: Congo (8.0%) and Chad (8.1%), (Revenue Statistics in Africa 2021). The average tax-to-GDP ratio for the 30 countries in Africa stood at 16.6% compared to OECD average of 33.8%. Figure 2 portrays tax revenue performance in Africa.

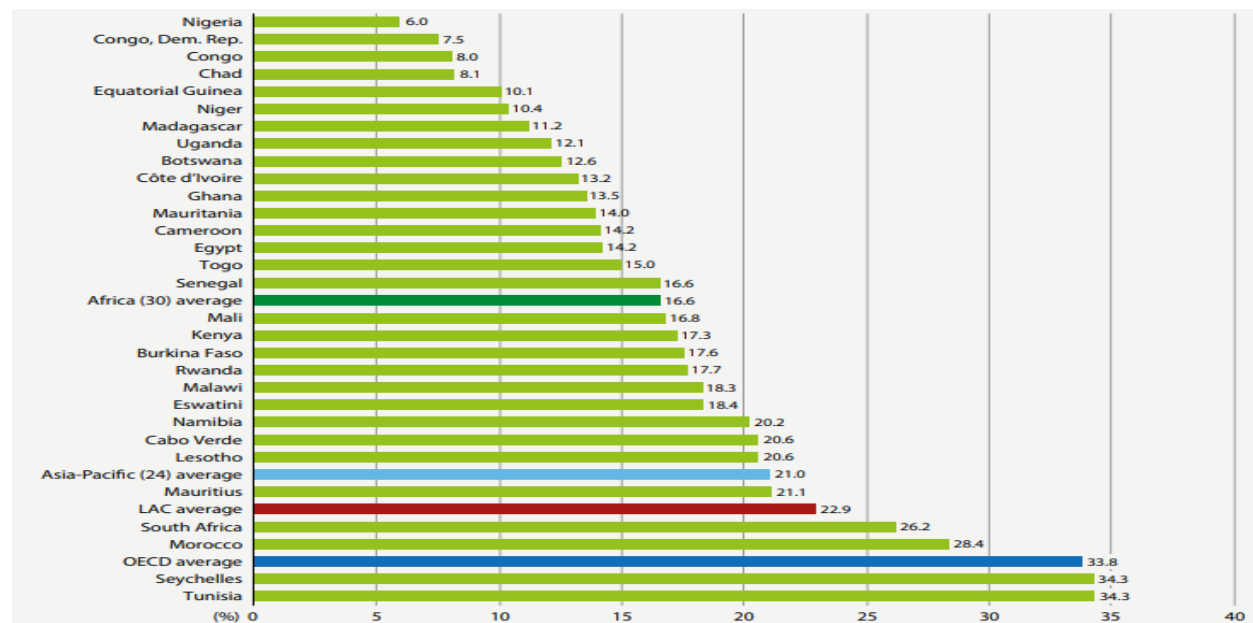


Figure 2: Tax Revenue Performance in Africa (2019)
Source: World Bank and OECD Data

To complement regulatory efforts and governments' interventions, researchers have strived to explore the causes or determinants of tax revenue performance. The literature has revealed varying causes of poor tax revenue performance including poor tax regulation and reforms, tax evasion, corruption, growth, financial development and trade openness (Sethi, Mohanty, Sucharita, & Loganathan, 2020; Arodye, Iyoha & Oriakan, 2020). This paper seeks to contribute to the stream of literature that explores the dynamics of macroeconomic-tax revenue performance nexus. Although theoretically, it is believed that macroeconomic fundamentals or environment affect all sphere of an economy including tax revenue dynamics, there is still paucity of empirical evidence on the subject (Andrejouska & Pulikova, 2018; Ihuarulam et al, 2021; Mawejje & Munyambonera, 2016). Moreover, studies within African setting have often focused on country-level analyses (see Chepkonga, 2016; Gemechu, 2013; Ihuarulam et al, 2021). This paper adopts cross-border specifications to integrate countries within the African block into the analyses. Findings from this analysis present common bases for responding to African worsening tax revenue performance.

Furthermore, even though prior studies explored wide range of determinants, they failed to conclude on the degree of relevance of these numerous antecedents making it difficult to develop a specific policy response in this rather resource-constrained

region. It is therefore useful to integrate partitioning into the variance analyses of tax revenue response to macroeconomic dynamics. While variance partitioning or decomposition approach are widely used in other subfields in finance and economics, it remained overlooked and visibly absent in the existing literature on macroeconomic-tax revenue analyses. In addressing this methodological gap, this paper further conducts decomposition analyses on the total variance of tax revenue-macroeconomic nexus in addition to the coefficient-based analyses. Evidence from this analysis would help shed light on areas within macroeconomic environment that merit more policy attention in improving tax revenue target.

Methodological Framework

The key variables of interest in this paper are tax revenue performance and macroeconomic variables. These variables are measured from secondary source data. The data are collected from World Bank, OECD, Global Economy, Central Banks and relevant agencies of selected countries. The data span is twenty-one (21) years from 2000 to 2020 among 54 African countries. The key macroeconomic variables used are exchange rate (EXR), interest rate (INT), inflation (INF) and foreign direct investment (FDI). The paper also controlled for political stability (PS), rule of law (ROL) and governance (GoV) which are believed to drive productivity, investment and growth with possible spillover effect on tax revenue.

The paper follows Generalised Method of Moment (GMM) for the estimation of the relationship with Panel Dynamic Ordinary Least Square (DOLS) as the estimation approach for robustness check. The panel model specification for the analyses is formulated in Eqn (1) as:

$$TRP_{it} = \alpha_0 + \beta_0 TRP_{it-1} + \beta_1 INT_{it} + \beta_2 EXR_{it} + \beta_3 INF_{it} + \beta_4 FDI_{it} + \beta_5 PS_{it} + \beta_6 ROL_{it} + \beta_7 GoV_{it} + \mu_t \quad (1)$$

Where:

TRP represents tax revenue performance and it is the response variable.

EXR, INT, INF and FDI are the macroeconomic variables

PS, ROL and GoV are the vector of control variables

α is the constant or the intercept of the model

$\beta_1, \beta_2, \dots$ and β_7 are the coefficients of the independent and control variables respectively

It is expected that $\beta_1 < 0$, $\beta_2, \dots$ and $\beta_7 > 0$

μ_t is the time-specific constant

Findings and Implications

The estimation reveals that, depreciation of local currencies of Africa countries undermines tax revenue performance. Similarly, high interest rate erodes tax revenue in Africa. However, inflation and foreign direct investment have positive effect on tax revenue. All the control variables also exhibit positive influence; however, political stability is insignificant. The variance decomposition reveals that all the four macroeconomic variables are important catalysts for tax revenue performance. At period one, tax revenue (lag) contributes to its own variance. However, from period the 3rd period, exchange rate and foreign direct investment became the dominant drivers of tax revenue performance. The implication is that African governments could deepen tax revenue performance by steering up policies to strengthen local currencies and reduce interest rate. It is further suggesting that Africa countries should pursue policies to attract foreign direct investment and inflation targeting to improve tax revenue performance.

Conclusion

The conclusion is that macroeconomic environment could shape tax revenue performance in Africa. Tax policies and interventions that attract foreign direct investment and structural transformation that strengthens local currencies could improve and sustain tax revenue performance.

FINANCIAL DEVELOPMENT AND HEALTH OUTCOMES IN SUB-SAHARAN AFRICA

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Abstract

This paper examines the effect of broad-based financial development measures on health outcomes in Sub-Saharan Africa. This study also analyses the moderating roles of public health spending and out-of-pocket health expenditure on the nexus between financial development and health outcomes in Sub-Saharan Africa. We decompose financial development into financial access, financial depth, and financial efficiency and test their effects on three health indices. Data covering the period 2000 to 2018 for forty-three (43) Sub-Saharan African countries are collected from the World Development Indicators (WDI) of the World Bank. This research paper employs the two-step system GMM in analysing the relationships among the study variables. The results show that public health financing has a positive effect on life expectancy at birth but a negative effect on maternal mortality and child mortality. All measures of financial development record significant effects on the measures of health outcomes. The results further shows that public education financing and out-of-pocket health spending are the channels through which financial development affect health outcomes. We therefore recommend that measures be put in place to improve the financial sector in order to improve health outcomes in Sub-Saharan Africa.

Keywords: Financial Development, Public Health Financing, Out-of-pocket health expenditure, Health Outcomes, Sub-Saharan Africa, Two-step system GMM

Introduction (Purpose/aim & background)

The importance of health cannot be stressed enough given the fact that, it precedes all human activities. A healthy nation, they say is a wealthy nation. The health status of residents of a country plays a very important role in the socio-economic progress of the country. Countries with high levels of health capital, as depicted by long life expectancy, low disease burden, and low mortality risks, develop quicker than those with shorter life spans and high disease burden (Fogel, 1997; De la Croix & Licandro, 1999). Low levels of health capital impede the transmission of physical capital and new technology from advanced nations to developing nations, hence impeding

economic progress (Lucas, 1990). Investments in health is therefore non-negotiable as evidenced in the findings of Chireshe and Ocran (2020) and Chakraborty (2004). It is therefore not surprising that health features prominently in the sustainable development goals.

Quality of health care in Sub-Saharan Africa has improved since the adoption of the millennium and sustainable development goals. However, progress is still substantially below the expectations of the people. Sub-Saharan Africa still lag other regions in terms of healthcare infrastructure and investment. Because health care spending is a major determinant of health outcomes (Akinkugbe & Mohanoe, 2009; Anyanwu & Erhijakpor, 2009), low levels of health spending in SSA have resulted in the region bearing the majority of the global morbidity (TB, malaria, and HIV/AIDS) and mortality (maternal and child mortality) burdens, as well as low life expectancy (WHO, 2013; Kiross et al., 2020). The region accounts for 80% of the projected 207 million cases of malaria and 90% of the projected 627 thousand malaria fatalities globally (WHO, 2013). Furthermore, SSA is home to more than 60% of the world's HIV/AIDS patients (USAID, 2012). When it comes to mortality, Sub-Saharan Africa has the highest rates of under-five, maternal, and infant mortality when compared to the rest of the world. In 2018 for instance, the under-five mortality rate was 78 deaths per 1000 live births, much higher than the global average of 38 deaths per 1000 live births. With a life expectancy of 60 years, the region lags the global average of 78 years (World Development Indicators, 2020).

Sub-Saharan African (SSA) countries have significantly poorer health outcomes than the rest largely due to the low healthcare investments (Kiross et al., 2020). Funding for healthcare investments has been identified as one of the major factors to the poor state of health in Sub-Saharan Africa. In 2019 for instance, the financing gap in the health sector in SSA was Sixty - Six billion United States Dollars (UNECA, 2019). Dwindling and unpredictable multilateral aid to the sub-region coupled with the narrow tax base make the case worse. Sub-Saharan African countries also depend on revenues raised from commodity exports from the sub-region. In recent times however, global prices of commodities such as oil and precious metals (e. g. gold) have declined substantially (UNECA, 2019) and are unpredictable. Policies to enhance domestic revenue mobilization for investments in health care infrastructure, human resources development and service delivery as well as reducing calamitous out-of-pockets (OOP) health care payments is therefore a necessity and financial sector development can play a major role to that effect. Development in financial sector plays a crucial role in government's ability to raise funding for public investments. It also makes it easier for households to raise enough funding for investment into their health.

Although a number of efforts, including the pioneering work of Claessens and Feijin (2006) to empirically analyse the nexus between financial development and health outcomes have been made, some gaps still exist, and hence more research is needed. Evidence on the nexus between health outcomes and financial sector development is scanty for Sub-Saharan Africa. At the global stage, single dimension measures targeting access are often used. There is a need to examine the effect of broad-based

measures of financial development on health outcomes. Separate effects of financial access, financial depth, and financial efficiency needs to be examined. Few studies also analyse the transmission mechanisms through public health financing and out-of-pocket health expenditure.

This paper therefore analyses the direct effect of four (4) broad-based measures of financial development (financial development, financial access, financial depth, and financial efficiency) on health outcomes (maternal mortality, child mortality, and life expectancy at birth). This paper also analyses the interaction effect of financial development with public health financing and out-of-pocket health expenditure on health outcomes.

Methodology

We model health outcomes as a function of its lags, financial development, public health financing, out-of-pocket health expenditure, and per capita income

$$H_{i,t} = f(H_{i,t-1}, FD, PHF, PHE, PCI)$$

Where;

H is health outcomes measured in three ways; maternal mortality, child mortality, and life expectancy at birth. FD is financial development measured in three ways; financial access, financial depth, financial efficiency, and overall financial development. PHF is public health financing measured as general domestic government expenditure as a percentage of GDP. PCI is per capita income measured as GDP per capita growth.

We source data from the World Health Organisation and the World Development Indicators on the dependent and independent variables over the period 2000 to 2020 for 43 Sub-Saharan African countries and employs the two-step system GMM to estimate the relationships in this study.

Conclusion

The results show that public health financing has a positive effect on life expectancy at birth but a negative effect on maternal mortality and child mortality. All measures of financial development record significant effects on the measures of health outcomes. The results further shows that public education financing and out-of-pocket health spending are the channels through which financial development affect health outcomes. We therefore recommend that measures be put in place to improve the financial sector in order to improve health outcomes in Sub-Saharan Africa.

CAN INSTITUTIONAL QUALITY ADDRESS AFRICA'S TRILEMMA OF FOOD INSECURITY, URBANIZATION AND EXTREME WEATHER EVENTS?

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Abstract

In this study, we construct a 2sls model to examine the effect of urbanization on food security and the role of institutional quality in the relationship between urbanization, extreme weather events and food security in Africa. We make use of data of 28 African countries between 2012 and 2021.

The two stage least squares (2sls) estimation technique reveal the following: (i) the current trend of urbanization is unsustainable due its adverse causality on extreme weather events (temperature rise, flood, drought, sea level rise) and food security, (ii) governance quality is critical in reversing the negative impact of urbanization on food security, extreme weather events, and (iii) all six WGI's governance indicators are crucial in promoting sustainable urbanization.

Policy ramifications are that central governments should be forward thinking to strengthen institutions, especially at the local governance level to formulate policies to regulate urban planning and settlement. This will promote urban sustainability to minimize extreme events and food insecurity.

Keywords: urbanization, food insecurity, extreme weather events, governance, institutions.

Introduction

This study examines the effect of extreme weather events and urbanization on food security and how governance moderates the linkages in 28 sub-Saharan African (SSA) countries. Urbanization contributes to economic growth and can lower extreme poverty which are mostly found in rural communities. It is on this basis that Sustainable Development Goal (SDG) 11 aims to accommodate everyone and build

sustainable cities that promote prosperity for all. About 487 million (42% of total population) of SSA live in urban centers and additional 950 million people are expected to settle in cities by 2050 (Moriconi-Ebrard et. al., 2020). City dwellers are on a steady rise in SSA (see Figure 1). The growing urbanization creates both opportunities and threats. Urbanization extends life expectancy (Lu et. al., 2017), reduces adult mortality (Brueckner, 2019), improves energy consumption efficiency (Wu et al., 2019) and serves as a lever towards the achievement of the other SDGs (Djurfeldt, 2015). However, unplanned urbanization can erode the perceived dividends by aggravating pollutions and increasing countries' vulnerability to food insecurity. The recent global paradox of pandemic, energy crisis, and food price increases is exposing urban centers' vulnerabilities.

Available evidence suggests that urbanization heightens extreme weather events (Qian et. al., 2022; Wu et. al., 2020; Luong et. al., 2020; Yan et. al., 2016; Li et. al. 2014). Urbanization has an impact on humidity, wind, aerodynamic framework, vapor pressure, emission dispersion, rainfall patterns, and storms. Qian et. al. (2022) reviewed over 500 studies and found out that urbanization changes the biosphere of a country, making it warmer due to changes in the biophysical and morphological properties of cities. Their review further associated reduced precipitation to urbanization. The warm atmosphere and dry clouds in cities influence the overall climate of a country. Consequently, available studies have identified urbanization as a major contributor to extreme weather events in the form of temperature rise, flood, drought, and sea level rise (Chen et. al., 2021; Song et. al. (2014). Likewise, Yan et. al. (2016) attribute precipitation reduction to urban land-use; Wu et. al. (2020) observe that urbanization contributes to more than 45% of regional heatwaves; and Luong et. al. (2020) argue that urbanization causes flood by modifying the planetary boundary layers and intensifying atmospheric instability.

Additionally, extreme weather events correlate negatively with food security (Tui & Fakhruddin, 2022; Ngcamuv & Chari, 2020; Mangani et. al., 2019). There are interlinkages between urbanization, extreme weather events and food security. Urbanization drives extreme weather events and both influence food security by reducing crop/animal yields; distorting food supply; and disrupting agricultural logistics distribution. For instance, the occurrence of floods disturbs road networks and cut-off farmlands (Beer, 2018). The interruption in the food supply chain has long-term effect on food security. Urbanization does not only exasperate food insecurity due to extreme weather events, but it also reduces agricultural labor force. Liu, et. al. (2021) estimated that every 1% increase in urban population reduces grain production by 0.07% due to reduction in agricultural labour force and increase in urban food consumption. As a result, urbanization has a direct impact on food security as well as an indirect impact through extreme weather events.

Furthermore, food insecurity exists if all people do not have physical and economic access to adequate, safe and nutritious food at all times (World Food Summit, 1996). The Sustainable Development Goal (SDG) 2 calls for everyone to have year-round access to safe, healthy, and sufficient food in order to end food insecurity. Six years after the SDGs were adopted (2016-2021), little progress has been made toward the

zero-hunger target. About 2,300 million people – 29.3% of the global population – still suffer from moderate to severe food insecurity [Food and Agricultural Organization (FOA) et. al, 2022]. This represents a 7.1% increase over 2016 level and a 6% annual growth rate over the period. The SSA is the most food insecure region in the world. In 2021, an estimated 63.2% of the SSA population – 71 million – were moderately or severely food insecure as compared with 54.2% – 53 million – in 2016 (FAO et. al, 2022). The COVID-19 pandemic forced additional 16 million people in SSA into acute hunger (FAO, 2021). The 2021 Global Food Security Index (GFSI) shows that only four countries in SSA recorded an overall food security index above 50% – South Africa (58%), Botswana (56%), Mali (55) and Ghana (52%). The remaining 24 countries with available food security data recorded a score below 50% (See Figure 2). The 24 countries account for 83% of the lowly ranked food secure countries in the world.

It is imperative to examine the contributing factors to food insecurity and prescribe solutions to restore SSA Africa to the path of achieving the SDG2. This study identifies urbanization and extreme weather events as interconnected problems affecting food security, and it suggests that governance can be the panacea for settling the trilemma. More especially, there is now compelling scientific evidence that human activity is influencing extreme weather events (NASA, 2020). Governance can lead the way in formulating policies to avert human activities that compound urban challenges, extreme weather events and food securities. Governance matters in resolving local, regional and global problems. Governance is the embodiment of a country's traditions and institutions through which authority is exercised, and it possesses the capacity to effectively formulate and implement sound policies (Kaufmann et. al., 1999). The formulation and implementation of policies relating to urbanization, extreme weather events and food security depends on the quality of governance. Available studies show a strong relationship between governance and climate change (Finnegan, 2022; Meadowcroft, 2009). Countries with good governance are able to reduce human induced climate catastrophes like flood

Weak governance influences urban planning. For example, if the governance aspect which controls corruption is weak, city officials may be influenced to engage in activities such as allowing people to build on waterways, sand weaning, and construction of smaller storm drains which lead to flooding. On the other hand, where citizens can hold the government accountable and have the right to replace ineffective government; authorities are likely to act in the manner that safeguard the wellbeing of the citizen. Urban centres emit toxic substances that if they are not properly disposed may end up in rivers. These rivers are often the main water source for neighbouring farmlands. The continuous pollution of these rivers can impact negatively on crop yield. However, governance aspect of rule of law can design and implement laws that prohibit indiscriminate disposal of toxic substances into streams and rivers.

In this study, we construct a 2sls model to examine the following:

1. The effect of urbanization on food security

2. The role of institutional quality in the relationship between urbanization, extreme weather events and food security in Africa.

Methodology

The interconnectedness of urban-driven extreme weather events and food security requires various policies which are effective in addressing them. The Kaufmann's WGI dataset is complex to capture the different aspects of modern-day governance. Governance indicators indices are sourced from the WGI. The governance indicators cover six indices including (i) Control of Corruption, (ii) Government Effectiveness, (iii) Political Stability and Absence of Violence/Terrorism, (iv) Regulatory Quality, (v) Rule of Law, and (vi) Voice and Accountability. Data on food security comes from the Global Food Security Index (GFSI) gathered by the Economist Impact. As in previous studies (Koomson et. al., 2022; Salahodjaev & Mirziyoyeva, 2021) we use four indices in measuring food security, which include (i) affordability (ii) availability (iii) quality and (iv) natural resources and resilience. All other macroeconomic datasets including urbanization comes from the World Development Indicators (WDI).

The data covers 28 SSA countries between 2012 and 2021 periods. The study sample and periods were selected purely on data availability. The 28 countries represent 100% of all SSA countries that have food security data available. The food security data on SSA from the GFSI started from 2012 to the current period. To improve the datapoints, the quadratic match sum is used to convert low frequency annual data to high frequency quarterly data to gain more degree of freedom.

Fitting a model that fully explains the dynamics in food security can be complex due to the many factors that account for it. If the explanatory variables are inappropriate it may lead to a widespread endogeneity problem in the model. Ordinary least squares models are infested with endogeneity problems due to omitted variable bias and/or simultaneity bias. According to Baltagi (1995), the two stage least squares (2sls) estimation technique is effective for estimating models that may have an endogeneity problem. This study uses the 2sls approach to examine the linkages between urbanization, extreme weather events, governance and food securities. The use of the 2sls is consistent in the literature (Koomson et. al., 2022; Salahodjaev & Mirziyoyeva, 2021; Amwata et. al., 2016; Kakota et. al., 2015). There is a possible bi causal relationship between our variables of interest and food security. To neutralize the effect of b-causality on the findings, we use emission as valid instrument.

$$Extrem_{it} = \beta_1 Urban_{it} + \beta_2 IQ_{it} + \sum_n \beta_n X_{n,it} + \mu_t + \varepsilon_{it} \dots \dots \dots (1)$$

$$Fs_{it} = \beta_1 \widehat{Extrem}_{it} + \beta_2 IQ_{it} + \sum_n \beta_n X_{n,it} + \mu_t + \varepsilon_{it} \dots \dots \dots (2)$$

Where; 'it' is country 'i' at time 't'. *Extrem* is an index of four extreme weather events: temperature rise, flood, drought, sea level rise, computed using principal components analysis. *Urban* is the log of the number of people living in cities. *IQ* is an

index for six institutional quality measurement from Kauffman et. al (1999). The six indices include voice and accountability (voice), regulatory quality (regqlity), political stability (polstab), government effectiveness (goveff), control of corruption (corruption), rule of law (rule). *Fs* is the food security index and 'X' is a vector of control variables regularly use in the literature (Koomson et. al., 2022; Amwata et. al., 2016; Kakota et. al., 2015). They include GDP growth rate (gdpgr), the net forest depletion (nfd), arable land (arable), and inflation rate (infl).

Results and Discussion

The results from the study are included below:

Table 1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
fsindex	280	43.061	6.027	31.1	63.4
urbanpop	280	38.165	15.379	11.194	71.56
extreme	280	67.331	9.105	41.625	88.25
govern	280	-.654	.512	-1.66	.721
logpollute	280	3.828	.518	2.926	4.951
gdpgr	280	1.333	3.756	-22.488	17.661
nfd	280	6.105	3.596	.278	18.42
arablep	280	17.717	14.131	.458	48.722
infl	280	9.045	25.4	-3.233	382.816

Table 2: Matrix of correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) fsindex	1.000								
(2) urbanpop	0.493	1.000							
(3) extreme	0.189	0.437	1.000						
(4) govern	0.636	0.324	0.223	1.000					
(5) logpollute	0.092	0.190	0.300	-0.096	1.000				
(6) gdpgr	0.004	-0.086	-0.085	0.173	0.055	1.000			
(7) nfd	-0.331	-0.381	-0.178	-0.339	-0.014	0.032	1.000		
(8) arablep	-0.178	-0.438	-0.488	-0.025	-0.326	0.068	0.264	1.000	
(9) infl	-0.175	-0.019	0.017	-0.185	-0.001	-0.196	0.073	-0.041	1.000

Table 3: Variable inflation factor

VIF	1/VIF
1.580	0.631
1.580	0.632
1.540	0.647
1.400	0.713
1.290	0.772
1.210	0.825
1.110	0.898
1.070	0.934
1.350	

Table 4: The role of governance in the relationship between urban driven extreme events and food security

VARIABLES	(1) fsindex	(2) fsindex	(3) afford	(4) avail	(5) qualitys	(6) natres
urbanpop	-0.966*** (0.310)	-36.13*** (0.362)	-8.450*** (1.383)	2.560*** (0.199)	3.962*** (0.361)	1.354*** (0.126)
extreme	-4.140*** (0.419)	-0.571*** (0.0175)	-14.24*** (1.869)	-1.282*** (0.269)	5.025*** (0.488)	-0.127 (0.171)
govern	140.0*** (16.77)	2,152*** (20.60)	549.7*** (74.76)	-49.04*** (10.75)	-134.9*** (19.52)	11.69* (6.828)
urbangovern		-56.63*** (0.543)				
gdpgr	-0.208*** (0.0250)	-0.104*** (0.00154)	-1.062*** (0.111)	0.156*** (0.0160)	0.283*** (0.0291)	0.201*** (0.0102)
nfd	-2.647*** (0.417)	0.704*** (0.0105)	-12.74*** (1.857)	2.057*** (0.267)	4.417*** (0.485)	0.131 (0.170)
arablep	8.440***	2.433***	39.49***	-7.006***	-8.908***	-2.959***

	(1.261)	(0.0532)	(5.624)	(0.809)	(1.469)	(0.514)
infl	0.147***	-0.206***	1.043***	-0.277***	-0.506***	-0.0611***
	(0.0421)	(0.00104)	(0.188)	(0.0270)	(0.0490)	(0.0172)
Constant	315.8***	1,409***	1,051***	114.2***	-395.4***	59.89***
	(32.50)	(12.82)	(144.9)	(20.83)	(37.84)	(13.24)
Observations	1,120	1,120	1,120	1,120	1,120	1,120
R-squared	0.736	0.998		0.849	0.495	0.935

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 4: The role of the decomposed governance indices in the relationship between urban driven extreme events and food security

	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
VARIABLES	fsindex	fsindex	fsindex	fsindex	fsindex	fsindex	fsindex	fsindex	fsindex	fsindex	fsindex	fsindex
urbanpop	1.088***	2.306***	-	1.326***	1.985***	0.0489	-7.814***	24.19***	-11.33***	-126.9**	4.364***	-13.10***
	(0.0470)	(0.0319)	(0.505)	(0.0498)	(0.254)	(0.0868)	(0.0535)	(1.252)	(0.262)	(56.37)	(0.263)	(0.218)
extreme	-1.064***	-0.937***	5.107***	-	-1.003***	-	0.0931***	-0.225***	3.065***	-2.965**	-1.023***	-0.255***
	(0.0782)	(0.0595)	(0.743)	(0.166)	(0.0661)	(0.103)	(0.0109)	(0.0758)	(0.0733)	(1.283)	(0.0453)	(0.0288)
gdpgr	-0.111***	-	-	-	-	-	-	-	-0.348***	1.001**	0.00103	0.0339***
	(0.00875)	(0.00690)	(0.0518)	(0.0256)	(0.0173)	(0.0126)	(0.00107)	(0.00729)	(0.00602)	(0.459)	(0.00439)	(0.00328)
nfd	0.402***	1.227***	1.098***	0.705***	1.042***	-	0.381***	0.343***	2.172***	0.520***	1.619***	0.428***
	(0.0453)	(0.0226)	(0.0541)	(0.0266)	(0.147)	(0.0743)	(0.00577)	(0.0430)	(0.0262)	(0.196)	(0.0210)	(0.0121)
arablep	0.218	-3.711***	9.873***	-	-3.493***	3.210***	-0.479***	1.103***	3.962***	18.17**	-8.325***	-3.708***
	(0.204)	(0.151)	(1.542)	(0.192)	(1.207)	(0.352)	(0.0238)	(0.241)	(0.119)	(8.912)	(0.171)	(0.0703)
infl	-0.129***	-0.229***	0.0851**	-	-0.198***	0.0297**	-0.190***	0.134***	-0.325***	1.511**	-0.259***	-0.232***
	(0.00703)	(0.00365)	(0.0379)	(0.0119)	(0.0103)	(0.0129)	(0.000727)	(0.0192)	(0.00345)	(0.743)	(0.00464)	(0.00233)
voice	4.478***						643.0***					
	(0.644)						(3.584)					
regqlity		21.88***						-1,466***				

		(0.886)						(83.25)				
polstab			-						565.8***			
			67.46***									
			(8.184)						(12.06)			
goveff				23.45***						6,394**		
				(4.930)						(2,806)		
corruption					-11.53**						-107.8***	
					(5.188)						(14.18)	
rule						21.06***						822.0***
						(1.070)						(12.28)
urbanvoice							-16.95***					
							(0.0940)					
urbanregqlity								39.36***				
								(2.213)				
urbanpolstab									-15.76***			
									(0.330)			
urbangoveff										-171.9**		
										(75.34)		
urbancorruption											2.056***	
											(0.381)	
urbanrule												-21.82***
												(0.329)
Constant	70.46***	91.35***	-	132.2***	84.43***	49.40***	341.1***	-865.3***	160.8***	4,625**	65.47***	618.5***
	(6.455)	(4.941)	(64.14)	(14.78)	(10.92)	(8.518)	(1.744)	(53.31)	(4.473)	(2,009)	(11.13)	(8.491)

Observations	1,120	1,120	1,120	1,120	1,120	1,120	1,120	1,120	1,120	1,120	1,120	1,120
R-squared	0.940	0.963	0.750	0.955	0.972	0.891	0.999	0.957	0.994		0.986	0.992

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

The key highlights form the study

The two stage least squares (2sls) estimation technique reveal the following: (i) the current trend of urbanization is unsustainable due its adverse causality on extreme weather events (temperature rise, flood, drought, seal level rise) and food security, (ii) governance quality is critical in reversing the negative impact of urbanization on food security, extreme weather events, and (iii) all six WGI's governance indicators are crucial in promoting sustainable urbanization.

Policy ramifications are that central governments should be forward thinking to strengthen institutions, especially at the local governance level to formulate policies to regulate urban planning and settlement. This will promote urban sustainability to minimize extreme events and food insecurity.

Conclusion

In this study, we constructed a 2sls model to examine the effect of urbanization on food security and the role of institutional quality in the relationship between urbanization, extreme weather events and food security in Africa. The study concludes that the current trend of urbanization is unsustainable due its adverse causality on extreme weather events and food security. Governance quality is critical in reversing the negative impact of urbanization on food security, extreme weather events, and that all six governance indicators are crucial in promoting sustainable urbanization.

Session 2: Business Strategy and Sustainability in Periods of Economic Crisis

Chair(s): Prof. Emmanuel Selasie & Dr. Abdallah Mumuni

INFLUENCE OF GREEN MARKETING COMMUNICATION TOOLS ON CONSUMER BUYING BEHAVIOUR

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ABSTRACT

The study attempted to find out the influence of green marketing communication tools on consumers' intended and actual behaviour. Specifically, it sought to answer the question: how does green marketing communication tools influence consumers' intention to buy green products and their preparedness to pay premium price for environmentally sustainable products? The motivation for this study was to add to knowledge on sustainable marketing from the consumer's perspective as opposed to the seemingly numerous firm-focused research works on sustainability measures and strategies. It is, also intended to serve as a useful marketing research reference document for practitioners, policy makers and future researchers. It was a quantitative study that used students of UPSA as its subjects and employed the qualtrics software to administer the questionnaire to participants. It used the convenient sampling technique to arrive at a valid sample size of 272 for data analysis. Basically, the structural equation model was used to analyse the data using Mplus 8 computer software. The results revealed a positive influence of green marketing communication tools on consumers' behaviour. The results on eco-labelling, however, was interesting since it confirmed the contradictory views found in literature. This happened to be the main non-finding of the study which may require future investigations.

Key words: Green marketing communication tools, eco-label, green advertising, green purchasing intentions, and payment of premium price.

Introduction

Considerable literature on green marketing communication tools and consumer purchasing behaviour is available but majority of them have been conducted in developed countries (Chatterjee, 2009; Chan, 2013; Seelig et al., 2021) with contradictory findings, which according to Rahbar and Wahid (2011) may only be relevant in certain cultural, time and geographical contexts. Pickett-Baker and Ozaki (2008) indicated that consumers were willing to buy brands that were less damaging to the environment but there were difficulties in their identification and the awareness of such products. This suggests that perhaps, more emphasis should be paid to the promotional aspect of green marketing for the needed awareness creation and easy identification of the genuine environmentally sustainable products to be well positioned in the minds of customers. It is against this background that this current research sought to investigate the effect of green marketing communication tools towards consumer buying behaviour.

Moreover, a number of studies have been explaining the concept of green marketing and consumers' buying intentions (Kotler et al., 2005; Peattie, 1995; Polonsky, 1994; Reid et al., 2015). However, there seems to be limited research that throws more light on the effect of green marketing communication tools towards consumers' green buying intentions and ultimately, towards the payments of premium price for eco-friendly products in the emerging sub-Saharan African market such as the Ghanaian green market.

This study, therefore, sought to examine how consumers' exposures to green marketing communication tools, such as eco-labels and green advertisements, influence their purchasing intentions and consequently on the buying behaviour of green products. The main research question for the study is: *how does green marketing communication tools influence consumers' intention to buy green products and their preparedness to pay premium price for environmentally sustainable products?*

The main objectives of the study were:

- To analyse the effect of green marketing communication tools on the buying intentions of green products, and
- To determine the influence of buying intentions on the payments of premium price for green products.

Conceptual model and hypotheses

The conceptual model of the study anticipated direct influence of eco-labels on green purchasing intentions (H1); a direct influence of eco-labels on the payments of premium price for green products (H2); direct influence of green ads on green purchasing intentions (H3) and on the payments of premium price for green products (H4). Finally, it predicted a direct effect of green purchasing intentions on the payments of premium prices for green products (H5).

Methodology

The quantitative research method was employed for the study and the questionnaire was employed as the main instrument for data collection. This survey used a valid data from 272 participants administered through WhatsApp platforms, with a convenience sampling technique. The data was analysed with the structural equation model (SEM), the statistical technique for simultaneously testing and appraising causal relationships among multiple independent and dependent constructs (Hair et al., 2010). The Mplus computer program version 8.0 was employed to assist in the data analysis.

Results

Confirmatory Factor Analysis

Table 1: Reliability and discriminant validity table chart.

Factor	Alpha	FD	CR	AVE	Ecl	Gads	GPI	PPP
Ecl	0.886	0.96	0.896	0.743	0.862			
Gads	0.821	0.934	0.821	0.607	0.607	0.779		
GPI	0.879	0.96	0.887	0.725	0.725	0.672	0.863	
PPP	0.895	0.961	0.897	0.744	0.744	0.779	0.815	0.863

Chi square=180.141 (df =48); CFI=0.945; TLI=0.925; RMSEA =0.05, (90% C.I. =0.08-0.12); n=272.

Where: FD=factor determinacy; CR=composite reliability; AVE=average variance extracted;

Ecl = eco-label; Gads= green advertisement; GPI=green purchase intention; PPP=payment of premium price.

Notes: The bold diagonal elements are the square root of the variance shared between the constructs and their measures; off diagonal elements are the correlations among constructs

Structural Model Results

Table 2: Structural Path Analysis

Structural path	Beta	t-value	p-value	Accepted/Rejected
H1: LV1 ---->LV3	0.149	1.224	0.221	Rejected
H2: LV2 ---->LV3	0.574	4.855	0.000	Accepted

H3: LV1 ---->LV4	0.239	3.422	0.001	Accepted
H4: LV2 ---->LV4	0.288	3.338	0.001	Accepted
H5: LV3 ---->LV4	0.495	6.728	0.000	Accepted

Chi square=149.655, (df =48); CFI=0.939; TLI=0.916; RMSEA=0.05, (90% C.I. = 0.07-0.1); n=272. Where: LV1=Eco label; LV2=green ads; LV3 = green purchasing intention; LV4= payment of premium price.

Findings

Firstly, results of the study confirmed the instruments used in the measurements of the factors as statistically significant, it demonstrates that they were reliable and valid. Secondly, the structural equation modelling (SEM) results shows an overall model fit, where Chi square=149.655, (df =48); CFI=0.939; TLI=0.916; RMSEA=0.05, (90% C.I. = 0.07- 0.1); n=272. According to Hair, et al. (2014), values above the threshold of 0.90 for CFI and TLI, and below 0.08 for RMSEA, indicate a good fit of the model to the data. Thirdly, with the exception of H1, all the anticipated effects of the study were confirmed. Even the one that was rejected did not mean that the influence was negative. It was a positive influence as predicted, except that the value was not statistically significant. This happened to be the main non-finding of the study which may require future investigations.

Conclusions

In sum, it may be concluded that from the study, green marketing communication tools do have positive impact on consumers' decision-making process. The results on eco-labelling, however, was interesting since it confirmed the contradictory views found in literature. On the whole, the study came out with a couple of theoretical and managerial implications, with limitations as well as directions for future research.

SUSTAINABLE PACKAGING: FACTORS INFLUENCING CONSUMER'S PURCHASE INTENTION OF ECO-FRIENDLY PACKAGING

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Abstract

The purpose of this study is to examine factors influencing consumer's intention to purchase eco-friendly packaged products. The theory of planned behaviour served as framework for identifying major antecedents of eco-friendly designed packaging behaviour and for determining their relative importance. Structural equation modelling was used to analyse the data of 300 consumers within Accra and it was used to test the proposed conceptual model. The findings of the study confirmed that purchase intention of eco-friendly packaged products is significantly influenced by environmental awareness and willingness to pay. However, the study also showed that social pressure does not significantly influence consumer's intention to purchase eco-friendly packaged products. This study provides interesting insight about the role of level of education on the relationship between the factors that influence consumer's intention to purchase eco-friendly packaged products. These useful insights will help marketers in developing a focused strategy towards consumers and encourage them to reduce the global ecological footprint packaging.

Keywords: Sustainability, Packaging, Consumer's Purchase Intention. Eco-Friendly

Introduction

Packaging has multiple functions, including product protection, transportation efficiency, information transmission, and marketing (Deliya & Parma, 2012, Raheem, Vishnu & Ahmed, 2014). In the modern world, packaging has become an important marketing tool for companies, capable of influencing buyers to initiate sales (Deliya & Parmar, 2012, Kuvykaite, Doratiene & Navickiene, 2009, Raheem et. al, 2014). However, traditional packaging contributes to environmental waste and pollution (Magnier & Schoormans, 2015).

Sustainable packaging is the development and use of recyclable, reusable, and eco-friendly packaging materials to reduce negative environmental impacts. Environmentally sustainable or green purchasing decisions offer a chance to

reduce the negative environmental impact by adopting environmentally friendly products (Leonidou, Katsikeas, Fotiadis & Christodoulides, 2013). Research shows that consumers are willing to pay more for sustainable packaged products if more of them are available and well labelled and purchasing and recycling of packaging are influenced by environmental awareness, attitude, perceived control, and social norms. Consumer's attitudes towards eco-friendly packaging are generally favourable, and environmental awareness and eco-friendly attitudes of consumers are related to eco-friendly purchasing. Ghana generates around 1 million tons of plastic waste each year, and only 5% are recycled (18th session of commission on sustainable development, UN national report on Ghana, paragraph 1). Companies such as Voltic and Coca-Cola are making significant contributions to environmental sustainability through their eco-friendly packaging initiatives. However, developing economies face different conditions compared to developed countries, such as level of civilization, finance, and literacy level.

This study aimed to explore the impact of attitude, environmental awareness, social pressure, and willingness to pay (price) on consumer purchase intention of eco-friendly packaging in the context of Ghana. The study also examined the moderating role of education in these relationships. The research addressed a gap in the literature by providing insights into consumer behaviour towards sustainable packaging in an emerging market. The findings can be used to develop targeted interventions to encourage eco-friendly purchasing behaviour in Ghana.

Methodology

The study used quantitative approach in investigating the factors that influence the purchase and use of eco-friendly packaging in Accra. This method emphasizes objective measurements and the statistical, mathematical, or numerical analysis of data collected through polls, questionnaires, and surveys, or by manipulating pre-existing statistical data using computational techniques (Babbie, 2010). The population of interest was Accra. Research has proven that Accra produces the most waste as compared to other cities in Ghana (Knott, 2018). The instrument used to determine the appropriate sample size refers to several related studies. This study used a sample size of 300 students. So, questionnaires were administered to a selected number (300) of respondents within Accra.

Further, the study adopted both the probability sampling technique and non - probability sampling technique. Also, a structured questionnaire was used as an instrument for data collection. The questionnaire was designed by adopting items from the extant literature with some modifications. All the items were measured on a five-point rating scale, where (1) represents 'strongly disagree' and (5) represents 'strongly agree'. Open-ended questions will also be employed to answer the research questions. In addition, there was questions on the demographics of respondents because, researcher seeks to gather information on the background of respondents with respect to age, income and educational levels.

Results

The results of the study indicate that environmental awareness significantly influences consumer purchasing intention of eco-friendly packaged products and supports hypothesis 1a ($\beta=0.64$, $t=7.87$, $p<0.05$), which is consistent with previous research on sustainable consumer behaviour (Dunlap and Michelson, 2002). However, the study in hypothesis h1b, ($\beta = 0.003$, $t = 0.029$, $p > 0.05$) found that social pressure does not have a significant positive influence on consumer purchase intention of eco-friendly packaged products, contrary to the hypothesis proposed. On the other hand, hypothesis H1c, ($\beta = 0.146$, $t = 2.079$, $p < 0.05$) supported the findings that willingness to pay has a positive influence on consumer purchasing intention of eco-friendly packaged products.

The analysis also showed that there are some differences in the outcomes based on the educational level of the consumers. Social pressure significantly influences the purchase intention of eco-friendly packaged products for undergraduate students, but not for graduate students. There is also no significant difference in the influence of environmental awareness on purchase intention between undergraduate and graduate students. However, willingness to pay has a significant positive influence on purchase intention for undergraduate students, but not for graduate students.

Therefore, the researchers conclude that the hypothesis stating that educational level has a significant influence on consumer purchase intention of eco-friendly packaging is not entirely supported. The findings suggest that other factors, such as age, income, and cultural background, may also play a role in shaping consumer behaviour towards eco-friendly packaging.

Conclusions

The research found that environmental awareness and willingness to pay for eco-friendly packaging are important in influencing consumers' purchase intention. Producers should emphasize the environmental benefits of eco-friendly packaging and offer affordable pricing options. Social pressure was not found to significantly affect eco-friendly packaging purchase intention among Accra consumers, suggesting alternative approaches may be needed. Further research is needed to explore the factors influencing consumers' price sensitivity for eco-friendly products.

Recommendation

The findings suggest that some graduate students are willing to pay more for eco-friendly packaging, while undergraduates may be more price sensitive but not necessarily unwilling to pay more. However, decisions about packaging materials should not be based solely on cost, but also consider environmental impact and student preferences. Therefore, a balanced and nuanced approach is necessary when making decisions about packaging materials for student restaurants and malls.

CLIMATE CHANGE RISK, GREEN MARKETING AND BRAND IDENTITY: INTERVENTIONS OF GREEN CUSTOMER EXPERIENCE

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Abstract

Purpose – Climate change continues to have a negative economic impact all around the world due to negative human activity. It is argued that the economic and social impacts of climate change consequences are dire on the socioeconomic life of individuals and organizations, a development that affects the living standards of people. Climate change poses a serious challenge to micro, small, and medium-scale enterprises (MSMEs) a sector championed by entrepreneurs. This development poses high risk and uncertainty to production inputs and other marketing outcomes of MSMEs. This conceptual study assesses the intervening role of green customer experience on green marketing and entrepreneurial brand identity. The study will also profess some critical propositions in the form of hypotheses to guild future researchers in the field.

Methodology–The study will rely on recently published highly ranked research works on the subject. Specifically, the author will conduct a content analysis of a peer-reviewed academic journal on ecological risk, green marketing, green brand identity, and customer green brand experience to develop a conceptual framework. The study will also be anchored on a theory for academic rigour.

Finding –It is envisaged that new normal risks such as climate change will pose various risks, including products, price, distribution and regulatory risk, and the hash economy may affect a firm's ability to produce green products. Green customer experience may influence green marketing and green brand identity.

Originality –This study will be the first conceptual paper that synthesizes the intervening role between customer green experience on climate change risk on green marketing and brand identity. The conceptual model-derived literature anchored on theory will provide a comprehensive framework for future work and open avenues of research on this topic. This paper contributes to climate change, green marketing, and brand identity, particularly from the sub-Saharan African perspective.

Session 3: Business Strategy and Sustainability in Periods of Economic Crisis

Chair(s): Dr. Ernest Abraham Mensah & Dr. Benedicta Quao

REGULATION AND PERFORMANCE OF RURAL BANKS IN GHANA

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Abstract

This study aims to determine how the performance of rural banks is affected by the regulatory and legal regime under which they operate in Ghana. The analysis is performed using data consisting of 33 rural banks across Ghana. Data were derived from the Microfinance Information Exchange, MIX Market Database ranging from 2005 to 2020. Generalized Least Squares (GLS) panel regression model is used. The minimum capital adequacy ratio requirement is used as a proxy for regulatory pressure. The finding shows a statistically significant positive effect of minimum capital adequacy requirement of 10 percent on rural bank operational self-sustainability. This indicates that asking rural banks to keep a higher minimum capital adequacy ratio has resulted in improving their performance in terms of operational self-sustainability. This suggests that minimum capital adequacy regulation is an effective policy in enhancing the profitability and sustainability of the financial sector. Also, the study found an insignificant negative effect of minimum capital adequacy requirement of 10 percent on the outreach objective of rural banks. Therefore, minimum capital adequacy regulation is not appropriate to accommodate the social needs, thus hampering the effort of the outreach mission of rural banks. In order to reduce poverty and reach out to a large number of borrowers, regulatory authorities should strike a balance between laws that improve rural banks' financial performance and regulations that support rural banks' outreach objectives.

Keywords: Regulation, Rural Banks, operational self-sustainability, outreach, Ghana

Introduction

The financial sector is one of the economy's essential areas, stimulating a country's financing climate. Governments, businesses and individuals engage in the financial industry with a range of investing, financing and saving activities. One most crucial sub-industry in the Ghanaian financial sector is the rural banking sector. Rural banks play a vital role in every financial service system, especially in developing economies like Ghana. They serve as enablers, reaching out to the poor and neglected informal sectors who wish to find little financial support but do not qualify for the high interest and collateral requirement by universal banks.

Nevertheless, the number of costly financial institution failures throughout the world has focused attention on the need to determine more appropriate ways to improve the stability and performance of different country's financial systems. Significant studies have been done in ascertaining the impact of regulation on the performance of financial institutions as well as promoting the stability of the economy (Barth, Caprio, & Levine, 2004; Hosono, Iwaki & Tsuru, 2004; Ofoeda, Abor & Adjasi, 2012). However, little has been done on how regulation impacts on the achievement of poverty reduction through the rural banks' activities. This study seeks to establish how the performance of rural banks is affected by the regulatory and legal regime under which they operate in Ghana.

Moreover, empirical work (Barth et al., 2004; Hosono et al., 2004; Ofoeda et al., 2012; Ofoeda, Gariba & Amoah, 2016) have extensively focused on the impact of bank regulation and supervision mainly on commercial banking and non-bank financial institutions sector, while an inadequate number of studies has been carried out on the rural banking sector. This limitation is a surprising gap given the overall importance and roles played by rural banks, to expand outreach and serve poor clients in order to eradicate poverty.

The works done in this area were limited in the measure of performance of rural banks. They limit their analysis to financial performance. This study, however, considered both financial and non-financial performance indicators of rural banks. The inadequate clarity of these effects makes it difficult to assess how to improve the rural banking industry. The study's aim is to determine how the performance of rural banks (operational self-sustainability and outreach) is affected by the regulatory and legal regime under which they operate in Ghana.

Methodology

Secondary data are used in the study hence, a quantitative research design is adopted. There are 144 rural banks currently operating in Ghana with the focus of reaching out to the rural and poor communities and they constituted the target population for the study. The purposive sampling technique was used to select 33 rural banks across the country that have data on the variables of interest for the

study as listed on the Microfinance Information Exchange, MIX Market Database (2020) for the period 2015 to 2020.

The time series data on performance was collected from Microfinance Information Exchange, MIX Market Database (2020). Data on regulatory pressure was obtained from the Bank of Ghana. The study adopted a modified version of a model by Hartarska and Nadolnyak (2007). The modified model allowed for the exclusion of some variables (macroeconomic and institutional factors) for the reason that the study was limited to Ghana and macroeconomic country-specific variables not applicable in this study. However, the same measures of performance indicators (Operational self-sustainability (OSS) and Outreach (OT)) are used as dependent variables. Included in the model is a dummy used as independent variable that caters for regulatory pressure using the minimum capital adequacy ratio of 10 percent as imposed by the regulator (BOG), while controlling for bank specific variables (liquidity, deposit, asset quality, loans, capital strength and size). A panel generalized least squares (GLS) model with random effects was used to estimate the regression equations.

Thus, the first regression model finds the effect of regulations on the Operational self-sustainability of rural banks. The model is stated as follows:

$$OSS_{it} = \alpha_0 + \alpha_1 CARR_{it} + \alpha_2 EAR_{it} + \alpha_3 SOP_{it} + \alpha_4 LO_{it} + \alpha_5 DP_{it} + \alpha_5 LIQ_{it} + \alpha_5 AQ_{it} + U_i + \varepsilon_{it}$$

The second regression model finds the effect of regulations on the Outreach of rural banks. The model is stated as follows:

$$OT_{it} = \alpha_0 + \alpha_1 CARR_{it} + \alpha_2 EAR_{it} + \alpha_3 SOP_{it} + \alpha_4 LO_{it} + \alpha_5 DP_{it} + \alpha_5 LIQ_{it} + \alpha_5 AQ_{it} + U_i + \varepsilon_{it}$$

Where OSS_{it} and OT_{it} represent Operational self-sustainability and Outreach respectively, are used to measure the performance of the rural banks. $CARR_{it}$ is a dummy variable that measures the effect of minimum capital adequacy ratio of 10% as imposed by the Bank of Ghana for the rural banks. EAR_{it} is capital strength which is a measure of the ratio of total equity to total assets and SOP_{it} is used to control for the size of the bank, measured as the total of all net asset account, including accumulated depreciation and loan loss reserve. LIQ_{it} is used to control for liquidity of rural Bank, which is measured as banks advances to total deposit. LO_{it} is a control variable for loans and measured as the total loans divided by the total assets of the rural banks for the years under study. DP_{it} is total customer deposit and AQ_{it} is a control for the asset quality of rural banks. Where the subscript i and t represent the cross-sectional and time series dimensions of the data respectively. Where ε_{it} represents the disturbance terms (within entities) in the model that could not be observed or computed because of the unavailability of data. The disturbance terms (between entities) are represented by U_i .

The study employed Generalized Least Squares panel regression to determine the effect of several explanatory variables used in the study on the performance of rural banks. The Hausman test was used to assess whether the random effect or fixed effect model was the best fit for the estimates. Other diagnosis test such as the Breusch-pagan and Cook-Weisberg test for heteroskedasticity, Variance Inflation Factor test for multicollinearity, and Link test for model fitness was conducted.

Findings

The study concludes that, there exists a statistically significant positive effect of minimum capital adequacy requirement of 10 percent on rural bank operational self-sustainability. This indicates that asking rural banks to keep a higher minimum capital adequacy ratio has resulted in improving their performance in terms of operational self-sustainability. Therefore, minimum capital adequacy regulation is an effective policy in enhancing the profitability and sustainability of the financial sector.

In addition, the study finds an insignificant negative effect of minimum capital adequacy requirement of 10 percent on the outreach objective of rural banks operating in Ghana. This indicates that asking rural banks to keep a higher minimum capital adequacy ratio has rather resulted in a decline in their performance in terms of outreach. Therefore, minimum capital adequacy regulation is not a suitable tool to enhancing the outreach mission of rural banks. What is more surprising is that outreach is not affected by the level of capitalization as the ratio of total equity to total assets used as a control for capital strength of rural bank reported an insignificant coefficient which is consistent with the finding of (Hartarska & Nadolnyak, 2007).

Conclusion, Recommendations and Policy Implications

The study has revealed a clear understanding of the effect of minimum capital adequacy ratio requirement of 10 percent on the financial and non-financial performance of rural banks operating in Ghana. The policy implications are that rural banks are likely to be more financially sustainable but not likely to reach more poor borrowers when the minimum capital adequacy ratio of 10 percent is used as a regulatory tool for the measure of rural banks' performance. Regulatory authorities (BoG, Apex Bank, etc.) should take into consideration the impact of the various regulatory mechanisms on both the financial and non-financial performance of rural banks.

From the findings, it can be inferred the sampled rural banks are performing well in terms of operational self-sustainability. To that end, the expansion in the depth of outreach needs sound regulation to limit the many hurdles that may occur. In order to reduce poverty and reach out to a large number of borrowers, regulatory authorities should strike a balance between laws that improve rural banks' financial performance and regulations that support rural banks' outreach objectives.

CREDIBILITY THEORY AND INSURANCE PREMIUM DETERMINATION IN GENERAL INSURANCE INDUSTRY IN GHANA

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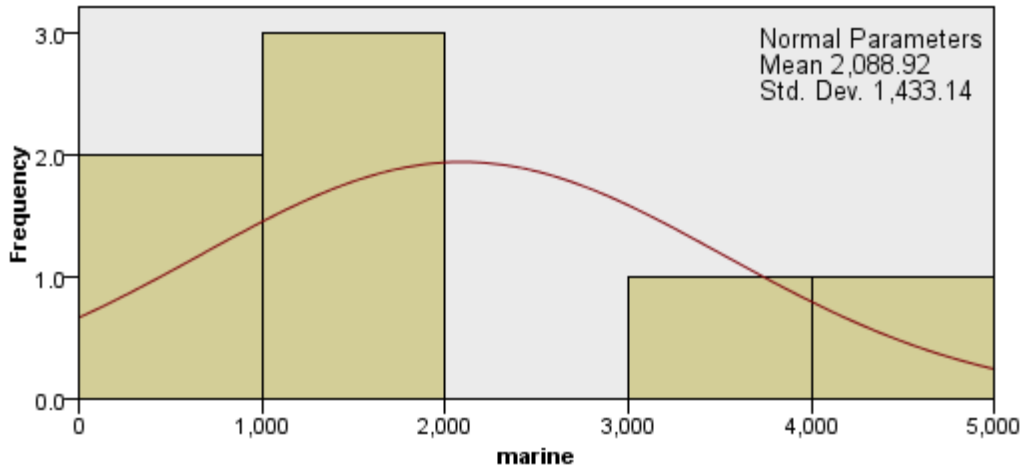
Abstract

Appropriately pricing risk of insurance products and services is critical to the survival of insurance industry. In Ghana, general insurers rely on a tariff guide provided by the National Insurance Commission (NIC) in determining premiums. Albeit, this tariff guide helps to some extent, it lacks basis in any established actuarial pricing model. This study applied a standard and more robust credibility model via ordinary Empirical Bayesian Credibility premium (EBCT) to estimate pure premium on reported motor, fire, marine and accident insurance claims data of State Insurance Company (SIC) in Ghana. The credibility estimations using the ordinary EBCT and the contrive ANOVA models were estimated and compared and the findings of the two set of estimates were tested using a t-test at 5% level of significance. It was established that both estimates were similar with the same mean and follow the same distributions. On this premise, the ANOVA established how credible it can be as an actuarial tool in calculating the risk premium of insurance in Ghana.

Introduction

Risk is inevitable and has a significant economic impact. This has resulted in a significant increase in the need for protection and subsequent demand for financial security for possible losses. Thus, the emergence and development of the insurance business is associated with an urgent need to protect individuals and assets from potential losses as a result of undesirable events. The main purpose of insurance is to provide financial protection by providing risk transfer methods for premiums. Therefore, the assessment of the right premiums for customers (insured) is one of the most important tasks in the insurance business.

Figure 1.0 Histogram/Skew of Motor Claim



Methodology

The overall mean of the claim data from all the class of risks used in the research is $\bar{X}$, where

$$\bar{X} = \frac{1}{N} \sum_{i=1}^N \bar{X}_i \quad (2.5)$$

$$E[m(\theta)] = \bar{X}$$

$$E[S^2(\theta)] = \frac{1}{N} \sum_{i=1}^{n_i} \sum_{j=1}^N \frac{1}{(n_i - 1)} (X_{ij} - \bar{X}_i)^2 \quad (2.6)$$

$$var[m(\theta)] = \frac{1}{(N-1)} \sum_{i=1}^N (\bar{X}_i - \bar{X})^2 - \frac{1}{Nn} \sum_{i=1}^N \sum_{j=1}^{n_i} \frac{1}{(n-1)} (X_{ij} - \bar{X}_i)^2 \quad (2.7)$$

$E[S^2(\theta)]$ and $var[m(\theta)]$ are non-negative parameters with $var[m(\theta)]$ adjusted to zero where a negative estimate is obtained. $var[m(\theta)]$, $E[S^2(\theta)]$ and $E[m(\theta)]$ are unbiased estimators.

A significant property of a good estimator is that it must be unbiased. An estimator $\hat{\theta}$ is unbiased if $E[\hat{\theta}] = \theta$. Meaning that, $E[\hat{\theta}] - \theta = 0$. This property is very relevant since it indicates which estimator gives a more precise value.

Results, Conclusion and Policy Implications

This study sampled SIC Ghana from the pool of insurers licensed by the NIC and adopted secondary data by using experience claims amounts presented by the audited annual report of SIC Ghana. The study analysed 7-year aggregate claims data from SIC Ghana which spanned from 2011 through 2017. The evidence of positive skewness in all the classes of risks means that the data is tailed to the right. Thus, larger claims constitute several units of smaller claims. Motor recorded the highest average claim amount of GHS 18,817.421million paid by the insurer to

policyholders for the year under review. Accident, fire and marine followed in that manner with average cost of GHS 6,130.434 million, GHS 5,378.323 million and GHS 2,088.923 million respectively.

Also, the estimated credibility factor by both models was 90.94% for the group of insurance products. The expected costs (in millions of Ghana Cedis) under the EBCT model and ANOVA model for motor, fire, marine and accident were 17.847051, 5.625175, 2.633708 and 6.309165 respectively. A t-test conducted at a 5% significant level revealed that the credibility estimates for ANOVA and EBCT were the same. Therefore, it was unquestionable to model SIC Ghana claims data with the ANOVA model, which is relatively novel to credibility premium estimation. The trend visuals of the expected claims and actual claims showed that the claims payments emerged in a similar manner for policies still in force, so the ANOVA model was fit for prediction. The validity of the model was inspected by conducting a chi square goodness of fit test at a significant level of 5%. The test failed to reject the null hypothesis and concluded that there was no statistically significant difference between the observed claims and the expected claims for the class of risks in the coming year at a significant level of 5% since the p-value (0.213) was greater than $\alpha = 0.05$. This outcome confirmed the assertion that predicted values using the ANOVA model and the conventional EBCT approach are the same. By practical policy implication and contribution to the emerging literature on risk premium estimations, this study has illustrated how the empirical Bayes credibility factors can be calculated using single factor ANOVA computer routines present in most statistical packages. The use of this actuarial model is more robust and a better tool for predictions using historical data. The confirmed uniformity in the estimations of pure premium (expected cost) using the conventional EBCT model and the ANOVA model for each risk unit in this research means the use of the ANOVA model as an actuarial tool across the general insurance industry will be the new evolution. The projected pure premiums can serve as a reference for the insurance industry in making decision on reserving (valuation) and competitive pricing of insurance products.

A STUDY OF THE RELATIONSHIP BETWEEN UNREGISTERED VEHICLES AND INSURANCE: IMPLICATION FOR MANAGING RISK AMONG ADULTS' VEHICLE USERS

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Abstract

The research study aimed at determining the relationship between unregistered vehicle and insurance. The study was focused on traders and drivers of unregistered vehicles in Madina and East Legon. The researchers employed a quantitative research approach where questionnaires were issued out and had 182 responses, to obtain information with regards to the purpose to the research study. The study enabled the researchers to determine the insurance policy used to unregistered vehicle owners. The study revealed that there was a positive correlation between risk identification, risk evaluation and insurance. It also revealed a statistically significant relationship between unregistered vehicle and insurance, implying that insurance helps owners and drivers of unregistered vehicles mitigate losses. The study findings are useful in raising awareness about particular risks related with unregistered vehicles, allowing owners of unregistered vehicles, other road users, and the DVLA to take appropriate action in response to concerns.

Keywords: Risk identification, risk evaluation, insurance and unregistered vehicle

Session 4: Empowering SMEs to Support Economic Structural Change

Chair(s): Dr. Adam Salifu & Dr. Munkaila Abdulai

LOW-INCOME WOMEN ENTREPRENEURS, BUSINESS STABILITY, AND HOUSEHOLD SUSTAINABILITY IN BAGAGRY: A BORDER COMMUNITY IN LAGOS, NIGERIA

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Abstract

Traditionally, the contribution of women to household sustainability was limited to reproduction, raising of children and carrying out domestic chores, while men solely take up the economic responsibilities. Due to changes in the family institution, gender-based roles were becoming blurred as couples tend to share both domestic and economic responsibilities. Although, many studies have been done on women entrepreneurs, but little has been done on low-income ones in border communities. This study, therefore, was designed to examine the means by which low-income women entrepreneurs sustain their households and trades in Badagry area of Lagos state, Nigeria. Gender Role Ideology and Role Resilience Theory provided theoretical orientation while descriptive design was adopted using both qualitative and quantitative methods of research. *Agbalata* market was purposely selected owing to its size and commercial activities involving both local and cross border women traders. Two hundred and fifty women were selected for the survey, while twenty were selected for in-depth interviews. Quantitative data were analysed using SPSS, while interviews were content analysed. However, most women engaged in trade to support their household economically which affected negatively the expansion of their business. Majority

of the elderly women engaged in trades to cater for their grandchildren. Family size was a determinant of the sustainability of the business, also engagement of women in multiple trades depending on the season. The study recommends that governmental intervention in terms of loan provision is essential to the survival of low-income women traders in border communities.

Keywords: Low-income Entrepreneurs, Household, Sustainability, Traditional roles, Gender-based roles, Border communities

Introduction

Due to modernity and changes in the family system and social structure at large, the gender-based role allocation is gradually becoming a mechanism of the past. Women are now taking up economic roles to support their husbands. In some cases, the society has galvanized into a stage whereby the experiences of the female-headed household are becoming more pronounced (Odoemene, 2003; Mansor, 2005). The study of dual-career couples started in the late 1960s, and the concept was introduced as a sociological concept by Rapoport and Rapoport (1969). The concept has become a common phenomenon in all parts of the world. Nowadays, couples are committed to the survival of the household, managing both economic and social responsibilities together. The imminent economic situations, high cost of living, destruction of public social infrastructure, private provision of basic amenities, among others inform the engagement of women in the informal sector of the economy. Therefore, the wish to make ground-breaking contributions to their societies is very high for women entrepreneurs (UNCTAD, 2013). Societal attitudes and norms inhibit women from considering starting a business. At the same time, systemic barriers mean that many Low-income women entrepreneurs confined themselves to small businesses, especially in the informal economy. This, in turn, limits their ability to earn substantial income for themselves and their households. It also impedes them from realising their full potential to contribute to socio-economic development, job creation and environmental stewardship (ILO, 2013).

Household sustainability has become a significant problem in this very crucial period of economic reform especially in border areas where low-income entrepreneurs engage in the sales of commodities smuggled through into the country through illegal routes (Akatsa-Bukachi, 2012). Therefore, sustaining the households of the women entrepreneurs and in turn, the survival of small-scale businesses will become a herculean task in the nearest future (Amuchie & Asotibe, 2015). It should be made known that while the government is involved in revitalizing the economy through strict monitoring of international borders and the surrounding communities, circumventing illegal movement of goods in and out of the country; the survival of small-scale businesses that guarantee household sustainability in those communities is being questioned (Cunha, 2007; Garba, 2011). In essence, the success of these low-income women entrepreneurs depends on regular supplies of goods and constant patronage by people from in and out of town contributing to employment provisions through the engagement of individual in the supply chain (Iyiola & Azhu, 2014). Thus, the usage of the income generated from the trade on the sustainability of the household may likely

threaten the survival of the business which may probably be informed by the size of the family and the profits generated periodically.

Objectives of the Study

1. To identify the variety of trade engaged in by low-income women entrepreneurs in Badagry area of Lagos.
2. To examine the effect of family size on the sustainability of the trade.
3. To examine the relationship between monthly income and the sustainability of the trade.
4. To examine the survival strategies adopted by low-income women entrepreneurs in sustaining their trades and households.

Brief Literature Review

In all human societies, the family is the first contact of the individuals. In essence, the household becomes the most important and inherent part of the lives of people. It remains the primary unit of the society where individual members cooperate for its survival and replicate societal norms, power, values, privilege and authority (Damaske, 2011). Traditionally, the head of the house is the crucial economic provider, the chief decision-maker and taker; identified as the person with the utmost authority within the household. Men (husbands) assume the roles of heads of households recognizing the women (wives) as part of the husbands' property that must be cared and catered for. The women handled domestic chores, caring for their husbands, children and other immediate family members. The patriarchal nature of African and specifically Nigerian societies informs the practice of men dominating the household while the women remain submissive and dominated (Mordi, Simpson, Singh & Okafor, 2010). The woman has no voice in the home but is an adherent listener who acts according to the instruction of the man. Even at the demise of the husband, the widow is inherited by a kinsman closely related by blood to the late husband. As such, the womenfolk in patriarchal societies remain eternal properties of their husbands' family.

The allocation gender-based roles in the home and society vary from one traditional space to another. Generally, women are the dominated while men dominate the social, economic and political spheres of life. The women make up a considerable proportion of the labour force, most notably in the informal sector. Instead of engaging in formal employment, women get involved in occupations such as petty trading, street vending, etc., where the wages are meagre and too low for sustenance (ILO, 2013). This accounts for the high rate of poverty among women in sub-Saharan. The poverty level among women has continued to be on the increase and sustenance especially in the female-headed households becomes very difficult. Also, women tend to move in and out of poverty, depending on how relatively they could endure and recover from such situations.

In the quest to survive and sustain the family, women entrepreneurs tend to adopt strategies for successful manoeuvre and amelioration of the circumstances surrounding them. The quantum of pressure and the level of contribution to the household by women is predetermined by the kind of job of their spouses engages in, the income of the spouse, the size of the family (types of marriage and fertility

decisions), family crises such as sickness or death, income-generating, economic strategies, social networks, access to loan facilities, etc. (Aderanti, 2002; Eichler & Schwarz, 2019). The status of women's spouse is a significant factor that informs the level of contributions to the household. It is on the basis also that the survival of the business and the household leans. Where the husband earns much and sustains the family, the woman has a better capacity to support the business in terms of finance and expansion. Otherwise, low income generated from by women entrepreneurs would be spent on household sustenance (Martin, McNally & Kay, 2013), which may negatively affect the growth of the business and its savings (Ogundiwin, Akhamiokor, Nwankwere, Oduguwa, & Olaniyan, 2018).

Furthermore, the size of the family is also a compelling factor responsible for determining the level of contribution of low-income women entrepreneurs to household sustenance. The larger the family size that is the number of people especially dependants in the household, the more the expenses incurred and the higher the propensity of the wife's contribution to the survival of the household. On the other hand, a smaller household may have a lesser dependant, and the liability for the woman becomes lesser, she accumulates more profits to sustain her business, more wealth and the propensity of being poor is drastically reduced (McKay, 2001; Brush, 2004)

Marriage and fertility decisions could also be linked to a woman's survival strategy. The status of her husband's family could predetermine her contribution to the household and the extended family of her husband. Therefore, the choice of who to marry is a cogent factor because the welfare of woman's family and also that of her husband may be resting on her shoulder. Therefore, her capability to provide for the enormous needs might drench her in poverty. Fertility decision, that is, the spacing and number of children is also a survival strategy for the woman (Damasko, 2016). In essence, it determines the time spent by the women within the household taking care of domestic chores and children at the expense of concentrating on their businesses to generate more income for sustenance and growth. Also, the consumption requirements such as food, clothing, books, toiletries, stationeries, etc., increases in respect to the number of children bore by the woman (Claudia, 2006).

Unfortunately, fertility decisions in rural African societies are not determined by women but by their husbands and relatives. In essence, the level of poverty among women is predetermined by people around them, husbands, relatives, parents, etc. Therefore, the reproductive function is a burden on women and their businesses is also negatively affected. The ages of children also play an important role. The younger the children, the more the burden posed on the woman. Despite the domestic roles played by women, Zororo (2011) found that about 40% of small-scale enterprises in developing countries are owned and run by women, putting the relationship between women entrepreneurship and the sustainable development as positive.

The ability of the woman to create a social network with other women within and outside the community helps in entrepreneurial development. The networks offer benefits such as problem sharing, provides information on business sustenance, childcare, making goods available on credit while monies are recouped after-sales, as well as loans provisions and support individually or collectively (Ekpe,

2011). All these improve the quality of life of the woman; give her a sense of belongingness and a broader financial capability.

In literature, more works have been done in the area of entrepreneurship and sustainable development goals (Koveos & Yimin, 2012; Kato & Kratzer 2013; Khan, 2016; Pansera & Sarkar, 2016; Apostolopoulos, Al-Dajani, Holt, Jones & Jones, 2018); entrepreneurship development, education and training (Griffiths, Kickul, Bacq & Terjesen, 2012; Woolf, Lane, Chaudhri & Kolodner, 2013; Martin, McNally & Kay, 2013; Fayolle 2013; Walter, 2016; Kremer, Brannen & Glennerster, 2017; Huis, Lensink, Vu, & Hansen, 2019), entrepreneurship theories and challenges (Baumol, 2010; Baumol, Litan, Schramm, & Strom, 2011; Rashid, 2018; Yunis, Hashim, & Anderson, 2019), while there is a dearth of empirical research on the relationship between the sustainability of the household and businesses of low-income women entrepreneurs especially in border communities.

Theoretical Orientation

It is widely accepted among scholars with traditional Gender Role Ideology that the primary responsibility of the woman is domiciled in the home; taking care of the children and close relatives even when the woman is formally engaged in paid employment or self-employed. However, the transition from traditional to egalitarian role ideology is being experienced in many societies on the globe. The ideology proclaims equity in the allocation of roles and engagement in economic activities. Despite this, the status of the man, the kind of economic activity he engages in predetermines the wife's occupation, her economic status and wealth accumulation. This might inform the high level of poverty among women in Nigeria. Traditional domestic roles, among other factors, make them low-income entrepreneurs also limited by their level of involvement in domestic economic responsibility. Hence the more the woman contributes to the upkeep of the household, the more negatively affected her business funding and growth.

Methodology

The research design for this study was descriptive, adopting both qualitative and quantitative methods of research. The study area was Lagos. It is the most complex metropolitan centre in Nigeria with people of diverse culture and political orientations. It is a major focus of financial power as it serves as the commercial and industrial capital. The high rate of migration of people from other regions of the country to Lagos contributes to high rate of dependence of a large family on few members, high levels of illiteracy, high proportions of unemployed women, poverty, divorce, and low marriage rates. Despite being a patrilineal society where husbands are expected to take absolute responsibility for their household, the metropolitan nature of Lagos with the peculiar problems aforementioned, made the engagement of women in low-income entrepreneurship inevitable. Whether a woman is married or not, the quest to support the household or survive as an individual warrant's engagement in one trade or the other as the cost of living in Lagos is higher than most parts of the country. Also, expectations of family members and associates on remittance back home are responsible for the

exceptional engagement of women in entrepreneurship since Lagos is perceived as the centre of success and excellence.

Badagry was purposively selected as a border community in Lagos, southwest, Nigeria. It shared border with Seme in the Benin Republic. As a result, cross-border was prominent, and women engage in the petty sales of imported and locally made goods. The Agbalata market (popularly known as Badagry central market) was purposively selected because of its large size, its status as an international market, and high level of commercial activities. Low-income entrepreneurs were selected by the size of their business, kinds of trade, capital invested, and monthly income. In that light, two hundred and fifty (250) respondents were purposively selected for the survey while Twenty (20) respondents were selected for interviews to corroborate the survey. Quantitative data were analysed using Statistical Package for the Social Sciences (SPSS version 20) while qualitative data were content analysed. It should be noted that quantitative methods were adopted for objectives 1, 2, and 3, while qualitative methods were adopted for objective 4.

Findings and Discussion

The socio-demographic characteristics of low-income traders in the border town of Badagry show that the age cohort of 40-49 had the highest percentage of 41.4%, followed by age group 30-39 with 33.1%, while women traders between ages 20-29 and 50 years and above had 11.7% and 13.8% respectively. By implication, the number of women engaging in low-income increased from age 20 to 49 and declined from age 50 and above. The increasing number of women below 50 years might be as a result of increased financial responsibility on the family as number of children increases (Martin, McNally and Kay, 2013). On the other hand, the decline from age 50 and above might be as a result of old age-associated health challenges. More so, older persons become dependent on caregivers to cater for their financial needs. Therefore, the reason to engage in economic activities is defeated (Okoye, 2011). Majority (71.5%) of the women were Yoruba, because the study area is in south-western Nigeria where the Yoruba were the dominant ethnic group. On the marital status of low-income traders, 81.2% were married informed by the intention of supporting their spouses to cater for economic needs of the family and immediate relatives. Majority of the low-income traders (38.8%) possessed a senior secondary school certificate. However, a more significant percentage of the women traders (52%) either had primary education or no formal education. This might be informed by early marriages common in rural African societies (Abanyam, 2013; Animasahun & Chapman, 2017). Also, majority (79.7%) of the women traders were Christians; this is because Badagry was the contact of the Christian missionaries in Nigeria.

The identified varieties of trade engaged in by low-income women entrepreneurs in Agbalata market were twenty-one. Majority of the women (14.2%) engaged in the petty scales of foreign-produced provisions/beverages because of the nearness of the market to Seme border through which goods are smuggled. The second most traded good was coconut (12.9%) since it was a significant farm

product among the people of Badagry, produced for local consumption, and export to other countries. It is easily accessible to traders and prospective customers were readily available. Some of the common trades among the women included sales of second-hand dresses, popularly called 'Akube' (11.7%), food items like rice, garri, beans, maize (10.5%), and soft drinks (10.0%).

Majority of the traders (36.8%) have been active in the trade of their choice for over 15 years, followed by those who have spent 6-10 years. Above all, 73.1% of the low-income traders have been consistently active for a minimum of 6 years in the business of their choice. In essence, most of the traders were experienced in the trade they engage in and were eligible to give cogent information about the trade and its modus operandi. Most of the traders (27.1%) claimed they earned between 20,001 and 30,000 naira monthly while the least category (12.2%) earned between 30,001 and 40,000 naira.

As regards the size of household, 52.8% of the entrepreneurs have a household of a maximum of five people, 38.2% possess a household size of 6-10 people, while 9.8% have a household size of a minimum of 11 people.

The majority (29.7%) of the respondents lived in room and parlour apartments, while 5.2% lived in duplexes. It was noted that most of those who lived in single rooms, room and parlour and mini flats have more enormous household than those who lived in larger apartments of two bedrooms, three bedrooms and duplex. However, majority of the entrepreneurs (84.1%) open for sales every day (Monday to Sunday), 0.4% open twice a week, 1.3% opens for business five times a week, while 14.1% opens six times a week. In addition, the findings show that majority of the entrepreneurs who opened for business everyday have larger households, therefore the quest to meet up with their daily needs subjected them to working for extra days and hours.

Hypothesis Testing

Hypothesis 1: There is an association between the household size of respondents and the sustainability of business.

Table 1: Relationship between household size and business sustainability

Variables	Valid (Percentage)	Missing (Percentage)	Total (percentage)
Household size and sustainability of business	246 (98.4%)	4 (1.6%)	250 (100%)
	Chi-square analysis	Chi-square value 8.693	P-value 0.013

Source: Case Processing Summary of chi-square

The chi-square analysis shows that the p – value <0.05 , hence there is a significant statistical association between the family size of respondents and the sustainability of their businesses. As such, the size of the household affects the sustainability of the business among low-income entrepreneurs in Badagry. It should be noted that, the larger the family size the more difficult it was for entrepreneurs to sustain their businesses especially in homes where members of the household depend absolutely on the proceeds from the business for survival. It was also noted that those who lived in more sophisticated accommodation have a smaller number of household members, also have other means of survival not basically from the proceed of the business. Therefore, the ability of low-income women entrepreneurs to develop and sustain their businesses depends on the income of other members of the household. The number of times women entrepreneurs open for business does not guarantee the sustainability of the business over time. In current literature, there is a dearth of empirical research on the relationship between family size and sustainability of business. Current literature centred on generational businesses and successional plans of family business (Onyeukwu & Jekelle, 2019; Nnabuife & Okoli, 2017; Adedayo & Olanipekun, 2016; Akinyele, Ogbari, Akinyele, & Dibia, 2015; Obadan & Ohiorenoya, 2013), neglecting the area concerning family and household size.

Hypothesis 2: there is an association between the average monthly income of Low-income entrepreneurs and the sustainability of their businesses.

Table 2: Relationship between monthly income and business sustainability

Variables	Valid (Percentage)	Missing (Percentage)	Total (percentage)
Monthly income and sustainability of business	181 (72.4%)	69 (27.6%)	250 (100%)
	Chi-square analysis	Chi-square value 17.693	P-value 0.001

Source: Case Processing Summary of chi-square

The chi square analysis shows that the p – value <0.05 , hence there is a significant statistical association between the average monthly income of respondents and sustainability of their businesses. That is, the monthly income of the traders determines the sustainability of the business. The more the monthly income, the more viable and encouraging the business is. Proceeds from the business can be re-invested for expansion. Of course, the larger the business, the higher the income and the propensity for the business to expand (Onyeukwu & Jekelle, 2019; Oudah, Jabeen & Dixon, 2018; Cho, Okuboyejo & Dickson, 2017)

The survival strategies adopted by low-income women entrepreneurs in sustaining their trades included loans, spousal support, daily, weekly and monthly contributions, thrift, credit purchase of goods, collecting of goods from fellow

traders, and investment of proceeds from other trades and jobs. However, the sources of loans, as mentioned by the traders included micro-finance banks, family members, and market association. On this, a 45-year-old trader has this to say:

“Most of the women here get loans from micro-finance banks popularly called “Lapo”, some are supported by their family members when they need to stock their shops, and those who are close to market executives also get loans from them. However, loans from friends and family members are most convenient for me as an individual”. **(IDI/FOODITEMS/45YRS/2019)**.

Spousal support was a prominent strategy of sustaining businesses among low-income entrepreneurs. Majority of the women attested that their husbands support them with cash and at times products for those whose husbands engaged in cross-border trades. The trade served at times as a cushion to sustain the household when their husband's supports to household sustainability fails. A trader in fairly used clothing (Akube) said:

“My husband has been the pillar of this business. He supports me with cash to get goods and also get goods for me from my customers in Seme at times. He is a ‘crosser’ (those who move goods using specially built vehicles across the border), and there are times when they might have issues with customs officials for days or weeks. During this period, the family feeds from the proceeds of this small trade, and God has been faithful”. **(IDI/AKUBE/32YRS/2019)**

Furthermore, majority of the traders engaged in daily, weekly, and monthly contributions to sustain the trades and households. Contributions were necessary for the women to sustain their businesses and take care of the households. Contributions were made to Thrift collectors. Also, contributions were organised among traders coordinated by a trusted individual who is also a trader either within or outside of the Agbalata market. Another trader reiterated:

“I am involved in three sets of contributions. I make regular contributions to the thrift collector who comes around in the afternoon daily. I make weekly contributions coordinated by one of the traders in the market who sells drinks just like I do. I also make a monthly contribution with one of my husband's associates which he supports most times when I am unable to meet up. These contributions are reinvested in the business and spent on pressing needs of the household”. **(IDI/COCONUT/41YRS/2019)**

Purchasing goods on credit from wholesale suppliers were also common among low-income women entrepreneurs. Furthermore, products not available in stock for a particular trader were collected from another trader(s) if customers are readily available for the purchase of such goods. Both traders negotiate on the minimum selling prices of such goods before sales. The seller can then add her profit margin. A trader in beverages said:

“There are situations when we collect goods that we don't have in stock from our colleagues for sales after negotiating the minimum

price and adding our profit margins. This is a usual practice among traders in the market to sustain the business and maintain our customers. Also, I get goods on credit from another woman who supplies and get paid within a week. That is one of the reasons traders must open for sales more often". **(IDI/BEVERAGES/29YRS/2019).**

Lastly, few of the traders who engaged in other trades and paid employments invested proceeds and/or salaries into the business for it to survive and develop over time. A fish seller has this to say:

"My mother owns and sponsored this business; she works with the local government. She inherited the trade from her mum, who is still alive but very old. She invests her salary at times in this trade, especially when there is a need to make bulk purchase and supplies. Without her investment on the trade, it would have been difficult to expand the business and meet up with supplies which come once a while". **(IDI/FISHSELLER/29YRS/2019).**

Low-income women entrepreneurs have as part of their objectives to sustain generational businesses passed from one generation to theirs. Therefore, raising capital from other personal businesses or jobs might just be to keep the business that has been traditionally known to such family alive.

Conclusion and Recommendations

In conclusion, low-income entrepreneurs engaged in twenty-one variety of trades as identified by this study. Majority of the commodities traded were foreign goods and edibles brought in through the Seme border into Badagry township. The study found that household size of the women determined the size and sustainability of their businesses. Therefore, the larger the household, the more challenging it was for the business to thrive. Also, monthly income of the women determined the sustainability of the trade over time. The level of income generated was a factor to the number of times women open for business per week.

Sustaining the household and business by low-income women entrepreneurs is a difficult task owing to the socio-economic situation in Nigeria and the border town in particular. Strict border regulations and surveillance of the border communities prevented smooth movement of goods without payment of customs duties to the Agbalata market where low-income entrepreneurs sell at retail to prospective consumers. Another prevalent factor was the availability of loan facilities for the women to expand their businesses and also remain in business. If loans are available and businesses developed, taking care of the household might not be as difficult as it would have been when the business was smaller.

Therefore, the study recommends the adequate provision of loans with low-interest rates should be made available to low-income women entrepreneurs to expand their businesses, make more profits for the sustainability of the household. Secondly, women in this category might be prepared to pay fewer customs duties to bring in durable goods across the border under strict supervision. Also,

channeling the distribution of locally made commodities to the traders would not only ensure the sustainability of the household and businesses but encourages the consumption of locally made goods and reduces the importation of foreign goods.

TRANSACTIONS (DIGITAL AND CASH) OF SMES IN GHANA: FOCUS ON AWUTU SENYA EAST DISTRICT.

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Abstract

Emerging and new technologies has for the past few years impacted on the day-to-day transactions made by organisations; be it large or small. Additionally, technology possibly has permitted the development of new business models as well as the provision and rise of new platforms to enhance the experiences of both business owners and customers. One of such platforms perhaps is the way customers and businesses make payments. This study explores how small and medium enterprises at Kasoa in one of the fast-growing districts closer to the capital of Ghana (Awutu Senya East District) transact business/make payments. The mixed method research design is to be employed, where closed ended questionnaires as well as interviews are the main instruments to be used by the researchers during the collection of data in March 2023. About a hundred (100) respondents, mainly owners and top management are to be included in the study. Also, both quantitative (regression) and qualitative (thematic) analyses would be used to analyse the data collected.

This study provides evidence as a vital step about digital and cash payments debate in the emerging technological era as well as establishes the transition from cash to digital payments' influence on the business' growth. Specifically, it would alert management of Awutu Senya East District Assembly on how the usage of digital payments could support the growth of SMEs and the economy at large. Additionally, the results would serve as an evidence based to the central government, metropolitan and other district assemblies, and stakeholders generally as well as to emerging/developing countries.

Key words: Cash, digital, Kasoa, SMEs and transactions

FIRMS ABSORPTION CAPACITY AND SMES OPEN INNOVATION PRACTICES IN GHANA.

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Abstract

The study examined the relationship between firm absorption capacity and open innovation practices among SMEs in Ghana. A quantitative non-experimental correlational design was used to target SMEs managers responsible for innovation related responsibilities with a year minimum of experience in the firm. A sample size of 250 respondents participated in the study. Two validated adapted survey instruments were used for the data collection and the data was analysed using correlation analysis. The results revealed a statistically significant relationship between firms' absorption capacity and both inbound ($r = .32, p < .01$) and outbound open innovation practices ($r=.17, p < .05$). The study recommends that SMEs Managers should develop and enhance firms' absorption capacity so as to increase open innovation activities.

Keywords: SMEs, Open Innovation, Learning Orientation, inbound, outbound

Introduction

The current turbulent and versatile business environment continues to make innovation very relevant. Organizations that build the capacity to continuously innovate in their processes, products, and people can compete favourably. The level and nature of innovation differ among firms and across industries. Large and multinational organizations' innovation differs from that of SMEs. Unlike SMEs, large firms are recognized to have the capability, infrastructure, and financial muscles to undertake innovations. Open innovation is therefore recognized highly as essential for SMEs (Sabando-Vera et al., 2022). Torchia and Calabro (2019) explained that with open innovation, firms are advised to deliberately involve external parties in the market rather than focusing only on their internal walls for innovation. SMEs struggle with financial resources, information asymmetry, and infrastructure capacity. It is argued that considering these challenges confronting SMEs, open innovation will be beneficial in this context (Sabando-Vera et al., 2022).

Hypotheses Development

Open innovation strategy, the process of knowledge exploration and exploitation is a great challenge for firms (Guertler & Sick, 2021), hence the relevance of absorption capacity become eminent. Cohen and Levinthal (1990) conceptualized a firm's absorptive capacity as the ability of the firm to recognize the value of new, external information, assimilate it and accordingly apply it to commercial ends. The proponents proposed that absorptive capacity is a firm's ability to generate innovation and facilitate learning and it is largely a function of a firm's prior related knowledge. Absorptive capacity can be applied at the individual, firm, and national levels. At the firm level, Cohen and Levinthal (1990) argued that at the heart of absorptive capacity is considerable investment in research and development. Zahra and George (2002) proposed that absorption capacity should be viewed as a dynamic capability relating to knowledge creation and utilization that enhances an organization's ability/capacity to gain and sustain a competitive advantage. Zahra and George (2002) opined that absorptive capacity occurs in two dimensions; potential capacity and realized capacity. Whilst the former deals with knowledge acquisition and assimilation, the latter focus on knowledge transformation and exploitation. Gleaning from the literature, however, the applicability of the construct can be found in areas such as innovation, marketing, interorganizational collaboration and learning, supply chain management, entrepreneurship, and international business (Zou, et al., 2018). Absorptive capacity plays a significant role in sustaining firms' competitive advantage, Zou et al., (2018) meta analysis of the absorptive capacity of 241 related studies, found that absorptive capacity (AC) is a strong predictor of innovation and knowledge transfer. While the firm size AC is positively related to SME performance, it is negative for large firms. Similarly, age AC was negative for matured firms' performance and insignificant for young firms. Zou et al. (2018) argued that researchers must revisit the traditional assumption of patterns of innovation in organizations. Since the meta-analysis reveals that AC is a strong influence on knowledge transfer, which is also a key attribute of open innovation (Zou et al., 2018), we can infer that absorptive capacity will be a strong predictor of open innovation performance. Research has already connected absorption capacity and innovation (Xia & Roper, 2016) but less is established in the case of open innovation. Absorption capacity represents the ability of the firm to manage internal innovation through research development while acquiring, assimilating, transforming, and exploiting external new knowledge (Zahra & George, 2002; Zou et al., 2018). In the case of inbound open innovation that focuses on the acquisition of external knowledge, absorption capacity enables firms to internalize the acquired new knowledge for innovation purposes (Kim et al., 2015). This explains a perceived positive relationship between inbound open innovation and absorption capacity. On the part of outbound open innovation that focuses on the commercialization of internally developed ideas, absorption capacity enables the firms to exploit how the new knowledge would be deployed in the external business environment. Absorption capacity is built on the existing knowledge base, knowledge processing capacity, and learning experiences to serially inform firms' innovation (Zou et al., 2018). Firms' open innovation strategies is expected to rely on its absorption capacity for successful innovation activities (Xia & Roper, 2016). Open innovation is about purposively inflow and outflow of knowledge, it is

thus argued that the level of inflow or outflow of such knowledge base depends on the firm's absorptive capacity. Absorptive capacity is therefore expected to have a positive relationship with open innovation, and this has not been of much research focus. The current study therefore predicts a significant positive relationship between firm open innovation strategy and its absorption capacity.

Hypothesis: *Firm open innovation practices and absorption capacity are positively related.*

Methodology

The study included a quantitative approach to examine the possibility of the relationship between absorption capacity, and open innovation by testing hypotheses. The participants mainly SMEs managers were recruited through the database of Ghana Enterprises Agency (GEA). The target was SMEs dealing in manufacturing and IT related business. The sample frame was managers within SMEs with a minimum of a year of work experience in that firm and responsible for strategy, innovation or research and development activities. A sample size of 250 managers participated in the study. Two adapted instruments were used in this study and the validity and reliability measures are well established and deemed to be appropriate. Absorption capacity was measured by *Flatten, et al. (2011) Absorptive Capacity Scale (ACAP)*, while *Cheng and Huizingh's (2014) Open Innovation Scale* was used to measure open innovation.

Data Analysis

The data was analysed using Pearson's correlation. The analysis commenced when the required primary data set was entered into the correlation model. Descriptive statistics were created to allow visual inspection before performing further statistical analysis (Field, 2018). Some of the assumptions tested in this study included normality with the Kolmogorov Smirnov test, homogeneity using scatterplots, and absence of multicollinearity using Variance Inflation Factors (VIF) (Field, 2018).

Results and Discussion

Table 1: *Correlations Matrix*

		AC	Inbound_OI	Outbound_OI
Spearman's AC rho	Correlation Coefficient	1.000	.324*	.167*
	Sig. (2-tailed)	.	.000	.043
	N	147	147	147
	Inbound_OI			
	Correlation Coefficient	.324*	1.000	1.000

Sig. tailed)	(2-	.000	.	1.000
N		147	147	.

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

The study examined the presence of a relationship between absorption capacity and inbound open innovation. The evaluation showed a statistically significant relationship, ($r = .32$, $p < .01$). This means that as the firm absorption capacity increases, inbound open innovation performance increases. The relationship between absorption capacity and outbound open innovation was also tested as revealed in the table. The results revealed a statistically significant relationship between the two constructs, ($r=.17$, $p < .05$). This suggests that an increase in absorption capacity of SMEs will lead to a lower increase in outbound open innovation practices.

Conclusion

The study concludes that as firm absorption capacity increases, both inbound and outbound open innovation performance increases. The findings suggest that as the absorption capacity of the firm increases, there is higher adoption of open innovation practices. This is especially true when technology and product development become more complicated and increasingly difficult for SMEs to pursue on their own. Also, as the firm increases its absorption capacity, it can attract and acquire much external new knowledge which is processed to produce excess or unused technology, licenses, and spinoffs that can be sold to the external market.

Session 5: Economic Structural Reforms

Chair(s): Prof. Joseph Tuffour & Dr. Isaac Ofoeda

“MAKING DO” WITH WASTE: THE RESOURCING BEHAVIOUR OF AGRIBUSINESS ENTREPRENEURS IN PERIOD OF CRISES. INSIGHTS FROM GHANA

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Abstract

This study provides an in-depth understanding of how agribusiness entrepreneurs behave during resource scarce era in agribusiness. Entrepreneurial bricolage is proposed as the fitted behaviour to resource scarce environment of agribusiness in crises. The potential for mobilizing the right material resource sustainably for the production of affordable products (i.e., feed and organic fertilizer) is in making do with waste. Thus, embedded knowledge of the context in which agribusiness bricoleurs operate is paramount to the sustainable production of affordable resources in times of crises. The aim of the study is to investigate the entrepreneurial behaviour of agribusiness owners in crises through a multiple case study in Ghana. The context displays various features that paves way for making do with waste for agribusiness purposes. It was found that using resources for other purposes that are not intended for, could solve problems in challenging times. Practically, it implies that bricolage can serve as a means of creating new resources for economic and natural environmental impact.

Keywords: Agribusiness entrepreneurs, bricolage, making do, resource scarce environment

Introduction

Agribusiness is a sequence activity that are interrelated and made of genetics and seed stock businesses; suppliers of agricultural inputs, farming, merchandisers of agricultural commodities, processors, retailers and consumers of food (Gunderson, Boehlje, Neves & Sonka, 2014). In most developing economies, agribusiness is smallholder and therefore subsistence in nature (Tindiwensi, Abaho, Munene, Muhwezi & Nkote (2021). In sub-Saharan Africa, smallholder agriculture for instance, is the source of 80% food supply to the populace. In view of that, agribusiness has been a major source of livelihood for the most poor and vulnerable (Poole, 2017). However, smallholding agribusiness is known for their resource scarcity (Poole, 2017). Scaling such businesses to market-oriented state to partly address poverty is therefore challenging (FAO, 2019), due to several factors.

From entrepreneurship perspective, a constrained environment is when a business is faced with new challenges, in a form of opportunities and risks, without the provision of new resources (Baker and Nelson, 2005) and for that matter as human, financial and material in this study. Due to the financial crises out of COVID-19 pandemic, coupled with Russia's invasion in Ukraine, obtaining resources like inorganic fertilizer for crop production and some feed (wheat bran, corn and oils etc.) for animal rearing is difficult. The key components of fertilizer are Nitrogen, Phosphorous and Potassium. Nitrogen, the most significant component for instance, is basically produced from natural gas and made in a solid form called urea and ammonia (Christie 2022). Russia and Ukraine are major players in export of such fundamental resources in agribusiness and the war has dislocated the supply chain of such resources. In view of the crises and its ripple effects on agribusiness, prices of such resources have escalated highly, making it difficult for smallholder agribusiness owners to cope.

The issue of resource scarcity in agribusiness is alarming as population of the world is on the rise, with at least a 3.5-fold increase in Africa alone (Gerland et al. 2014). It is obvious that population increase with economic growth leads to a ripple effect of consuming more foods. From Food and Agricultural Organisation (FAO, 2020) report, there is therefore a need to raise meat production from 233 million tonnes to 300 million tonnes with a demand for poultry meat consumption alone rising to about 40% globally (Rosegrant, 2001). However, meat production is struggling to keep up with the demands of expanding human populations due to how livestock compete with humans for protein intake (food-feed competition). The demand for animal protein keeps being on ascension (Speedy, 2004) and therefore a global rise in demand for animal feed, particularly proteins cannot be halted (Shumo et al., 2019).

It has been established that resources and their mobilisation are central and defining features of the entrepreneurial process (Clough, Fang, Vissa, and Wu, 2019) and therefore, serves as important aspects of entrepreneurship (Nason and Wiklund, 2018; Desa and Basu, 2013). As a result, the ability of an entrepreneur to obtain the needed resources, is a success determining factor for product development and innovation (Crupi, Liu, & Liu, 2021), start-up survival (Acheampong, Odoom, Anning-Dorson, and Anim, 2018) and scaling social, economic, and environmental impact (Desa and Koch, 2014; DeSantola, and

Gulati, 2017; Musona, Sjögrén, Puumalainen, and Syrjä, 2020). In the past decade, there have been emergence of different theoretical perspectives to describe the logics and behaviour underpinning the entrepreneurial process (Fisher, 2012) and their resource mobilization (Clough et al. 2019; Desa 2012, Desa and Basu 2013).

Bricolage, a theory of resourcefulness, which is a common correlate of improvisation (Baker and Miner, 2000) and 'do-it-yourself' (Levi-Strauss, 1967) processes involving 'fiddling' (Simba, Ojong and Kuk, 2021) was firstly considered by the French structural anthropologist Claude Levi-Strauss (1967) in the exploration of sense-making in some societies. In his native language, it means to cobble things together. As an entrepreneurial theory of behaviour, it is attested to thrive in resource-constrained or poorly developed environment (Bacq, Ofstein, Kickul, and Gundry, 2015; Janssen, Fayolle, and Wuillaume, 2018), where entrepreneurs often make do by using resources at hand when confronted with new challenges. Therefore, bricolage can act as a legitimate mechanism for institutional change (Desa 2012, p. 727) to assist agribusiness owners to avert the current situation.

While entrepreneurial bricolage has been acclaimed to be an important process of mobilizing resources in early-stage firm establishment, the role of entrepreneurial behaviour in enabling their entrepreneurial ventures to scale their operations or firms extending into new, Bottom of the Pyramid (BOP) markets on constrained budgets, has largely been under researched (DeSantola and Gulati, 2017; Bacq et al., 2015; Desa and Koch, 2014). In so doing, the study is to explore entrepreneurial behaviour of agribusiness owners in crises in Ghana.

Methodology

Research approach

The behaviour of a bricoleur takes a constructivist approach (Clough et al., 2019), embodied by idiosyncratic discernment and understanding of material resources in the close surroundings of the penurious players in the agribusiness sector. Accordingly, the entrepreneurs' resourcing behaviour were explored from an interpretivist stance (Schwandt, 2000; Tracy, 2013). This enables entrepreneurship to be seen as a process driven by the pursuit of new value through an inside perspective of the entrepreneur's motivations (Leitch, Hill, & Harrison, 2010; Packard, 2017). This encourages the familiarisation of smallholder agribusiness players and their relationship to material resources. Interview was conducted through the lens of the theory of bricolage and when it was realized that additional interview would bring no value to the analysis, saturation point was reached (Tracy, 2013). Sufficient examples illustrating material bricolage behaviours for future research direction were gathered.

Data collection

In accordance with Pratt (2009), researching on material bricolage can be done successfully through qualitative means. This is because qualitative fits the objective “how” better than measuring “how many” (Yin, 2017). In addition, qualitative research has the advantage of identifying phenomenon and provide precisions to the descriptions of its various elements (Senyard et al., 2014). An *exploratory multiple case-study* was used to collect data because little is known about the process underlying material bricolage in agribusiness, a resource scarce environment of Ghana. Such an *inductive* approach helps in understanding the bricolage process (Eisenhardt, 1989) and also extend theory in the research context (Graebner et al., 2012) for a new theoretical and managerial insights (Yin, 2014). Unstructured interviews, participant observation and archival studies were used to collect data from 3 owners of agribusinesses that met the criteria of being a smallholder enterprise. The smallholder agribusinesses were purposively selected from the researchers’ social and professional networks and experience as random selection may yield to no traces of bricolage behaviour exhibited by the businesses. Data was collected over three months period between November 2022 and February, 2023. A set of 14 semi-structured interview questions according to Fisher (2012)’s methodological design was used. The recorded interview lasted 50minutes on average and was later transcribed. In all, eight interviews were undertaken.

Data analysis

The interview narratives were analysed towards four elements in the definition of bricolage as themes (making do, resources on hand, combination of resources for new purposes and refusal to enact limitations) and their domains (Baker and Nelson, 2005; Fisher, 2012). In this case, the elements and domains were used as criteria to match the bricolage behaviour narrated by the respondents. The transcribed document was reviewed and issues corresponding to the themes were noted. Results from the three independent researchers were compared and finalized.

Findings

Data from smallholder agribusiness owners’ experience with resource mobilization to unearth bricolage resource behaviour were used. Table 1 presents quotations from the cases. Material bricolage – organic waste is directly linked to sustainable development. The conventional protein feed ingredients that are costly can be replaced by BSF larvae in feeding farm animals. Rearing of insects, generates income by providing jobs and helps in making the environment clean. It also reduces food-feed competition between humans and animals as fish and soya are redirected to human consumption.

Elements of bricolage and their domains

Bricolage elements	Explanations of elements	Extracts from cases
Making do (rule of the game)	Rely on the resources on hand to accomplish tasks.	"I buy left over maize, cow pea, soyabeans and other grains from the market. It is cheaper because they've selected the best for human consumption, and the rest sold to me cheaply. I also buy corn chaff and leftovers from the grinding mills" (AGR3).
Resource on hand	The troves of the bricoleur are objects, tools, ideas, and broad skills owned or scavenged	"We culture black soldier fly (BSF) larvae (<i>Hermetia Illucens</i>) on organic substrate (household organic waste) to produce affordable protein feed for farm animals" (AGR1).
Combination of resources for new purposes	Bricoleurs recombine resources on hand and use them in ways they are not originally intended for. Exploit contributions not thought of by other competitors.	"We are exploiting opportunities that are not thought of by other competitors. We are able to turn BSF into affordable animal feed and organic fertilizer for crop farming" (AGR1).
Refusal to enact limitations	Instead of refusing to enact, bricoleurs resist environmental constraints imposed upon them.	"Despite the rise in cost of borrowing, we still access loans from the informal financial services and friends concurrently" (AGR2).

Conclusion

This paper is an addition to the growing literature advancing entrepreneurship research in smallholder agribusiness, linking it to a contemporary enactment and behavioural theory of bricolage. Agribusiness provides a good context for examining bricolage behaviour. Bricolage is a promising practice in a resource constrained environment of smallholder agribusiness. The study therefore increases the understanding of how smallholder agribusiness makes use of local materials to innovatively operate in crises. Future research is expected to move the present findings on the ability of bricolage to commercialise smallholder agribusiness in other resource constrained agribusiness sectors in emerging economies. In addition, samples for the study were only taken from agribusiness in Ghana and therefore limits the generalizability and replication of the findings,

policy implications of this study are not limited to Ghana. Governments and agribusiness supporting organisations should not neglect the benefits gained from waste in agribusiness. The ability of the local materials to increase soil fertility and reduce environmental pollution cannot be over emphasised. BSF culturing and rearing calls for organic waste management and therefore promotes production of organic fertilizer to improve soil and crop farming.

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Abstract

The study investigates the role of the adoption of International Public Sector Accounting Standards (IPSAS) in the high public debt crisis in Africa. The investigation is based on data from World Bank and country specific IPSAS adoption history. The data for the analyses span from 2000 to 2020 for 54 African countries. The paper employs Dynamic Ordinary Least Square (DOLS) estimation approach for the analyses. The investigation reveals that IPSAS exhibits significant positive influence on public debt in Africa. The implication is that IPSAS could amplify debt accumulation. It is recommended that African countries which have adopted or in the process of adopting IPSAS should make conscious effort to formulate debt financing and threshold policy in order to avoid excessive debt-engagement merely as a results of the ease of access to debt market arising from IPSAS reporting.

Keywords: Public debt, International Public Sector Accounting Standards (IPSAS), Generalised Method of Moment (GMM), Dynamic Ordinary Least Square (DOLS), Amplifier, Inhibitor and Africa

Introduction

Debt financing is a foundational financing option for both private and public sectors. No government, regardless of its country's status as developed or developing, can claim to be self-sufficient, let alone have the much-needed cash to pursue economic growth and development on a regular basis (Adebayo, 2019). This echoes the importance of public debt as alternative financing to meet government growth and development agenda. Nevertheless, public debt needs to be sustainable. Unfortunately, for the past decade African debt has been growing unsustainably (Harcourt, Robertson, & Rivera, 2023). According to World Bank (2022), the public debt of many African countries has doubled in the last decade.

The eminent debt crisis is not facilitated by only the growth of the debt stock but also the composition of the debt. African's debt portfolio has traditionally contained concessionary multilateral loans of about 47% of the stock and bilateral loans of about 35%, however, countries in the region have reconstructed their debt portfolio by tapping into the international bond markets (Harcourt et al, 2023; World Bank, 2022). Although several finance experts, economists and politicians have attributed the debt crisis in Africa to the emergence of the COVID-19 pandemic and Russian-Ukraine War, it is important to acknowledge that the threat of debt crisis has been therefore before these global crises. For instance, between the reporting periods of 2010 and 2019 (i.e., pre-COVID-19 period), African's public debt to gross domestic product rose from 35% to 60% (International Monetary Fund, IMF, 2021; Onyekwena & Ekeruche, 2017).

The public debt crisis has continued to deepen. The threat of growing public debt is troubling, and it is edging dangerously to unsustainable levels with some countries such as Ghana, Mozambique and Zambia declaring debt crisis where debt restructuring programmes are already in place or have already defaulted (Devarajana, Gillb, & Karakülahb, 2021). As of December 2020, Fourteen (14) African' countries were designated as at the high risk of debt distress and Six (6) already in debt distress (AfDB, 2021). Surprisingly, several of these African countries were beneficiaries of Heavily Indebted Poor Countries (HIPC) initiative since the early 2000s (Word Bank, 2022). The HIPC initiative provided smooth fiscal consolidation and financial respite but fast forward, the crisis has resurfaced with several calls seeking for another debt relief. This is a stark reminder of how African countries can backslide quickly into an unsustainable debt. Studies have explored the causes of the elevated or rising public debts in Africa with varying evidence (OECD, 2022; Morsy, & Moustafa, 2020; Tawiah & Soobaroyen, 2022)

Due to the seriousness of the implications of rising public debt or debt crisis to economic development and the continuity of basic economic functioning the investigation of the fundamental causes of the rising public debt in Africa is not conclusive. One dimension of the investigation of the antecedents or drivers of the public debt crisis which is visibly absent is the public financial reporting framework. Similar to other developing countries, many African countries have either migrated or in the process of migrating to International Public Sector Accounting Standards (IPSAS). In fact, for the past two decades, international agencies and institutions such as African Development Bank (AfDB), International Monetary Fund (IMF) and the World Bank, have led public sector financial reporting reforms requiring countries to adopt IPSAS-based financial reporting (International Federation of Accountants, 2019; Polzer et al., 2021; Tawiah & Soobaroyen, 2022).

Some existing studies have suggested that IPSAS-based reporting increases the level of disclosure (Beck, 2018; Sellami & Gafsi, 2019), enhances transparency and reduces corruption (Cuadrado-Ballesteros, Citro, & Bisogno, 2020; Hamed-Sidhom et al., 2022) and improves financial management and quality of governance (Cuadrado-Ballesteros & Bisogno, 2021; Tawiah, 2022). It has further been documented that major international financing agencies and institutions prefer IPSAS-based financial reporting and some have even integrated IPSAS-reporting into the methodologies in sovereign credit rating (Véron, 2011).

Moreover, IPSAS-based reporting is sometimes a requirement for assessment and evaluation of projects financed by sovereign-backed debt (Pattanayak, 2018; ADB, 2019).

This implies that consistent with the signaling effect hypothesis, IPSAS adoption could have implication on sovereign debts (Nagae, Katayama, & Takase, 2022). Between 2003 and 2019, African countries have made debuts into private, commercial and international capital markets where governments have raised more than US\$155 billion from more than 125 eurobond instruments (AfDB, 2021; Ekeruche, 2022). It is within these same periods where many of African countries have considered or adopted IPSAS. Is it a mere coincident or has IPSAS contributed to the growing debt? In another vein, it has been argued that IPSAS adoption presents opportunities to access capital market at low interest rates through reduction of interest premium which governments would have paid (Raga, Ayele, & Velde, 2022). It is also claimed that developing economies such as Africans adopt IPSAS as means to signal financial sustainability and probity, thereby making them amenable to receive more concessionary and cheaper financing and aid (Sellami & Gafsi, 2019; Boolaky-Doorgakunt et al., 2022; Nagae et al., 2022). This stream of arguments alternatively suggests that IPSAS could also inhibit rising debt through low interest rate, and premium and high aids and grants. Following these two strands of arguments, the only conclusion is that there is a possible role in or influence of IPSAS on African public debt, however, whether or not it has amplified or inhibited the elevated debt is still inconclusive. Unfortunately, there is no empirical study which has specifically explored these dynamics.

This paper therefore seeks to explore the role of IPSAS in African's debt crisis. This is critical as related evidence exist about the adoption of International Financial Reporting Standards (IFRS). It has been documented that IFRS adoption had implications on the debt market and affected the debt dynamics of the adopters (Chen et al. 2013; Florou & Kosi, 2015; Florou, Kosi & Pope, 2013; Ling-Ching, Hsu, & Lee, 2013; Wu & Zhang, 2014). In light of these, it seems apt to gauge to what extent does IPSAS adoption either amplifies or inhibits public debt outcomes in Africa. Thus, this paper investigates whether IPSAS is a catalyst that amplifies or inhibits the public debt crisis in Africa.

Hypothesis Testing Framework

This paper uses secondary data from 54 African countries from World Bank, IFAC website and country specific Central Banks and Accounting Regulators to conduct the investigation. The data span is from 2000 to 2020. This generates 21 years' data range. While public debt is measured by debt to GDP, IPSAS is measured using dummy with 1 for adoption and 0 for non-adopters.

Following the literature, public debt (PD) in African is also influenced by exchange rate (EXR) and interest (INT). The study therefore controls for these variables. The estimation strategy follows panel model specification. The use of panel model is to capture both the time series and cross-section parameters. The estimation of the panel model is conducted through Dynamic Ordinary Least Square (DOLS). This is expressed in Eqn (1) as follows:

$$PD_{it} = \alpha_0 + \mu_1 IPSAS_{it} + \mu_2 EXR_{it} + \mu_3 INT_{it} + \sum_{i=-q}^p \delta_2 \Delta EXR_{it-i} + \sum_{i=-q}^p \delta_3 \Delta INT_{it-i} + \epsilon_t \quad (1)$$

Where:

It is expected that the coefficients of IPSAS, EXR and INT >0

The rest of the variables remain as described earlier

α_0 is the constant term in the model

ϵ_{it} is the error term.

Findings and Implications

The estimation is conducted through DOLS estimation approach. However, to ensure reliability of the estimates, the paper runs sensitivity analyses on the results using Generalised Method of Moment (GMM). Thus, GMM is used as the robustness check. The robustness checks reveal stability in the estimates. The results reveal that IPSAS exhibited positive significant coefficient. This suggests that IPSAS could amplify public debt crisis in Africa. In terms of the control variables: both variables exhibited positive effect, but it is only exchange rate that shows significant coefficient. The theoretical implication is that IPSAS is a market-based signal that opens opportunity for debt /capital market. The evidence further reveals that capital providers place incremental favourable signal on the adoption and availability of IPSAS-based public sector reporting.

Conclusion

It is concluded that IPSAS exhibits significant positive influence on public debt in Africa and therefore could amplify African public debt crisis. It is recommended that African countries which have adopted or in the process of adopting IPSAS should make conscious effort to formulate debt financing and threshold policy in order to avoid excessive debt-engagement merely as a results of the ease of access to debt market arising from IPSAS reporting. This could minimize the vulnerability of adopters through issuing indiscriminately debt instrument due to available opportunities from IPSAS adoption.

REVISITING THE DEBT-GROWTH NEXUS IN SUB-SAHARAN AFRICA: FRESH EVIDENCE FROM PANEL NONLINEAR ARDL APPROACH

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Abstract

While some countries have used debt to drive economic growth, the asymmetric effect on sub-Saharan African (SSA) countries has received little attention in the empirical literature. To fill this void, this paper revisits the asymmetric effect of external debts on economic growth in 30 sub-Saharan African countries from 1990 to 2021. To determine the presence of cross-sectional dependence, the cross-sectional dependence test is used, while the second-generation panel unit root tests are used to examine the unit-root properties. Cointegration tests show that there is a long-run cointegration relationship between the variables. Finally, the panel non-distributed lag (NARDL) approach was used to estimate the coefficient values in the study. The empirical results show that external debt has an asymmetric impact on economic growth in both the short and long run. In the long run, a positive shock in external debts of 1% triggers an upturn in economic growth by 0.216% while a negative shock triggers 0.354% decline in economic growth. This implies that the negative shock of external debts has a much stronger impact on economic growth than the positive shock. In the short run, a positive shock in external debts by 1% triggers a decline in economic growth by 0.641%, while a negative shock of 1% leads to a decline in economic growth of 0.170%. It is recommended that governments in the selected countries in sub-Saharan Africa should drive economic growth by promoting domestic revenue mobilization since external debts impede economic growth.

Keywords: Asymmetry, External Debt, Debt Service Cost, Economic Growth, NARDL Approach

Session 6: Information Technology and Digitalization

Chair(s): Dr. James Doku & Mr. Nii Amartey

CRITICAL SUCCESS FACTORS OF E-LEARNING IMPLEMENTATION IN HIGHER EDUCATION: A REVIEW OF THE LITERATURE

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Abstract

eLearning implementation is still experiencing failure in developing countries. This research aims at minimizing the failure rate of its implementation by investigating the critical success factors of its implementation. In the context of developing countries, the adoption of eLearning has been researched. There have been calls in the literature for further research from the perspective of developing countries. The prevailing situation in the implementation of eLearning is such that institutions are still experiencing failure in its implementation. This largely due to assumptions of eLearning and not considering certain factors before implementing an e-learning course. This study seeks to find solution for the effective eLearning implementation to reduce the failure in eLearning implementation. This researched used secondary information. Literature review of related articles from google scholar were analysed and synthesized to find the common critical success factors that affect effective e-learning implementation. This study revealed factors hindering e-learning implementation to help minimize failure rate in its implementation. From the literature it was found that thirty-one critical factors in eight dimensions affect the effective implementation of e-learning in higher educational institutions. Broadly, the eight dimensions are Technology, Student characteristics, Institutional support, e-Content development, Teacher characteristics, Teaching pedagogy, Planning, and Satisfaction.

Key terms- e-learning, critical success factors, implementation, Higher education, benefits

Introduction

eLearning implementation is still experiencing failure in developing countries. This research aims at minimizing the failure rate of its implementation by investigating the critical success factors of its implementation. There has been a lot of research in the area of e-learning, the request for the development of e-

learning is on the ascendency and there is still need to research on the critical elements affecting effectiveness of e-learning (Khasawneh, 2015). In the context of developing countries, the adoption of eLearning has been researched. There have been calls in the literature for further research from the perspective of developing countries. The factors for effective e-learning implementation are not different from various researchers but varies a little bit. In a research conducted by (Almaiah & Al Mulhem, 2018) they indicated that website quality, technology options, top management support, and e-learning awareness by academic faculty and students are the factors of effective e-learning implementation. They were of the view that a gap still exists between the infrastructure of the facilities that are provided, and the real use and acceptance of e-learning systems among students and academic staff. (Mehregan et al., 2011) in their research stated that student characteristics, lecturer characteristics, content quality, IT quality, participation interaction, educational institute support are the factors for effective e-learning implementation. Regarding mass investment for e-learning solutions which do not meet their original objectives, e-learning performance assessment remains crucial. There is therefore the need to contribute to the limited knowledge base on the effectiveness of e-learning in higher education institutes (Alhabeeb & Rowley, 2018). In 2015, Abdel-Gawad & Woollard, argued that curriculum, tutors, learners and technology are critical success factors for implementing classless e-Learning systems in the Egyptian higher education. In a survey conducted by (Jaoua et al., 2022), They were of the view that e-learning system, e-learning readiness, interactivity, and resistance to change affects the success of e-learning. The higher educational institutions have experienced some success, others too have failed in their implementation of e-learning

Methodology

This researched used secondary information. Literature review of related articles from google scholar were analysed and synthesized to find the common critical success factors that affect effective e-learning implementation. Because science is, first and foremost, a cumulative undertaking, literature evaluations serve an important role in scholarship. In keeping up with an exponentially developing e-learning literature, rigorous knowledge syntheses are becoming vital, supporting practitioners, academics, and graduate students in locating, analysing, and synthesizing the contents of many empirical and conceptual studies. Literature reviews are useful for, among other things, identifying what has been written on a subject or topic; determining the extent to which a specific research area reveals any interpretable trends or patterns; aggregating empirical findings related to a narrow research question to support evidence-based practice; generating new frameworks and theories; and identifying topics or questions that require further investigation (Paré G. et al., 2015). This study is a literature review. About ninety articles were downloaded from Google Scholar based on the search title 'critical Success Factors of elearning'. Out of the ninety articles, fifty were critically examined to come to a conclusion of the factors that critically determine the success of e-learning in higher educational institutions. Review articles, when done correctly, can be valuable information sources for practitioners looking for

the most up-to-date evidence to guide their decision-making and work practices (Paré G. et al, 2015)

Findings

From the literature it was found that thirty-one critical factors in eight dimensions affect the effective implementation of e-learning in higher educational institutions. Broadly, the eight dimensions are Technology, Student characteristics, Institutional support, e-Content development, Teacher characteristics, Teaching pedagogy, Planning, and Satisfaction

Conclusion

The adoption of eLearning in Universities can bring about various degrees of change in the learning and teaching processes. It is the level of this change that determines the benefits HEI can glean from implementing eLearning tools and also its successes. Automation which is the first stage comes with less benefits and low risk. As processes are rationalized, reengineered, and finally a shift in paradigm, more benefits are encountered during the actual system usage.

For there to be effective eLearning various factors must come into play. For instance, the planning stage to adopt eLearning must be comprehensively considered and all stakeholders involved to achieve a successful eLearning. The building stage, the data collection for the courseware must be essential so the relevant material will be given to learners. The marketing, communication, and assessment strategies must be well designed to enable institutions achieve good results and feedback. The study attempts to contribute to the recent calls on implementation issues in eLearning. This study will serve as a guideline for effective eLearning implementation in higher educational institutions.

ICT AND OPERATIONAL EFFICIENCY OF BANKS: AN ASSESSMENT FROM PRACTITIONERS PERSPECTIVE

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Abstract

The paper examines the Information Communication Technology and operational efficiency of banks and an assessment from the practitioner's perspective. The survey used twenty-one (21) licensed universal banks that operate in Ghana and adopts ICT and thus impact on Operational efficiency of the banks. Results indicate that, ICT has improved management principles among banks, and it has also intensified operations using electronic delivery channels. Again, it has been revealed that Information and Communication Technology (ICT) have influenced and had a significant impact on Operational Efficiency. Finally, based on the data collected and analysed, there is enough evidence to support the claim that Information and Communication Technology (ICT) has a significant positive influence on Operational Efficiency among the universal banks. The paper also recommends that, all the management of banks in Ghana must continue to be more innovative in ICT to attract customers and ensure their competitiveness in the banking industry. Also, banks that are deploying various Smart Cards especially, the E-zwich, need to provide more Point-of-Sale Devices to facilitate and attract easy use and patronage by customers. As a results of the enormous benefit and efficiency ICT brings to the banks' operations systems, management of Ghanaian banks need to adopt immediate and stringent measures to always ensure the efficiency of all ICT products and systems

Keywords: ICT, Technology, Ghanaian Banks, Operational Efficiency

Introduction

Information Technology (IT) is the automation of processes, controls, and information production using computers, telecommunications, software, and ancillary equipment such as automated teller machine and debit cards (Khalifa et al., 2016). It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels. Irechukwu (2000) lists some banking services that have been revolutionized using Information Communication Technology (ICT) as including account opening, customer account mandate, and transaction processing and recording. Information and Communication Technology has provided self-service facilities (automated customer service machines) from where prospective customers can complete their account opening documents direct online. It assists customers to validate

their account numbers and receive instruction on when and how to receive their cheques books, credit, and debit cards. Communication Technology deals with the physical devices and software that link various computer hardware components and transfer data from one physical location to another (Nwakoby, Sidi & Ofobruku, 2018). ICT products as use in the banking industry include Automated Teller Machine, Smart Cards, Telephone Banking, MICR, Electronic Funds Transfer, Electronic Data Interchange, Electronic Home and Office Banking, POS devices (Aithal, 2016).

Ghana's banking industry has over the years witnessed significant amount of transformation with the emergence of technologically innovative products and services (Mikhail, 2017). Banks have employed these innovative products and services in their operations to provide customers with easy accessibility. As such managers cannot ignore Information Systems because they play a critical role in contemporary organisation (Amanfo, 2010). The application of information and communication technology concepts, techniques, policies, and implementation strategies to banking services has become a subject of fundamental importance and concerns to all banks and indeed a prerequisite for local and global competitiveness. ICT directly affects how managers decide, how they plan and what products and services are offered in the banking industry. It has continued to change the way banks and their corporate relationships are organized worldwide and the variety of innovative devices available to enhance the speed and quality of service delivery (Agbolade, 2011).

Many banks are making what seem like huge investments in technology to maintain and upgrade their infrastructure, in order not only to provide new electronic information-based services, but also to manage their risk positions and pricing (Abor, Amidu & Issahaku, 2018; Olanrewaju, 2016). At the same time, new off-the-shelf electronic services such as online retail banking are making it possible for very small institutions to take advantage of new technologies at quite reasonable costs. These developments may ultimately change the competitive landscape in the financial services (ibid). All these technologies are mostly geared towards the improvement of effective customer satisfaction. However, other studies (Adu, 2019; Chitsa, 2017; Kotey & Abor, 2019; Idowu et al, 2002; Balachandher et al, 2001) have portrayed that IT has appreciable positive effects on bank productivity, cashiers' work, banking transaction, bank patronage, and bank services among others. They concluded that, these have positive effects on the growth of banking. Notwithstanding these positive effects of ICT on general banking activities, some outstanding questions remain; to what extent has ICT really influenced bank management? Do the pros of ICT in the banking industry significantly outweigh the cons and to what extent do ICT backed banking operations expose banks to various business risks? This study attempts to answer these questions by the assessment of the influence of ICT on bank management, opportunities, and challenges in the Ghanaian banking industry.

Literature Review

Information and Communication Technology and Banking in Ghana

Information and Communication Technology (ICT) is the automation of processes, controls, and information production using computers, telecommunications, software, and ancillary equipment such as automated teller machine and debit cards (Kotey & Abor, 2019; Khalifa, 2000). It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels. Irechukwu (2000) lists some banking services that have been revolutionized using ICT as including account opening, customer account mandate, and transaction processing and recording. Information and Communication Technology has provided self-service facilities (automated customer service machines) from where prospective customers can complete their account opening documents direct online. It assists customers to validate their account numbers and receive instruction on when and how to receive their cheques books, credit, and debit cards (Mikhail, 2017; Kozak, 2005). Communication Technology deals with the physical devices and software that link various computer hardware components and transfer data from one physical location to another (Wiredu, Labaran, Nketiah & Osibo, 2020; Mahboub, 2018:). ICT products in use in the banking industry include Automated Teller Machine, Smart Cards, Telephone Banking, MICR, Electronic Funds Transfer, Electronic Data Interchange, Electronic Home and Office Banking.

According to Kriese, Abor and Agbloyor, (2019), over time, technology has increased in importance in Ghanaian banks. Traditionally, banks have always sought media through which they would serve their clients more cost-effectively as well as increase the utility to their clientele. Their main concern has been to serve clients more conveniently, and in the process increase profits and competitiveness. Electronic and communications technologies have been used extensively in banking for many years to advance agenda of banks

In Ghana, the earliest forms of electronic and communications technologies used were mainly office automation devices. Telephones, telex and facsimile were employed to speed up and make more efficient, the process of servicing clients (Wang, Liu & Parker, 2020). They continued to be the primary information and communication tools for doing bank business for many years (Del Gaudio, Porzio, Sampagnaro & Verdoliva, 2021).

According to Adu (2019), Ghanaian banks started using personal computers (PCs) in back-office functions later in the 1980s as competition increased and the PC became more widely utilized. Later, tellers started using them to provide customer service. The one-branch idea became a reality as a result of banks networking their operations and branches as a result of advancements in computer technology. This extremely significant technological innovation, which altered the country's financial scene, was developed by Barclays Bank (Ghana) and Standard Chartered Bank (Ghana).

The ATM is arguably the most significant electrical invention in our country and throughout the world. In Ghana, banks having ATM services have networked

them, increasing their value to users. The first ATM was built by Trust Bank Ghana in 1995. Not long after, the majority of the big banks launched competing ATM networks. In partnership with the Agricultural Development Bank, Ghana Commercial Bank launched its ATM service in 2001. ATMs have helped to cement the one-branch idea in this county by being networked, so consumers don't have to go to their branch to perform their banking (Kessey & Wesley, 2020).

Another technical advance in Ghanaian banking is the different electronic cards created by banks throughout the years. The first major cash card was presented in May 1997 by Social Security Bank, now Socete Generale SSB. Their 'Sika Card' is a value card that can be filled with cash electronically. In the early part of 2001, Standard Chartered Bank introduced the country's first debit card. Its functionalities have recently been connected with users' ATM cards, increasing its accessibility to the general public by eliminating the need for a separate application procedure. In November 2001, a partnership of three (3) banks (Ecobank, Cal Merchant Bank, and The Trust Bank) unveiled the 'E-Card,' a new advancement in electronic cards. This card is online in real time, so if a customer uses it or their account balance changes, their card instantly reflects the change (Kriese, et al., 2019).

Forms of ICT Innovations in the Banking Sector

According to Abor (2005), technical advances have been found that will help banks' distribution networks. Electronic banking refers to all of the electronic delivery methods together. Electronic banking is not a single technology, but rather an attempt to combine many. The various electronic delivery channels are discussed below:

a. Automated Teller Machines (ATMs)

Rose (1999) describes ATMs as follows: "an ATM combines a computer terminal, record-keeping system and cash vault in one unit, permitting customers to enter the bank's bookkeeping system with a plastic card containing a Personal Identification Number (PIN) or by punching a special code number into the computer terminal linked to the bank's computerized records 24 hours a day". Once access is gained, it offers several retail banking services to customers. They are mostly located outside of banks, and are also found at airports, malls, and places far away from the home bank of customers. They were introduced first to function as cash dispensing machines. However, due to advancements in technology, ATMs can provide a wide range of services, such as making deposits, funds transfer between two or accounts and bill payments. Banks tend to utilize this electronic banking device, as all others for competitive advantage.

b. Telephone Banking

Telebanking (telephone banking) can be considered as a form of remote or virtual banking, which is essentially the delivery of branch financial services via telecommunication devices where the bank customers can perform retail banking transactions by dialing a touch-tone telephone or mobile communication unit, which is connected to an automated system of the bank by utilizing Automated Voice Response (AVR) technology" (Balachandher et al, 2001).

c. Personal Computer (PC) Banking

PC-Banking is a service which allows the bank's customers to access information about their accounts via a proprietary network, usually with the help of proprietary software installed on their personal computer". Once access is gained, the customer can perform a lot of retail banking functions. The increasing awareness of the importance of computer literacy has resulted in increasing the use of personal computers. This certainly supports the growth of PC banking which virtually establishes a branch in the customers' home or office, and offers 24-hour service, seven days a week. It also has the benefits of Telephone Banking and ATMs.

d. Internet Banking

The idea of Internet banking according to Essinger (1999) is: "to give customers access to their bank accounts via a web site and to enable them to enact certain transactions on their account, given compliance with stringent security checks". To the Federal Reserve Board of Chicago's Office of the Comptroller of the Currency (OCC) Internet Banking Handbook (2001), Internet Banking is described as "the provision of traditional (banking) services over the internet".

e. Branch Networking

Networking of branches is the computerization and inter-connecting of geographically scattered stand-alone bank branches, into one unified system in the form of a Wide Area Network (WAN) or Enterprise Network (EN); for the creating and sharing of consolidated customer information/records. It offers quicker rate of inter-branch transactions as the consequence of distance and time are eliminated. Hence, there is more productivity per period.

f. Electronic Funds Transfer at Point of Sale (EFTPoS)

An Electronic Funds Transfer at the Point of Sale is an on-line system that allows customers to transfer funds instantaneously from their bank accounts to merchant accounts when making purchases (at purchase points). A POS uses a debit card to activate an Electronic Fund Transfer Process (Chorafas, 1988).

The Impact of ICT on the Banking Industry

In recent years, the use of Information Technology (IT), which primarily refers to computers and related equipment, has witnessed enormous expansion in service sectors. The most prominent example is the banking business, where the advent of IT-related goods in online banking, electronic payments, security investments, and information exchanges (Oztemel & Gursev, 2020) has enabled banks to deliver more diversified services to clients while employing fewer people. Seeing this pattern of growth, it seems obvious that IT can bring about equivalent contribution to profits.

Existing research has found two beneficial impacts on the relationship between IT and bank performance. First, IT can help banks cut their operational expenses (the cost advantage). For example, the internet enables banks to conduct

standardized, low-value-added transactions (such as bill payments, balance inquiries, and account transfers) online while focusing their resources on specialized, high-value-added transactions (such as small business lending, personal trust services, and investment banking) through branches. Second, IT can help customers trade inside the same network (the network effect) (Alam, 2020; Freeman, 2018; Oláh, Karmazin, Pető & Popp, 2018).

Some research conclude that IT will reduce productivity, echoing the so-called Solow Paradox. Maurseth, (2018) noted that “you can see the computer age everywhere these days, except in the productivity numbers”. Shu and Strassmann (2005) analyzed 12 US banks from 1989 to 1997 and discovered that, despite being one of the most marginal productive variables among all inputs, IT cannot boost bank profitability. On the other hand, several research concurs that IT expenditure has a beneficial impact on corporate value. Differences in measuring and econometric approaches might explain the discrepancy in empirical results (Paradi, Sherman & Tam, 2018). In fact, the financial sector offers a wider range of consumer services than either manufacturing or agriculture. The production function method in this case, which defines each bank's profit (output) as a specific production function of inputs, is less likely to accurately represent the market than a differentiated model with network effects.

In addition, while most production approaches only present a mixture of IT influences on both demand and supply sides, a differentiated model can distinguish a network effect from the demand side (in banking services) from a cost reduction effect from the supply side. Most importantly, a differentiated model can characterize the competition in the industry, which cannot be distinguished from the cost effect in the production function approach.

Challenges associated with Innovation in Financial Services

The payment services and financial products that enable people and businesses to engage in the larger economy are provided by financial services corporations. By providing means for saving money may be invested, credit can be extended, and risk management can be done, they support the current capitalistic society (Gomber, Kauffman, Parker & Weber, 2018). The provision of payment services and facilitation of the allocation of economic resources over time and space are the two fundamental tasks carried out by the organizations that make up the banking industry, and they have remained largely constant over the past few decades.

However, the industry's organizational structure has undergone significant change (Chang, Baudier, Zhang, Xu, Zhang & Arami, 2020). As a result of competition, an industry that moves quickly has been established where businesses must adapt to survive. The retail consumer financial services sector is the one place where this force of change is felt the most forcefully. Mutual funds, brokerage houses, and other non-bank rivals have continued to penetrate these industries, which were formerly exclusively the province of banks, diminishing the market share of the conventional banking industry (Ozili, 2018). The primary driver of these developments is the escalating competition from other participants in the financial services sector, which is continuing to reduce banks' market share. This

rivalry feeds banks' desire to innovate in terms of goods, services, and delivery methods, along with the rapid advancements in information technology.

Methodology

Rahi, Alnaser & Abd Ghani, (2019) posited that research design is the basic framework or blueprint for conducting a research project. This study adopted a combination of qualitative and quantitative approaches to gather and analyse data. The target population for this study covers selected licensed banks that operate in Ghana. However, out of these, only twenty-one (21) licensed universal banks that have operated for more than two years were sampled. Within each selected bank, the study purposively sampled five (5) officials working in ICT, operations and treasury departments of respective banks. In all, the study sought to analyse the views of 105 respondents. The choice of this population was to ensure that adequate data from all banks are collected to facilitate analysis towards attaining findings that could reasonably be generalized for the entire banking industry of Ghana.

The main instrument used to collect primary data for this study was a questionnaire. The questionnaires allow each target/sampled bank to provide a self-assessment of the impact of computerization on internal operational efficiency and bank management. Additionally, secondary data relevant to this study was collected from annual reports, books, and other journals of selected licensed banks in Ghana. Analyses of research data gathered through questionnaires were analysed using statistical package for social sciences (SPSS) and Microsoft Excel. Hence findings were presented in the form of percentages, graphs, tables and charts. Descriptive statistics computed also helped in the formulation of generalizations towards arriving at a conclusion for the study. Also, inferential analysis such as Chi-square was used in analysing the research questions for this study.

Chi-square test: The chi-square (χ^2) test was used to analyse responses from administered questionnaires in order to ascertain whether the introduction of ICT backed products (computerization) has improved management within Banks in any way. The details of the chi-square test are summarized below;

Calculating the test-statistic

The value of the test-statistic is

$$\chi^2 = \sum_{i=1}^i \sum_{j=1}^j \frac{(O_{ij} - E_{ij})^2}{E_{ij}},$$

Where:

χ^2 = cumulative test statistic, which asymptotically approaches a χ^2 distribution.

O_{ij} = an observed frequency.

E_{ij} = an expected (theoretical) frequency, asserted by the null hypothesis.

4.0 RESULTS AND DISCUSSIONS

This section of the paper makes a statistical meaning out of the data collected. It compresses the data and attempts to bring the statistical meaning out of it. This section considers inferential method of analysis. It also discusses the relevant issues to answer the study's objectives.

Information and communication technology (ICT) innovations and other banking products

This section of the analysis seeks to obtain the ICT innovations that have been deployed by banks under study and the year range within which these innovations were deployed. The year range within which these innovations were deployed was represented using a Likert's scale where; 1=1990-1995, 2=1996-2000, 3=2001-2005, 4=2006-2010, 0= Not yet.

From Table 4.1 below the mean score for E-zwich smart card is approximate to 4.00. This indicates that, E-zwich smart card was deployed by banks within 2006-to-2010-year range. Besides, the mean scores for Visa/MasterCard services, Mobile banking, computerized customer credit rating, Business intelligence software and specialized management reporting tools, Local intranet and Human resource and payroll systems are approximate to 2.00. This implies that, these ICT products used by the banks were deployed between 1996 and 2000. Moreover, the mean score of Queue management system depicts that it is not yet deployed by most of the banks under study. In addition, the rest of the ICT products were deployed by the banks from 2001 to 2005-year range, thus, their mean scores are approximated to 3.00. This implies that the adoption of ICT has helped reduce cost of internal communication across the bank, helped the bank increase the number of its customers and helped reduce the rate of errors in the computations of interests and other charges that are applied to customer accounts

Table 4.1: ICT Innovations and other Banking Products

	Mean score	Std. Deviation
Local Area Networks	2.55	.649
Computerized Banking Application (Software)	2.88	.524
Wide Area Networks	3.17	.740
Payroll and Human Resource Systems	1.58	1.759
Electronic Mailing Systems	3.20	.605
Local Intranet	2.33	1.398
Electronic Funds Transfer Services	3.13	1.065
Automated Teller Machine (ATMs)	3.43	.698
Ezwich Smart Cards	3.80	.755

Internet Banking	2.95	1.478
Deployment of Point of Sale Devices	3.05	1.578
Customized Software for Internal Departments	3.42	1.306
Computerized Customer Credit Rating	1.63	1.931
Visa/MasterCard Services	1.07	1.784
Mobile Banking	2.08	1.977
Job Tracking Software (Help Desk Management Software)	3.42	1.406
CCTV and Access Control Systems	2.68	1.535
Cheque Code line Clearing and Automated Clearing House (CCC / ACH)	3.93	.516
Business Intelligence Software and Specialized Management Reporting Tools	1.67	1.989
Queue Management Systems	0.33	1.561
Voice Over IP Services on Internal Telephone Network	2.17	1.993

Source: Survey Data 2020

ICT and Influence on Operational Efficiency

This section measures the extent of these ICT innovations influence on operational efficiency. This extent was measured using a Likert scale where; 5= strongly agree, 4= agree, 3= neutral, 2= disagree and 1= strongly disagree.

From Table 4.2 below ICT have influence on operational efficiency but respondents disagree with the statement that ICT has helped the banks to improve its quality of services, installation of security cameras in banking halls and other accessible premises have helped enhanced security in the bank and customised applications for internal departments enhance their work rate and quality of output generated by the departments it had have on operational efficiency.

Respondents were indifferent about the use of job tracking systems and help desk software together with the reports that are generated from these systems have enhanced management's ability to monitor job progress and the adoption of access control. Time ware systems have helped enhance security at security zones. Respondents agree with the rest of the statement that ICT have influenced operational efficiency. Finally, respondents strongly agree that the use of voice over IP systems have helped reduce cost of internal communication across the bank. These have an influence on operation efficiency and have aided tracking of employee reporting times on operational efficiency.

Table 4.2: Information and Communication Technology (ICT) influence on operational efficiency

Responses	Mean score	Std. Deviation
The use of electronic delivery channels (ATM, mobile banking etc.) has reduced the number of customers that queue in the banking hall and the pressure on tellers/cashiers	3.68	1.097
Customers have fewer complaints with the use of electronic delivery channels (e-banking)	4.10	.896
The availability of ICT products has helped the bank increase the number of its customers.	4.37	.551
ICT has helped reduce the rate of errors in the computations of interests and other charges that are applied to customer accounts.	4.33	.968
ICT has helped reduce the man-hours that are committed in providing service to customers	3.98	1.097
ICT has helped the bank improve its quality of service	2.28	2.043
The use of voice over IP systems have helped reduce cost of internal communication across the bank	4.63	0.486
The internal electronic mailing and local intranet pages has enhanced speedy dissemination of information across the staff body and reduced circulation cost.	3.68	1.123
The adoption of access control and time ware systems have helped enhance security at security zones and aided tracking of employee reporting times	2.97	1.589
The adoption of business intelligence software and special reporting tools have enhanced the speedy generation of relevant information to guide management decision making	4.13	0.689
The implementation of Cheque Codeline Clearing and Automated Clearing House (CCC/ACH) has reduced total work volume and time spent at the workplace by Clearing Staff	3.65	.917
The installation of security cameras in Banking Halls and other accessible premises have helped enhance security in the Bank	2.37	1.746
The use of job tracking systems and help desk softwares together with the reports that are generated from these	3.22	1.451

systems have enhanced management's ability to monitor job progress		
Customized applications for internal departments enhance their work rate and quality of output generated by the departments	1.77	1.640
The adoption of call tracking software that tracks phone call duration has caused a reduction in call costs	4.23	0.113

Source: Survey Data 2020

Hypothesis Testing of ICT's Influence on Operational Efficiency

This section of the analysis is testing ICT's influence on operational efficiency at 95% confidence level using the chi-Square distribution test.

Hypothesis

H₀: ICT does not have influence on operational efficiency

H₁: ICT has an influence on operational efficiency

Test statistic

The test statistic for testing this hypothesis is the Chi-Square test with has a degree freedom of $(3-1) * (2-1) = 2$

From Table below, the significance value of 0.000 of the Pearson Chi-Square values is less than a significance level of 0.05. This indicates that, the null hypothesis (H₀) is rejected and concludes that there is enough evidence to support the claim that Information and Communication Technology (ICT) influence Operational Efficiency.

Chi-Square test Table

	Value	Degree of freedom	Significant value
Pearson Chi-Square	36.964	2	.000
Likelihood Ratio	31.932	2	.000
Linear-by-Linear Association	25.346	1	.000
N of Valid Cases	60		

Source: Survey Data 2020

Measure of Association between ICT and Operational Efficiency

Table below depicts the measure of association between ICT and operational efficiency. From the table, the Pearson's correlation coefficient (Pearson's R) between ICT and operational efficiency is 0.655. This shows that, ICT has a positive significant impact on banks operational efficiency at 5% level of significance.

Table 4.4: Association between ICT and Operational Efficiency

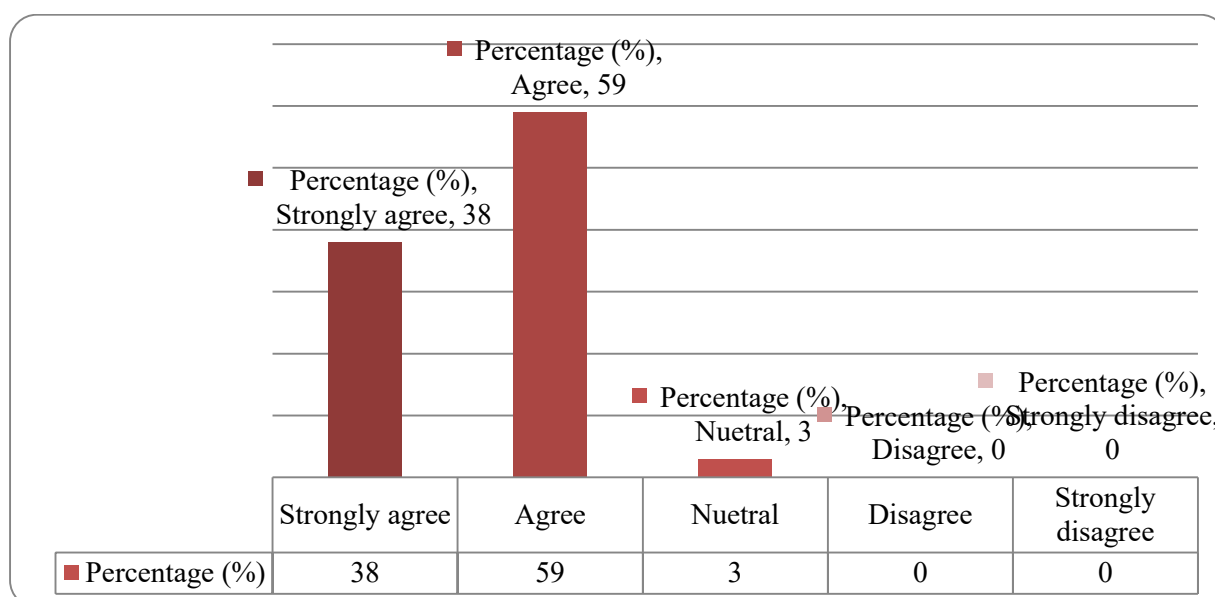
		Value	p-value
Interval by Interval	Pearson's R	0.655	0.000
Ordinal by Ordinal	Spearman Correlation	0.662	0.000
N of Valid Cases		60	

Source: Survey Data 2020

Whether bank management has been improved using electronic delivery channels

The figure below depicts that 38% of the respondents strongly agree with the statement that banks' management has intensified through the adoption of electronic delivery channels, 59% of them agree with the statement and 3% were indifferent about the statement. This implies that ICT have improved management in banks using electronic delivery channels.

Whether bank management has been improved by the use of electronic delivery channels



Source: Survey Data 2020

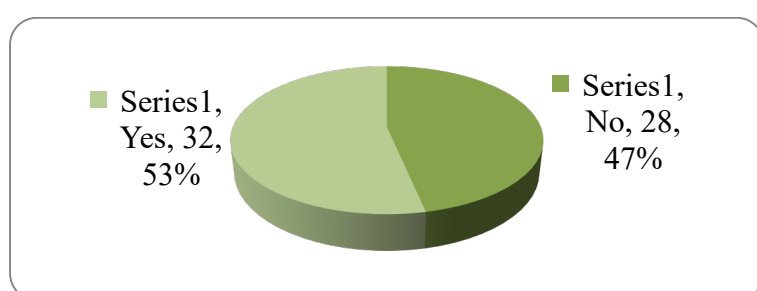
Challenges associated with computerization among banks

The section of the analysis assesses the challenges associated with the using of ICT innovations in banks daily operations.

Challenges banks face with computerization of the institution

The figure below indicates that 53% of the respondents responded that they face challenges whereas 47% of the responded that they do not face any challenge. This shows they despite the usefulness of ICT innovations it has some challenges that also affect operational efficiency.

Whether banks face challenges with computerization of the institution



Source: Survey Data 2020

Challenges associated with ICT products

The table below shows the challenges associated with each of the under listed ICT product. Those products indicated “NONE” depicts that the banks do not face any challenges at all with the adoption that ICT product. It can clearly be seen that the banks under study does not face any challenges with only four ICT products, but faces challenges with the rest as presented in the Table with respective challenges

Challenges associated with ICT products

ICT Products	Challenges
Computerized Banking Application (Software)	○ Communication error ○ System downtime ○ Upgrade cost
Local Area Networks	○ Breakdown of network switches ○ Breakdown of the local server ○ Link failures
Wide Area Networks	○ Frequent breaks in data transmission ○ deprived support from ISP ○ Link malfunction ○ overreliance on third party
Human Resource and Payroll Systems	○ Support not imminent

Electronic Systems	Mailing	NONE
Local Intranet		NONE
Electronic Funds Transfer Services		o Frequent password error
Automated Teller Machine (ATMs)		- o Card read error - o Temporal failures - o Frequent breakdowns in communication links - o meagre support from telephone networks
Ezwich Smart Cards		- o Not compatible with many ATM machine - o inadequate POS
Internet Banking		- o Inadequate customer education - o Slow internet
Deployment of Point-of-Sale Devices		- o Cost of deployment - o Insufficient POS machines
Customised Softwares for Internal Departments		o Lack of education
Computerised Customer Credit Rating		o Too ambiguous
Visa/MasterCard Services		o Not compatible with many ATM machines
Mobile Banking		- o costly to deploy - o Poor picture quality
Job Tracking Softwares (Help Desk Management Software)		o recurrent operational error
CCTV and Access Control Systems		- o Lack of education on play backs - o No infra-red cameras for night vision
Cheque Codeline Clearing and Automated Clearing House (CCC / ACH)		o inadequate cheque scanning machines
Business Softwares and Specialized Management Reporting Tools	Intelligence	NONE
Queue Management Systems		NONE
Voice Over IP Services on Internal Telephone Network		o Expensive to deploy

Source: Survey Data 2020

Conclusion and Recommendations

It can be concluded that the banks in Ghana especially those under study have numerous ICT products aim at enhancing their customer service and operations.

Some of these include E-zwich Smart Card, Visa/MasterCard services, Mobile banking, computerized customer credit rating, Business intelligence software's as well as specialized management reporting tools. Others also include Local intranet and Human resource and payroll systems, Wide Area Network, electronic funds transfer services and ATM. The remaining ones comprise Computerized Customer Credit Rating and Visa/MasterCard

As already been agreed by authors such as (Farrell and Saloner, 1985; Katz and Shapiro, 1985) the study has also disclosed that ICT has improved management among banks, and it has also intensified operations through the use of electronic delivery channels. Furthermore, it has been revealed that Information and Communication Technology (ICT) have influenced and had a significant impact on Operational Efficiency. This is buttressed by Agboola (2001) who also studied the impact of computer automation on the banking services in Lagos and discovered that Electronic Banking has tremendously improved the services of some banks to their customers in Lagos.

However, these ICT products has not only created enormous opportunities for the banks, but they also have their accompanying challenges some of which include communication error, system downtime and upgrade cost, breakdown of network switches and local server. Others include ambiguity of computerized customer credit rating and insufficient Point of Sale machines especially for E-zwich Smart Cards.

Finally, the study concludes that based on the data collected and analyzed, there is enough evidence to support the claim that Information and Communication Technology (ICT) has a significant positive influence on Operational Efficiency.

The study recommends that all the management of banks in Ghana must continue to be more innovative in ICT to attract customers and ensure their competitiveness in the banking industry. This could be done through the adoption of other international products to augment their existing products. Also, banks that are deploying various Smart Cards especially, the E-zwich, need to provide more Point-of-Sale Devices to facilitate and attract easy use and patronage by customers. Looking at the enormous benefit and efficiency ICT brings to the banks' operations systems; management of Ghanaian banks need to adopt immediate and stringent measures to ensure the efficiency of all ICT products and systems at all times. This could be achieved by monitoring the systems frequently by well-equipped IT operators. This will help to ensure continuous reliability by customers.

INFORMATION TECHNOLOGY AND OPERATIONAL EFFICIENCY OF BANKS; THE GHANAIAN EXPERIENCE

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Abstract

The paper examines the Information Communication Technology and operational efficiency of banks and an assessment from the Ghanaian perspective. Based on a survey of twenty-two (22) licensed universal banks that operate in Ghana, and adopts IT and its impact on Operational efficiency of the banks. The paper used SPSS and excel as the analytical tools to analyze the data collected. The paper also used Chi-Square test the relationship between the variables under review. Results indicate that, IT has improved management among banks, and it has also intensified operations through the use of electronic delivery channels. Again, it has been revealed that Information Technology (IT) have influenced and had a significant impact on Operational Efficiency. Finally, based on the data collected and analysed, there is enough evidence to support the claim that Information Technology (IT) has a significant positive influence on Operational Efficiency. The paper also recommends that, all the management of banks in Ghana must continue to be more innovative in IT to attract customers and ensure their competitiveness in the banking industry. As a results of the enormous benefit and efficiency IT brings to the banks' operations systems, management of Ghanaian banks need to adopt immediate and stringent measures to ensure the efficiency of all IT products and systems at all times.

Keywords: *Information Technology, Operational Efficiency*

Introduction

Information Technology provides self-service facilities from where prospective customers can easily access their account and perform different activities directly online. Information technology in Ghanaian banking system and operation has been acknowledged as the life wire of banks in the financial sector as it promotes and facilitates the performance of banks in the country (Mustafa, 2021). It is a term that generally covers the harnessing of electronic technology for the information needs of a business at all levels. Al-Nadesh et al. (2022) lists some banking services that have been revolutionized through the use of Information Communication Technology (ICT) as including account opening, customer account mandate, and transaction processing and recording. Information and Communication Technology has provided self-service facilities (automated customer service machines) from where prospective customers can complete their account

opening documents direct online (Haabazoka, 2019). It assists customers to validate their account numbers and receive instruction on when and how to receive their cheque books, credit and debit cards.

Information Technology deals with the physical devices and software that link various computer hardware components and transfer data from one physical location to another (Muazu and Abdulmalik, 2021). IT products in use in the banking industry include Automated Teller Machine, Smart Cards, Telephone Banking, MICR, Electronic Funds Transfer, Electronic Data Interchange, Electronic Home and Office Banking, POS devices.

Ghana's banking industry has over the years witnessed significant amount of transformation with the emergence of technologically innovative products and services. Banks have employed these innovative products and services in their operations so as to provide customers with easy accessibility. As such managers cannot ignore Information Systems because they play a critical role in contemporary organization.

Many banks are making what seem like huge investments in technology to maintain and upgrade their infrastructure, (Bansal et al., 2021) in order not only to provide new electronic information-based services, but also to manage their risk positions and pricing. At the same time, new off-the-shelf electronic services such as online retail banking are making it possible for very small institutions to (Adusei et al., 2022) take advantage of new technologies at quite reasonable costs. These developments may ultimately change the competitive landscape in the financial services (ibid).

It is not clear whether automation of banking activities by management has represented a positive change and enhanced operational efficiency since it continues to have long queues, is vulnerable to cheating by some clients who bank fake notes. With competition in the banking sector becoming intense and new financial service providers emerging all the time, this could result into the banks inability to function effectively and efficiently. It is therefore upon this statement that the researcher seeks to undertake to find out how adoption of new technologies has impacted on operational efficiency in commercial banks in Ghana.

Despite the undeniable importance of technology in banking operations, the impact on operational efficiency is still misunderstood. Previous studies have produced mixed results regarding the impact of technology on banking sector operational efficiency with some concluding that technological innovations had least impact on bank operations (El-Charani et al., 2018) and others indicating a significant contribution to bank operations (Haabazoka, 2019; Ekele et al., 2020; Muazu et al., 2021; Al-Nadesh et al., 2021). It is at the center of such mixed conclusions that creates and necessitates the need to carry out a study from a Ghanaian context to establish the effect of bank technologies on operational efficiency in commercial banks in Ghana.

Methodology

This study adopted a combination of qualitative and quantitative approaches to gather and analyse data. This method was appropriate because Tahsien et al. (2020) conducted a quantitative study to investigate the factors influencing the adoption and use of M-IoT systems. The target population for this study covers all licensed banks that operate in Ghana. However, out of these, only twenty-two (22) licensed universal banks that have operated for more than two years were sampled. Within each selected bank, the study purposively sampled five (5) officials working in IT, operations and treasury departments of respective banks. In all, the study sought to analyse the views of 105 respondents. The choice of this population was to ensure that adequate data from all banks are collected to facilitate analysis towards attaining findings that could reasonably be generalized for the entire banking industry of Ghana. The main instrument used to collect primary data for this study was a questionnaire. This data is captured by using a five-point Likert scale and other closed ended questions. This method brings out the different degrees of variations in responses to particular issues in the questionnaire. However, secondary data relevant to this study was collected from annual reports, books and other journals of selected licensed banks in Ghana. Data were analysed using statistical package for social sciences (SPSS) and Microsoft Excel. Hence findings were presented in the form of percentages, graphs, tables and charts. Descriptive statistics computed also helped in the formulation of generalizations towards arriving at a conclusion for the study. Also, inferential analysis such as Chi-square was used in analysing the research questions for this study.

Chi-square test

The chi-square (χ^2) test was used to analyse responses from administered questionnaires in order to ascertain whether the introduction of ICT backed products (computerization) has improved management within Banks in any way. The details of the chi-square test are summarized below:

Calculating the test-statistic

The value of the test-statistic is

$$\chi^2 = \sum_{i=1}^i \sum_{j=1}^j \frac{(O_{ij} - E_{ij})^2}{E_{ij}},$$

Where;

χ^2 = cumulative test statistic, which asymptotically approaches a χ^2 distribution.

O_{ij} = an observed frequency;

E_{ij} = an expected (theoretical) frequency, asserted by the null hypothesis;

Findings/Results

Hypothesis Testing of it's Influence on Operational Efficiency

This section of the analysis is testing IT's influence on operational efficiency at 95% confidence level using the chi-Square distribution test.

Hypothesis

H₀: ICT does not have influence on operational efficiency

H₁: ICT has an influence on operational efficiency

Test statistic

The test statistic for testing this hypothesis is the Chi-Square test with has a degree freedom of $(3-1)*(2-1) = 2$

From Table below, the significance value of 0.000 of the Pearson Chi-Square value is less than a significance level of 0.05. This indicates that, the null hypothesis (H₀) is rejected and concludes that there is enough evidence to support the claim that Information and Communication Technology (ICT) influence Operational Efficiency. This shows that, ICT has a positive significant impact on banks operational efficiency at 5% level of significance.

Table 1: Chi-Square test Table

	Value	Degree of freedom	Significant value
Pearson Chi-Square	36.964	2	.000
Likelihood Ratio	31.932	2	.000
Linear-by-Linear Association	25.346	1	.000
N of Valid Cases	60		

Source; survey data 2023

Conclusion

It can be concluded that the banks in Ghana especially those under study have numerous IT products aim at enhancing their customer service and operations. Some of these include E-zwich Smart Card, Visa/MasterCard services, Mobile banking, computerized customer credit rating, Business intelligence softwares as well as specialized management reporting tools. Others also include Local intranet and Human resource and payroll systems, Wide Area Network; electronic funds transfer services and ATM. The remaining ones comprise Computerized Customer Credit Rating and Visa/MasterCard

The study has also disclosed that IT has improved management among banks and it has also intensified operations through the use of electronic delivery channels. Furthermore, it has been revealed that Information Technology (IT) have influenced and had a significant impact on Operational Efficiency. This is buttressed by Ekele (2021) who also studied the impact electronic banking on performance of commercial banks in Nigeria and discovered that Electronic Banking has tremendously improved the services of some banks to their customers in Lagos.

However, these IT products has not only created enormous opportunities for the banks, they have their accompanying challenges some of which include communication error, system downtime and upgrade cost, breakdown of network switches and local server. Others include ambiguity of computerized customer credit rating and insufficient Point of Sale machines especially for for E-zwich Smart Cards.

Finally, the study concludes that based on the data collected and analyzed, there is enough evidence to support the claim that Information Technology (IT) has a significant positive influence on Operational Efficiency.

Recommendations

The study recommends that all the management of banks in Ghana must continue to be more innovative in IT to attract customers and ensure their competitiveness in the banking industry. This could be done through the adoption of other international products to augment their existing products.

Looking at the enormous benefit and efficiency IT brings to the banks' operations systems, management of Ghanaian banks need to adopt immediate and stringent measures to ensure the efficiency of all IT products and systems at all times. This could be achieved by monitoring the systems frequently by well-equipped IT operators. This will help to ensure continuous reliability by customers.

Session 7: Business Strategy and Sustainability in Periods of Economic Crisis

Chair(s): Dr. Haruna Rufai & Mr. Akwesi Sarfo Kantanka

INNOVATIVE STRATEGIES FOR BRAND SUSTAINABILITY IN THE MUSIC INDUSTRY; THE EXPERIENCE OF TOP GHANAIAN ARTISTS

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Abstract:

This empirical qualitative study aimed to explore the innovative strategies used by top Ghanaian artists to sustain their brands in the music industry for over a decade. The study adopted a purposive sampling technique to select 10 participants who have sustained their brands in the music industry for at least a decade. Data were collected through in-depth semi-structured interviews and analysed thematically. The study found that the innovative strategies used by top Ghanaian artists for brand sustainability in the music industry include Cultural fusion, investment in digital marketing, building a strong brand identity, institutionalized periodic music festivals, collaborating with other global and upcoming artists, fun and live engagement sessions with fans. The study also identified challenges faced by the artists, including limited resources and weak national structures to support artists. This study contributes to the existing literature on brand sustainability and provides valuable insights for music artists, managers, and policymakers in Ghana. Practical implications of the findings are presented therein.

Keywords: *Innovation, Branding, Sustainability, Music, Artist, Brand sustainability*

Introduction

The music industry is a highly dynamic and competitive that thrives on innovation to remain relevant and profitable (Kumar et al., 2016). According to a report by IFPI, the global recorded music industry generated a total revenue of \$21.5 billion in 2020, a 7.4% increase from the previous year (IFPI, 2021). This growth was attributed to the rise of digital streaming services, which accounted for 62.1% of global recorded music revenue in 2020 (IFPI, 2021). In Ghana, the music industry

has witnessed significant growth in recent years, with the emergence of new artists and genres. According to a report by PwC, the music industry in Ghana is expected to grow at a compound annual growth rate (CAGR) of 13.8% from 2019 to 2023 (PwC, 2019). The report also highlights the growing importance of digital platforms in the distribution and consumption of music in Ghana.

Brand sustainability is critical for the success of any brand, including those in the music industry. Innovative strategies are needed to ensure that a brand remains relevant, profitable, and competitive in the long term. Some of these strategies include brand differentiation, market segmentation, product innovation, and digital marketing (Zhang et al., 2017). In the music industry, brand differentiation is particularly important, as it helps artists stand out in a crowded and competitive market (Zhang et al., 2017). However, despite the need for innovative strategies for brand sustainability, many music artists in Ghana still struggle to implement them. Some of the challenges faced by these artists include limited resources, lack of knowledge on innovative strategies, and difficulty in breaking through the market (Agyekum et al., 2021). As such, there is a need for empirical research that explores the innovative strategies used by top Ghanaian artists to sustain their brands in the music industry. This empirical qualitative study thus seeks to fill this gap by exploring the innovative strategies used by top Ghanaian artists to sustain their brands in the music industry for over a decade. The study also aims to identify the challenges faced by these artists over the years. This study contributes to the existing literature on brand sustainability in the music industry and provide valuable insights for music artists, managers, and policymakers in Ghana.

Methodology

This study adopted a qualitative research design to explore the innovative strategies used by top Ghanaian artists to sustain their brands in the music industry. A qualitative research design was chosen because it allows for a detailed and in-depth exploration of the research questions and provides rich and detailed data on the experiences and perspectives of the participants. The study used a purposive sampling technique to select top Ghanaian artists who have sustained their brands in the music industry for at least ten (10) years. The inclusion criteria for the participants were being a Ghanaian artist, having released at least one album, and having a substantial following on social media. The study recruited at least 10 participants.

Data were collected through in-depth semi-structured interviews with the participants. The interviews were conducted face-to-face and via video conferencing, depending on the preference of the participants. The interviews were audio-recorded and transcribed verbatim for analysis. The interview guide was developed based on the research questions and was pilot-tested before the actual data collection to ensure its effectiveness and clarity. Data analysis was conducted using thematic analysis, which involves identifying patterns and themes in the data (Braun & Clarke, 2019). The data were analysed manually, with the transcripts read and re-read to identify key themes and patterns. The themes were coded and categorized into broader categories to identify commonalities

and differences among the participants. The analysis was conducted by two independent researchers to ensure the reliability and validity of the findings.

Findings

The findings of the study revealed that top Ghanaian artists employed various innovative strategies to sustain their brand value in the music industry. Collaboration was identified as a critical strategy that enabled artists to create new sounds, expand their reach, and tap into new markets. Cultural fusion was also identified as an innovative strategy that enabled artists to differentiate their music and build sustainable brands. Additionally, music festivals and investment in digital marketing were identified as critical strategies that enabled artists to create a unique identity, promote their music, and build brand value. The themes identified in the transcriptions are discussed as follows:

1. **Collaboration:** respondents revealed that collaboration is a critical strategy they deploy to sustain their brand value in the music industry. Collaborations with other artists allow for the creation of new sounds, expansion of reach, and tapping into new markets. The study found that artists choose collaborators based on style, sound, and values, and collaborations contribute to the growth of the industry by fostering creativity, innovation, and cross-cultural exchange.

2. **Cultural Fusion:** The study found that cultural fusion is an innovative strategy that enables top Ghanaian artists to differentiate their music and build sustainable brands. Incorporating traditional music and culture into contemporary music helps create a unique sound that reflects the artists' cultural roots and values. Balancing traditional elements with contemporary sounds is crucial to making the music appeal to a modern audience. Cultural fusion contributes to the growth of the industry by promoting cross-cultural exchange and attracting a diverse audience.

3. **Brand Identity:** The study found that respondents build strong brand identity that sustain their brand value in the music industry. Creating a unique identity for oneself as an artist requires developing a consistent image and sound that reflects one's values and style. Ensuring consistency in branding across different platforms, including social media, and merchandise, is essential. Brand identity contributes to the growth of the industry by creating a strong connection with the audience and reflecting the artists' values and style.

4. **Music festivals:** respondents revealed that periodic music festivals are critical strategy that enables them to sustain their brand value in the music industry. Music festivals provide a platform for artists to showcase their music, connect with fans, and reach new audiences. Participating in music festivals can help build an artist's brand by increasing exposure and creating opportunities for collaborations with other artists. Artists use music festivals to build fan base by providing a unique experience for fans to interact with their favourite artists. The festival environment allows for a shared experience, creating a sense of community among fans and artists. This can lead to increased loyalty and support for the artist's brand. Furthermore, music festivals can also contribute to an artist's brand sustainability by providing opportunities for networking and industry

connections. Artists can meet with industry professionals, including producers, managers, and record label executives, who can provide valuable advice and guidance on building and sustaining their brand.

5. Corporate social responsibilities (CSR): Finally, the study also found that CSR is a critical strategy that enables top Ghanaian artists to sustain their brand value in the music industry. CSR refers to the responsibility that companies or organizations have to the society and the environment in which they operate. CSR involves activities that have a positive impact on the society and the environment, beyond the economic benefits of the organization. In the music industry, artist involves activities such as supporting charitable organizations, sponsoring music events for social causes, and participating in community development programs. By engaging in CSR, artists are able to create a positive brand image, improve their reputation, and build goodwill among fans and the community. This CSR activities also enhances an artist's credibility and influence in the industry. By demonstrating a commitment to social and environmental causes, artists can gain the support of fans, industry professionals, and other stakeholders. This can lead to increased opportunities for collaborations, sponsorships, and endorsements.

Conclusions and Recommendations

The study explored the innovative strategies used by top Ghanaian artists to sustain their brands in the music industry. The findings of the study revealed that digital marketing, building a strong brand identity, collaborating with other artists and brands, and engaging with fans are key innovative strategies that contribute to brand sustainability. The study also identified challenges faced by the participants, including limited resources and lack of knowledge on innovative strategies, as well as the difficulty in breaking through the market and competing with established artists.

INDUSTRIAL PRODUCTION AND ENVIRONMENTAL DEGRADATION NEXUS: A PANEL NONLINEAR ARDL APPROACH

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Abstract

Despite the importance of industrialization as one of the main contributors to the development process in the developing countries, its environmental effects have been largely neglected in empirical literature. To fill this gap, this paper examines the asymmetric effect of industrial production on environmental degradation in 30 selected sub-Saharan African countries spanning from 1990 to 2019. The cross-sectional dependence test is used to ascertain the presence of cross-sectional dependence while the second-generation panel unit root tests and are applied to examine the unit-root properties. The results of cointegration tests confirm the presence of the long run cointegration relationship among the variables. Finally, we employed the panel nonlinear autoregressive distributed lag (NARDL) approach to estimate the coefficient values. The empirical findings demonstrate that industrial production asymmetrically influences environmental degradation both in the short and long runs. In the long run, a positive shock in industrial production of 1% induces an increase in environmental degradation by 0.213 while a negative shock induces 0.390% decrease in environmental degradation. On the other hand, the long run estimates reveal that a positive shock in industrial production by 1% exerts a rise in environmental degradation by 0.321% while a 1% negative shock mitigates environmental degradation by 0.127%. It is recommended that governments in the selected sub-Saharan African countries should promote de-carbonization in industries and encourage industrial efficiency.

Keywords: Asymmetry, Industrial production, environmental degradation, Panel NARDL,

CONSUMERS' BIOSPHERIC VALUES AND PURCHASING INTENTIONS OF SUSTAINABLE PRODUCTS

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ABSTRACT

Generally, business strategy and sustainability measures which are firm-focused may not be successful without the conscious effort to create responsible consumers who would embrace the idea of sustainable consumption. This is mainly because the consumer is believed to be at the end of all production processes. The motivation of this paper was to contribute to bridge the gap between firm-oriented strategies and measures against the consumer-based measures that are meant to lead to a holistic fight against sustainable development or environmental sustainability. The study sought to understand how desirable goals serving as the guiding principles in the lives of consumers towards the environment, thus, the biospheric values of consumers, affect their purchasing intentions of organic products. A questionnaire was used as the instrument for data gathering and the quantitative method was employed for the study. This survey used a valid data from 408 participants in Ghana, administered through the social media, specifically, through WhatsApp platforms. The study used the structural equation modelling analytical tool with the computer software Mplus version 8.2. The key finding was that the Ghanaian consumer had strong biospheric values which contributed to neutralise the indirect influence of perceived inconvenience towards buying intentions of organic products. It contributes to the seemingly limited literature on green consumption which is considered as a gap between consumer-focused and firm-oriented strategies and measure towards business growth and sustainability issues.

Keywords: Biospheric values, pro-environmental, green consumerism, sustainable marketing, organic products

Introduction

Business strategy and sustainability issues are relevant topics for discussion not only in periods of economic crisis, but it is essential for the survival of business entities generally. Typical business strategies commonly employed to deal with sustainability issues include, but not limited to eco-innovation and the circular economy (Hojnik et al., 2020), environmental laws (Gerba & Brusseau, 2019), and

environmental laws (Ulucak & Kassouri, 2020). One of the perceived effective measures to deal with environmental sustainability challenges is the creation of the responsible green consumer (Giesler & Veresiu, 2014; Hojnik et al., 2020).

The purpose of this paper seeks to find out how biospheric values of consumers, affect their purchasing intentions of organic products. Studies from the consumer's perspective include but not limited to green consumerism (Schuitema & de Groot, 2015), pro-environmental purchase behaviour (Nguyen et al. 2016), decoding behavioural responses of green hotel guests (Olya et al., 2019, are some of the measures aimed at tackling the environmental challenges.

However, there seem to be limited research on the biospheric values of consumers with reference to the buying intentions of organic products, which are key category of sustainable market offerings. Nguyen et al. (2016) suggested among others that future studies should consider the use of organic products in the analysis of biospheric values of consumers. Hence, the main research question of the paper was: how does the biospheric values of consumers affect their buying intentions of organic products? The motivation of this paper was to contribute to bridge the seemingly disparity between firm-oriented strategies and measures against the consumer-based measures that are meant to complement each other in the fight against unsustainable development practices.

Conceptual model and hypotheses

The conceptual model of the study anticipated direct influence of biospheric values on consumers' attitudes towards environmental protection (H1); a direct influence of biospheric values on perceived inconvenience of consumers for green products (H2); direct influence of attitudes towards environmental protection on consumers purchasing intentions for organic products- the outcome variable (H3) and a direct influence of perceived inconvenience on consumers' purchasing intentions for organic products- outcome variable (H4). Finally, it predicted an indirect effect of biospheric values through attitudes to the outcome variable, and another indirect effect from the same antecedent variable- biospheric values- through perceived inconveniences to the outcome variable, thereby getting two additional hypotheses of H5 and H6 respectively.

Methodology

This study was conducted in Ghana, a country which is currently facing major ecological degradation through the activities of illegal small-scale mining (Longdon, 2017). The quantitative research method was employed for the study and the questionnaire was employed as the main instrument for data collection. This survey used a valid data from 408 participants administered through WhatsApp platforms, with a convenience sampling technique. The data was analysed with the structural equation model (SEM), the statistical technique for simultaneously testing and appraising causal relationships among multiple independent and dependent constructs (Hair et al., 2010). The Mplus computer program version 8.2 was employed to assist in the data analysis.

Results

Assessing the goodness-of-fit (GOF) of the CFA model, the following indicators were considered: chi-square test statistic, the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root mean square error of approximation (RMSEA). Estimated values above the generally accepted threshold of 0.90 for CFI and TLI, and RMSEA coefficient of less than 0.08 are considered good fit for the proposed model (Hair et al., 2014). The results from this study suggested that the CFA model recorded a good fit with reference to the data collected, as seen in Table I.

Table I: Reliability and Discriminant Validity indices; Correlation matrix of the effects of the multifactorial CFA models.

Factor	Alpha	FD	CR	AVE	BioV	Atti	Pinc	Bint
BioV	0.94	0.980	0.940	0.797	(0.893)			
Atti	0.89	0.962	0.895	0.740	0.682	(0.860)		
Pinc	0.82	0.926	0.822	0.607	0.479	0.674	(0.779)	
Bint	0.90	0.952	0.897	0.744	0.458	0.703	0.778	(0.863)

Note: FD = Factor determinacy; Chi-square (df = 59) = 258; CF I= 0.923; TLI = 0.910; RMSEA=0.05; n = 408.

Using the computer software Mplus, version 8.2 to test for the proposed hypotheses, the path analyses with SEM revealed direct and statistically significant values for all anticipated relationships among the four main constructs of biospheric values, attitudes of the consumer, perceived inconvenience of consumers, and purchasing intentions of the green consumer, depicted in Table II.

Table II: Structural Equation Modelling (SEM); Beta values, t-values, and p-values.

STRUCTURAL PATH	Beta	t-values	p-values	Acceptance/Rejection
H1: BioV→Atti	0.675	9.949	0.000	Accepted
H2: BioV→Pinc	0.482	7.441	0.000	Accepted
H3: Atti →Pint	0.372	5.095	0.000	Accepted
H4: Pinc → Bint	0.585	8.204	0.000.	Accepted
H5: BioV→Atti. →Pir	0.251	4.498	0.000	Accepted
H6: BioV →Pinc →Pi	0.282	5.672	0.000	Accepted

Note: Chi-square (df = 94) = 4 81; CF I= 0.903; TLI = 0.876; n = 408.

Findings

From the study, all anticipated relationships within the conceptual model were proved as predicted and found to be statistically significant. One of the key findings of the study shows that consumers' biospheric values directly influence their attitudes towards environmental protection, which in turn translates into positive purchasing intention of organic products. A notable finding from this study reveals that, strong biospheric values have the capability to neutralise

consumers' perceived inconvenience usually associated with eco-friendly products, which in turn has a direct influence on consumers' buying intentions of organic products.

Conclusions

Generally, biospheric values proved to be a good predictor of consumers' buying intentions of organic products from the findings of the study. Therefore, it may be said that the awareness of the Ghanaian consumers on environmental sustainability is encouraging. Marketers, strategic investors, policy makers and researchers should take the advantage of the findings of this study since it is a clarion call for proper development of the emerging green marketing in Ghana in an attempt to contribute to the issue of sustainability. It is, therefore, recommended for future studies to find out how the biospheric values of customers are translated into actual buying of organic products.

Session 8: Marketing in Periods of Economic Crisis

Chair(s): Prof. Kofi Osei-Frimpong & Dr. Ibn Kailan Abdul-Hamid

FINANCIAL MARKETS AND CONSUMER BEHAVIOUR NEXUS: EXPLORING THE INFLUENCE OF SOVEREIGN DEBT RESTRUCTURING ON CONSUMER DEMANDS OF SOVEREIGN BONDS

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Abstract

Purpose: The purpose of this paper is to deepen understanding on the potential impact of domestic sovereign debt restructuring on consumer sentiments in times of economic crisis.

Methodology: A model is proposed from extant literature to suggest the influence of the debt exchange program on consumer behaviour. Additionally, the study explores the moderation influence of economic crisis. Using online quantitative survey approach, data was collected from some 293 respondents and examined through structural equation modelling using Amos 26.0 software.

Findings: Results suggest that dynamics of debt exchange program influence consumer behaviour and this is significantly enhanced in times of economic crisis.

Research limitations: The generalization of the research findings is impaired by the choice of convenience sampling approach.

Practical implications: The study illustrates the need for managers to recognize the sensitivities of the dynamics of debt exchange program and to employ relevant affective marketing strategies to execute the program with minimal discomfort to bond holders.

Originality/value: The empirical validation of the research model provides novel outlook of consumer behaviour in situations of domestic bond exchange program. The study also expands on the already established relationship between sovereign debt default and consumer confidence.

Keywords: Consumer behaviour, Sovereign bonds, Debt exchange

Introduction

A key financial market development in emerging markets over the past decade has been the expansion of domestic bond markets (Ahwireng-Obeng & Ahwireng-Obeng, 2019). Deeper domestic bond markets have broadened the range of financing options for both sovereign and corporate borrowers and helped cushion the negative impact of financial shocks on the real economy in many emerging markets (Ahwireng-Obeng & Ahwireng-Obeng, 2019). Moreover, some foreign investors show a growing preference for local currency sovereign bonds in many emerging markets.

Sovereign bonds, one of the first financial assets to be traded, continues to comprise a significant share of global financial assets, however, recent economic crisis occasioned by covid-19 pandemic and the Russian-Ukraine conflict, have destabilized many emerging economies with some at the point of bankruptcy, impairing the capacity of many emerging economies to service sovereign bonds (Asonuma et al, 2023). In many cases, emerging economies have amassed unsustainable debt fueling the need to restructure sovereign bonds to prevent or resolve financial or economic crisis and to achieve debt sustainability levels (Asonuma et al, 2023). This may include rescheduling amortization schedules as well as writing off the debt principal and stakeholders need to understand the behaviors of consumers in a crisis to construct their marketing strategies.

Ghana finds itself in economic crisis, cutting it off from the international capital markets and making sovereign debt default inevitable. Ghana seeks liquidity support from the International Monetary Fund (IMF) and domestic debt restructuring is a cardinal requirement of the IMF (Acheampong, 2022). Economic policymakers sometimes perceive a sovereign default as a jump into the unknown (Asonuma et al, 2023). For this reason, this study examines the potential impact of domestic sovereign debt restructuring on consumer sentiments within the domestic bond market. In particular, the study examines the influence of potential creditor losses ("haircuts") during sovereign restructuring episodes on consumer confidence in the bond market.

There are numerous publications relating marketing indicators to financial indicators (Oehring, 2022; Mousa et al, 2021), however, there is lack of research on how sovereign bond customers behaviours change to cope with new economic context (Fernandez-Araoz, 2020). More specifically, there is limited studies on customer behaviours in sovereign bond default situations.

In this context, the main objective of the present study is to explore the influence of debt exchange program and economic crisis on consumer behaviour.

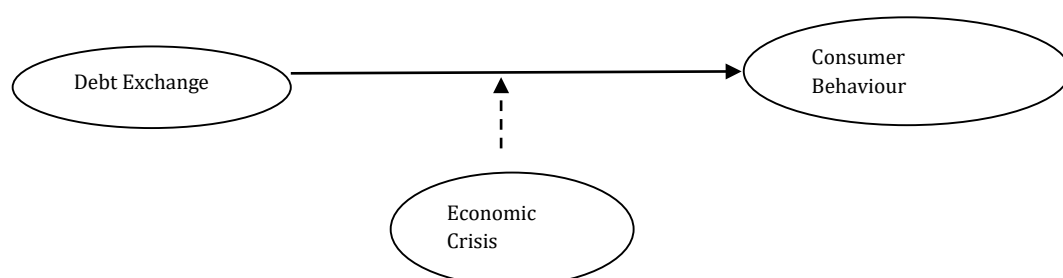


Fig.1: Antecedents of Consumer behaviour

Methodology

The study used a quantitative survey design approach to better understand consumer behaviour of domestic bond holders in times of economic crisis and to test the hypothesized model (fig. 1). The study used a standard survey instrument designed to solicit information from voluntary participants to obtain measurable and objective data from the respondents and to help achieve the defined objectives of the study (Babbie, 2020). Prior to the main study, a pilot test with 10 respondents from the population of interest was conducted and it satisfied the content validity and reliability of the data (Cronbach's $\alpha > 0.7$). In the substantive study, online respondents were reached through emails and other social media channels and out of 350 questionnaires delivered, 293 (83%) were found useable following comprehensive screening of completed questionnaires.

Findings/Results

In respect of respondents' characteristics, there were 52.0% males and 48.0% females. Most respondents (cumulatively 65%) were over 50 years, and about 35% of the respondents were under 50 years. Majority of the respondents indicated about 70% had up to university degree level and beyond (graduate and post-graduate), with about 30% of the sampled respondents having professional educational qualifications. About 50% of respondents have had sovereign bonds for more than 10 years, 35% of bondholders have traded for less than 5 years and some 15% had traded between 5 and 10 years.

Preliminary analysis of these results suggests the scale items were appropriate for the study; using SPSS and Amos 26.0 software, skewness and kurtosis of the data range from -0.80 to -0.37, and -1.27 to 0.87 respectively. Further, there were significant standard loading of the items from each construct and so no item was dropped. To confirm the data's convergent validity, the composite reliability (CR) and average variance extracted (AVE) both had acceptable values (CR > 0.7; AVE > 0.5) (Fornell & Larcker, 1981). Additionally, the Cronbach alpha values of each construct demonstrate strong reliability (Cronbach's $\alpha > 0.7$).

Direct effect analysis

Using Amos 26, the results reveal that debt exchange program ($\beta = 0.74$, $t = 11.33$, $p < 0.05$) has direct influence on consumer behaviour. This means the dynamics of the debt exchange program exerted direct influence on consumer behaviour.

Moderation effect analysis

In line with established statistical practice (Ranaweera & Jayawardhena, 2014), moderation analysis was done. The results show that economic crisis has enhanced and significant predictive effect on consumer behaviour ($\beta = 0.85$, $t = 11.93$, $p < 0.05$). This means the dynamics of debt exchange program exert enhanced effects on consumer behaviour in times of economic crisis.

Conclusions

The results show that with the advent of the domestic debt exchange program, normal expectations of sovereign bonds have broken, and this led to changes in consumer behaviour towards financial instruments. These results affirm that debt exchange program influence consumer behaviour, which influenced is enhanced in times of economic crisis.

From a practical point of view, agencies can outline suggestions to sustain the bond markets through changes in consumer behaviour. Suggestions like active engagements with stakeholders and the exemptions of vulnerable persons or groups. The study recommends that agencies seek professional business psychologists to do arbitrations in such matters.

EXAMINING LEADERSHIP IMPACT ON MARKET ORIENTATION CULTURE: THE CASE OF GHANA BROADCASTING CORPORATION

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Abstract

This qualitative empirical study examines the impact of leadership on market orientation culture within the Ghana Broadcasting Corporation (GBC). The study aimed to understand the role of leadership in shaping the organizational culture of GBC towards a market-oriented approach. The research employed a case study design, with data collected through in-depth interviews with 20 staff members and managers from the marketing department of GBC. The interviews were analysed using thematic analysis to identify key themes and patterns in the data. The findings revealed that leadership plays a crucial role in shaping the market orientation culture of GBC. The study identified four key leadership practices that were perceived to have a positive impact on market orientation culture. These practices included: 1) setting clear goals and expectations, 2) providing resources and support, 3) promoting innovation and creativity, and 4) encouraging collaboration and teamwork. The study also revealed some challenges that hindered the development of a market orientation culture at GBC. These challenges included resistance to change, lack of adequate resources, and inadequate communication, political interference and feedback mechanisms. Overall, the study concludes that effective leadership is essential for creating and maintaining a market-oriented culture within organizations. The study recommends that GBC leadership focus on implementing the identified leadership practices and addressing the identified challenges to foster a market orientation culture within the organization. The findings of this study have implications for other organizations seeking to adopt a market orientation culture.

Keywords: *leadership, market orientation culture, Ghana Broadcasting Corporation, qualitative study, case study design, customer orientation, competitor orientation, responsiveness to change, transformational leadership, transactional leadership, organizational interventions, organizational culture.*

Introduction

The educational, promotional, knowledge sharing, and socio-economic significance of broadcasting is widely acknowledged. Underlying this significance is effective leadership that fits the description of being entrepreneurial, innovative and transformational. However, leadership in its entirety might not be able to transform and make broadcasting institutions functional unless it adopts a market orientation culture. In marketing management, market orientation culture is the conceptual and theoretical practice where organizations are customer centred, alert to competitors, responsive to change as a way of demonstrating agility, with strong internal organizational cooperation and being emphatic on long term profitability instead of short-term sales.

The key themes of market orientation culture are customer orientation, inter-functional coordination; competitor orientation and profitability focus (Vutete and Kuyogo, 2016; Harris & Piercy, 1997; Kohli, Jaworski and Kumar, 1993; Narver and Slater, 1990). Leadership is defined by Yukl (2006) as “the process of influencing others to understand and agree what needs to be done and how to do it, and the process of facilitating individual and collective efforts to accomplish shared objectives”. Northouse (2010) defines leadership as “a process whereby an individual influences a group of individuals to achieve a common goal. It is evident from definitions of (Yukl, 2006; Northouse, 2010) that leadership dwells on processes, and involves persuading individuals to achieve a common goal. Extensive examination of extant literature relative to the topic of study identified a research gap with regards to examination of leadership impact on market orientation in the context of broadcasting.

Proponents of the conceptual theory of market orientation culture include (Kohli & Jaworski, Narver & Slater, 1990; Harris, 1998; Piercy, Harris & Lane, 2002). Empirical studies undertaken into leadership styles and market orientation culture with respect to different industries are by (Yadeta, Jaleta, Melese, 2022; Muis & Isyanto, 2021; Ozsahin, Zehir, Acar, & Sudak, 2013; Kassim & Sulaiman 2013; Kerdpitak, 2019; May-Chiun, Mohamad, Ramayah & Chai, 2015; Mengue & Auh, 2008). The key variables of market orientation culture that featured prominently in these studies are customer orientation, competitor orientation, responsiveness to change and inter-functional coordination. It was based on this extensive review of extant empirical literature that a research gap was identified based on which this study was commissioned.

Ghana Broadcasting Corporation is Ghana's largest, biggest and oldest integrated media institution. GBC has 31 transmitter stations as relay booster of information transmission across Ghana, 15 regional stations and workforce of 1893 (Nyarkoh, Adjei & Kotei, 2013). As at the third quarter of 2022, there were 155 active TV stations categorized into 11 on parameters defined by National Media Commission (NCA, 2022). Within the same period are 513 stations in active service (NCA, 2022). The state of competition has become keen and fierce. Coupled with this is GBC's inability to generate adequate Internally Generated Funds (IGFs) (Agyepong and Frimpong, 2017). These issues partly gave rise to commission this

study with regards to assessment of effective market orientation culture is influenced and practice at GBC from perspective of leadership styles. The focus of the study is GBCs marketing division.

Proposed objectives of the study

- a) To assess whether individuals in key leadership positions of marketing division at GBC understand the significance of market orientation culture.
- b) To identify types of leadership styles exhibited by leaders in the marketing division of GBC with regards to market orientation culture.
- c) To identify types of organizational interventions put in place to ensure market orientation culture is effectively practiced.
- d) To assess perceived gaps between leadership styles and market orientation culture if any.

Methodology

The research methodology adopted for this study is qualitative technique which involved in-depth face-to-face interview with Twenty (20) persons selected from the marketing division of Ghana Broadcasting Corporation. Qualitative research is described by King (2004) as semi-structured and in-depth (unstructured) interviews where it is non-standardized. The population of the study are individuals in leadership positions in the marketing division of GBC. Khotari (2004) refer to population as total of items about which information is desired.

A sample of five (5) participants/respondents from the marketing division of Ghana Broadcasting Corporation was accessed in their respective leadership roles in order to collect robust data envisioned for the study. This study used common themes and contents for the analysis, and is described by Braun & Clarke (2006) as a method for identifying and analysing patterns of meaning in a data set. Two (2) themes, critically explored in this study are transformational and entrepreneurial leadership styles from perspective of leadership construct and for market orientation culture perspective, three (3) themes explored are customer orientation, competitor orientation and responsiveness to change.

The sampling techniques adopted are purposeful and convenience sampling. Khotari (2004) refer to convenience sampling as “when population elements are selected for inclusion in the sample based on the ease of access, it can be called convenience sampling. Purposive sampling involves selected an audience who have characteristics is/are needed in the sample. According to Khotari (2004, p17), purposive sampling is considered desirable when the universe happens to be small and a known characteristic of it is to be studied intensively.

Findings of the Study

Findings on objective No. one (1)

It could be realized that with regards to objective (1), “to assess whether individuals in key leadership positions of marketing division at GBC understand the significance of market orientation culture” most of the interviewees narrowed their understanding of market orientation concept more to “customer orientation”

followed by “competitor orientation”. Although laudable, this is inconsistent with conceptual understanding of the variables of market orientation culture by (Narver & Slater, 1990; Kohli & Jaworki, 1990; Harris & Piercy, 1997). Responsiveness to change is a construct most participants were silent on.

Findings on objective No. (2)

The second objective underlying this study was to find out the types of leadership styles that are commonly used at GBC relation to ‘market orientation culture. Four of the five participants interviewed pointed at used of transactional leadership style to be the predominant style in-house. Transactional leadership style according to empirical studies undertaken by (Jadeta et al, 2022; Appioah-Nimo et al, 2016), indicate that its effect on market orientation culture is insignificant. These findings are consistent with the style at GBC and it is not suitable for market orientation culture; Leadership styles that have proved suitable for market orientation culture are transformational leadership style (Yadeta et al, 2022; Muis & Isyanto, 2021; Menguc & Auh, 2008). Supportive leadership style is another style which according to empirical survey findings have positively impacted on market orientation (Kassim & Suliaman, 2011; Lloyd and Ogbonna, 2005). Ozsahin et al (2013) however towed the line of change-oriented leadership and discovered it has similar effects on market-oriented culture as with transformational leadership style. This perhaps, arguable could be reasons for low responsiveness to change behaviour.

Findings on objective No. 3

The third objective of study sought to identify types of organisational interventions put in place to ensure market orientation culture is effectively practiced; Responses provided reflects different dimensions of market orientation culture. While the first interviewee touched on allocation of role to ensure maximum satisfaction delivery to customer categories (i.e. customer orientation, the second interviewee mentioned segmenting customers based on loyalty status; the third interviewee emphasized on giving incentives to customers while the fourth interviewee dwelled on dimensions of the market mix. It became evident from the findings that, most of the interviewees associated market orientation culture with customer orientation relative to the other variables, namely competitor orientation and responsiveness to change. Customer orientation or customer centricity is defined by Fader (2012), as an approach to deeply integrate a business’s offerings with the tests and preferences of its customers”. Vutete and Kuguyo (2016) similarly defined customer orientation as “understanding the needs and wants of customers through proactive research and active listening to customer suggestions and complaints”. It could be clearly deduced that too much emphasis on customer orientation is favored at the marketing division in particular and GBC in general more than equally important variables such as competition orientation and responsiveness to change (Pinho et al, 2014).

Findings on objective No 4

The fourth objective of the study sought to find from respondents gaps they perceived existed between leadership styles and market orientation culture. The responses given were given as political influences, GBC has a core mandate as state broadcaster and disseminator of information and is a reason why gaps exist between leadership and market orientation. Another reason provided as to why gaps exist was given as lack on innovativeness, and adherence to the status quo. The last reason was cited as lack of effective coordination between the various units within the marketing department of the corporation. These findings are starkly inconsistent with findings of empirical studies of (Yadeta, Jaleta, Melese, 2022; Muis & Isyanto, 2021; Ozsahin, Zehir, Acar, & Sudak, 2013; Kassim & Sulaiman 2013; Kerdpitak, 2019; May-Chiun, Mohamad, Ramayah & Chai, 2015; Mengue & Auh, 2008).

Conclusion and Recommendations

The study reveals that effective leadership plays a crucial role in shaping a market orientation culture within the Ghana Broadcasting Corporation. The study identifies four key leadership practices that are perceived to have a positive impact on market orientation culture, including setting clear goals and expectations, providing resources and support, promoting innovation and creativity, and encouraging collaboration and teamwork. However, the study also reveals some challenges that hinder the development of a market orientation culture at GBC, including resistance to change, lack of adequate resources, inadequate communication, political interference, and feedback mechanisms.

Based on the findings, the study recommends that the leadership of GBC focus on implementing the identified leadership practices and addressing the identified challenges to foster a market orientation culture within the organization. This can include developing training programs to improve the leadership skills of marketing division leaders, allocating resources towards market-oriented activities, and establishing communication channels to enable effective feedback from customers and stakeholders.

Overall, the study concludes that effective leadership is essential for creating and maintaining a market-oriented culture within organizations. The findings of this study have implications for other organizations seeking to adopt a market orientation culture. By adopting the identified leadership practices and addressing the challenges hindering market orientation culture, organizations can better understand and meet the needs and preferences of their customers, remain competitive, and achieve long-term profitability.

THE MEDIATING ROLE OF ATTITUDE IN THE DETERMINANTS OF ONLINE PURCHASE INTENTIONS BY GENERATION Z CONSUMERS

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Abstract

This paper investigates the mediating role of attitude and the factors that influence the online purchase intentions of Gen Z consumers. Drawing from the Theory of Planned Behaviour (TPB) with the Extended Unified Theory of Acceptance and Use of Technology (UTAUT2), the study investigates the effect of social media interactions, price value, social influence, hedonic motivation, and attitude on online purchase intentions.

Quantitative research was conducted via an online survey hosted on Qualtrics. A total number of 441 valid data was collected and analysed using Structural Equation Modelling (SEM) with IBM SPSS 20 and Amos 23 software. Findings suggest that hedonic motivations and social media interactions have a significantly positive influence on attitudes, while attitude and price value have a significantly positive influence on the online purchase intentions of Gen Z consumers. Social influence has a significantly negative influence on their online purchase intentions.

Future research and practitioner focus should investigate the mediating role that trust will play in the relationship between social influence and online purchase intentions. Risk as an antecedent to trust in online purchase intentions should also be investigated.

Keywords: attitude, gen Z, hedonic motivation, online purchase intention, price value, social influence, social media interactions.

Introduction

This study seeks to investigate the mediating role of attitude in the factors that influence the online purchase intentions of Generation Z Consumers. For years, the Internet's rapid growth has facilitated e-commerce and online shopping. Consumers can now customize products and services (such as trip booking, food

ordering, and online product design), make payments, and interact with sellers, thanks to the development of online shopping platforms(Thomson Tunsakul, 2020)

The generation after millennials, known as Generation Z, comprises people who were born between 1997 and 2012. The Gen Z members are described as a group with digital agility (having been brought up by the internet), and in 2022, the oldest Gen Z member would be 25 years old, and the youngest member would be 10 years old. This group remains very familiar with technology, particularly gadgets, having grown up with it, and this has had an indirect impact on their personalities as well as caused their lives to be inextricably linked to technology. (Veybitha et al., 2021). The Digital Economy Report 2021 by the United Nations Conference on Trade and Development (UNCTAD) mentions how the Covid-19 pandemic has brought an increase in internet activities, with western economies leading and developing economies in Africa lagging in online purchasing or ordering of goods/services. (UN report, 2021). Generation Z consumers have become an attractive prospect for retailers worldwide due to their growing numbers and dominance in global markets(Tunsakul, 2020). Previous research has stipulated that gender, education, age, safety concerns, technology, and frequency of online purchases have a positive influence on online purchase intentions, while other research in the area of purchase intentions has focused on trust, ease of use, privacy, perceived risk, and security as predictors of a positive attitude toward online purchase intentions(Harrigan et al., 2021);(Kanchan et al., 2015)

While these factors are still a concern for many, there is a need to understand what factors influence the online purchase intentions of Gen Z individuals, and how their attitude affects their online purchase intentions. In response to this, the study addresses the gap by developing a research model that analyses Gen Z online purchase intentions based on individual internal factors (attitude, and hedonic motivation) and external factors (price value, social media interactions, and social influence). Theoretically, the study draws on the assumptions of the Theory of Planned Behaviour (TPB) and The Extended Unified Theory of Acceptance and Use of Technology (UTAUT2) to examine the factors outlined and to determine their influence on the online purchase intentions of the Gen Z cohort. The study will help managers to develop superior marketing strategies that will attract Gen Z consumers to their online shopping business and satisfy as well as retain Gen Z customers.

Methodology

Participants and Procedures

After a pilot study, potential participants for this study were Gen Z consumers based in Ghana who shop online on popular sites such as Melcom, Jumia, etc. To collect the data, a standardized survey was created and hosted on Qualtrics ([http:// www.qualtrics.com](http://www.qualtrics.com)). Participants for the online survey were selected through a convenience sampling method and a link to the questionnaire was sent to participants via WhatsApp. A total number of (70%) of the respondents indicated that their most preferred device is the smartphone. The highest category of products purchased online revealed from the study was

fashion/apparel/shoes (46%), followed by food (23%) and (12%) for computers and gadgets. Data were analysed using the Structural Equation Model (SEM) Method. Presented in Table 1 is a summary of the computations relating to the tests of the hypotheses in this study.

Table 1 Structural Results

Structural Path	Beta	T-value	P-value	Acceptance/Rejection
H1- Social Media Interactions → Attitude	0.30	4.20	<0.001	✓
H2- Hedonic Motivation → Attitude	0.60	10.38	<0.001	✓
H3- Price value → Purchase Intention	0.25	4.10	<0.001	✓
H4- Social Influence → Purchase Intention	0.11	2.11	0.035	x
H5- Attitude → Purchase Intention	0.58	10.47	<0.001	✓

Chi-square(df=120) =217.8; CFI=0.98; TLI=0.97; RMSEA=0.043(90% CI: 0.03–0.05); n = 44

Findings

Both Hedonic Motivation defined as the fun or pleasure derived from using technology and Social Media interaction demonstrated a positive influence on attitudes toward online purchases This is in line with previous studies (Novela et al., 2020; Shastry & Anupama, 2020). Price value showed a positive influence on online purchase intentions, this was a direct influence and was not mediated by the attitude factor. This confirms previous studies and is a clear indication that the Gen Z consumer has purchase intentions for online products that promise good value for money. Attitude demonstrated a positive influence on the Gen Z consumer's online purchase intention. Social Influence is defined as the peer influence an individual will get from friends and family. The study reveals that social influence was not having a positive influence on the online purchase intentions of Gen Z consumers. This may have happened because the study revealed that 36% of respondents had never engaged in online shopping. The mediational hypotheses also offer important insights. In general, the two mediating effects tested were supported by the research study. While analysing specific paths, three important findings are depicted. First, the important role of attitude in mediating the positive effects between hedonic motivation and online purchase intention for the Gen Z consumer. This mediating path: (Hedonic Motivation → Attitude → Purchase intention) proved significant with a p-value of 0.005, full mediation was thus observed. Also, attitude successfully mediated the relationship between social media interactions and purchase intention. The mediating path: Social Media Interactions → Attitude → Purchase intention) proved significant with a p-value of 0.015, full mediation was thus observed.

Conclusion

The study sought to evaluate factors that promote the Gen Z consumer online purchase intentions with attitude playing a mediating role. The study objectives were achieved using the Theory of Planned Behaviour (TPB). The study also revealed the robustness of the TPB, which is evident in the incorporation of factors such as social media interaction, hedonic motivation, and price value, into the study, which revealed very interesting findings in assessing the Gen Z consumer online purchase intentions. The results of the study show that to attract Gen Z consumers to online shops, firms must improve on social media interactions, price, and social influence and so these must be carefully crafted in online marketing strategies targeted at the Gen Z consumer. Online businesses must boost Gen Z consumers' confidence through positive word of mouth and recommendations from friends and family. Furthermore, firms can run large promotions for group or family purchases to improve social influence. Online Businesses can conduct social media engagement programs to boost social media interactions for online businesses. Future studies may evaluate additional factors in the UTAUT2 model such as Effort Expectancy, and Habit to assess their impact on the Gen Z consumer's online purchase intentions. Future studies should also investigate the mediating role that Trust will play in the relationship between social influence and online purchase intentions. Risk as an antecedent to trust in online purchase intentions should also be investigated.

ASSESSMENT OF MARKET ORIENTATION AND BANK PERFORMANCE

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Abstract

Introduction

This study aims to examine the influence between market orientation and firm performance. The specific objectives of the study were to identify the effect of customer orientation on firm performance; to determine the effect of competitors' orientation on firm performance, and to investigate the effect of inter-functional orientation on firm performance.

Methodology

Quantitative research approach was used, with a purposive sampling technique adopted. Questionnaires were administered to 220 employees from selected leading banks in Ghana, with 190 usable responses obtained from the respondent. Data collected were analysed using SPSS software version 25.

Findings/ Results

The findings demonstrate that customer orientation had a positive influence on firm performance and was statistically significant. Also, according to the findings, competitor orientation had a positive and significant influence on firm performance. The study then also discovered that inter-functional orientation had an equally positive and significant influence on business performance.

Conclusion

The study concludes that market orientation positively and significantly influences bank performance. Although this study focused on one industry in Ghana, it provides relatively new insight regarding the influence of market orientation on

firm performance in the Ghanaian context. Future studies could look at other industries to see if the result could be replicated in those industries.

Session 9: Structural Reforms in Accounting and Financial Services

Chair(s): Prof. Samuel Antwi & Dr. Redeemer Krah

BOARD EXPERTISE AND NON- PERFORMING LOANS: EMPIRICAL EVIDENCE OF LISTED BANKS IN GHANA

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Abstract

The amount of expertise that each member brings to the table is a crucial component for the board to function properly and be able to accomplish its goals. With the objective of reducing non-performing loans, the board must have appropriate expertise in order to oversee and regulate the lending practices of banks. The aim of this study is to examine the relationship between board expertise and non-performing loans of listed banks in Ghana based on the agency theory and the resource dependency theory. A panel data covering the period 2011 to 2020, was collected from the annual reports of eight (8) listed banks in Ghana. A positive relationship between legal expertise, industrial expertise, and of non-performing loans was discovered in the study using the random effect regression model. However, despite being positive, the study found no significant relationship between financial expertise and non-performance loans. The study, based on the findings, suggests the necessity for a regulatory requirement on bank's board members to possess the requisite expertise identified in this study a important for reducing the amount of non-performing loans among banks in order to provide a stable financial sector for economic growth.

Introduction

Non- performing loans are a major concern since they eventually lead to loan default. Loan default can simply be attributed to failure or non- repayment of loans approved and disbursed to borrowers (Enimu et al., 2017, Yibrie & Ramakrishna, 2017) loan default does not only affect the banks in question but also affects individuals and the economy at large. As at February, 2021, the rate of non-performing loans in Ghana stood at 15.3%, compared to the January, 2021's 14.7%, recording a total monthly increment of 0.6%, this is however a worrying trend since non-performing loans largely lead to loan default, where the money cannot be attained back from the defaulters. Despite all the measures that have been put

in place to reduce the number of loan defaults in banks, the number keeps rising at an alarming rate. Financial institutions contribute immensely towards employment creation and poverty alleviation ultimately through economic growth (Amuakwa-Mensah et al., 2017, Baidoo & Akoto, 2019). The financial sector also contributes to sustainable development through its credit provision to individuals and firms for investments and other ventures that contributes to the growth and development of the economy (Garcia- Perez et al., 2018, Lopatta et al, 2017, Mezher et al., 2002). Effort has been made by existing studies to examine the factors that influences banks non-performing loans. Size of the firm for example has been identified a major determinant of non-performing loans (Dash & Kabras, 2010; Rajan & Dhal, 2003; Hu et al., 2004; Salas & Saurina, 2002) due to the fact that larger bank size allows for more diversification opportunities. There is therefore the need to tackle the issue of non-performing loans by examining the role of board members, that is the top authorities governing these banks, thus, the skills and expertise of these bank board of directors. This work seeks to establish the relationship between various board expertise and non- performing loans since this will help in the reducing the number of non- performing loans in banks in Ghana.

Methodology

Data

This section provides a description of the data and the empirical approach adopted to test the relationship assumed in this study. We use panel data covering 2011 to 2020 for eight listed banks in Ghana namely GCB Bank, Agricultural Development Bank, Access Bank Ghana Plc, Republic Bank, Standard Chartered Bank Ghana Limited, Societe Generale Ghana Limited, Ecobank Ghana Limited and CAL Bank. Listed banks were selected for this study based on the criteria that data needed for the study must be available for collection. The data was hand collected from the annual reports of the listed banks in Ghana with the study period.

Model specification

$$NPL_{it} = \beta_0 + \beta_1 LE_{it} + \beta_2 IE_{it} + \beta_3 FE_{it} + \beta_4 FE_{it} + \beta_5 FE_{it} + \beta_6 FE_{it} + \beta_7 FE_{it} + \varepsilon_{it}$$

Where NPL_{it} represents non-performing loans for bank i at time t . LE_{it} is the number of board members with legal expertise for bank i at time t . IE_{it} is the number of board members with expertise in the banking industry for bank i at time t , BS_{it} represents the size of the board for bank i at time t , BI_{it} represents board independence for bank i at time t , BGD_{it} represents board gender diversity for bank i at time t , AGE_{it} represents the age of the number of years of operation for bank i at time t , $SIZE_{it}$ represents size of the bank measured as the natural log of total assets for bank i at time t . $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6$, and β_7 are the respective predictor variables to be determined for the study. ε is a three-way error structure defined as; $\varepsilon_{it} = \mu_{it} + \Lambda_i + \gamma_t$, where Λ_i is banks unobserved effects; γ_t is time specific unobserved effect and μ_{it} is the idiosyncratic error term.

Empirical Results and Discussion

Descriptive Statistics of the Variables

In this section, the study examined the descriptive statistics for independent variables. Descriptive statistical is a technique that produces a number or figure that summarizes or describes a set of data (variables). Ordinarily, it summarizes the information in a data set by revealing the average indicators of the variables used in a study and presents that information in a convenient way (McClave et al., 2000). Each variable is examined based on the mean, standard deviation, minimum and maximum values. Table 2 below displays the descriptive statistics for the study.

Table 2: Descriptive Statistics of the variables

Variable	Obs	Mean	Std. Dev.	Min	Max
LE	80	1.4375	.85453	0	3
IE	80	4.275	2.164004	1	12
FE	80	3.4875	1.440761	1	8
BS	80	9.1375	1.719168	5	12
BI	80	.688125	.1654613	0.13	0.19
BGD	80	.2185	.1464439	0	.91
AGE	80	44.625	32.91123	2	124
SIZE	80	14.95784	.8035855	12.8047	16.58828

The descriptive statistics in Table 2 shows that over the period under study, the board's legal expertise (LE) averaged 1.4375 with its industry expertise (IE) averaging 4.275 and also had an average of 3.4875 for financial expertise (FE). The average of the board size (BS), board independence (BI) and board-gender diversity (BGD) are 9.1375, 0.688125 and 0.2185 respectively with the age averaging 44.625. The average non-performing loans in the listed banks in Ghana between the time span of this study had a size of 14.95784 measured as the natural log of the total asset. The minimum and maximum figures for size in table 2 show that there is a vast variation between the non-performing loans in the listed banks in Ghana. Also, the variations within and between the listed banks was quite high judging from the standard deviations as well as from the minimum and maximum values shown above.

Regression Results

The random effect regression was selected for the study after conducting a Hausman test. Table 5 below shows the Random Effects Regression Results for the independent variables used in the study.

Table 5: Random Effects Regression Results of the relationship between board expertise and non-performing loans

Standard deviation	Coefficient	Std Dev.	T	P> T
LE	3.639228	1.41966	2.56	0.001
IE	0.5427958	0.6502541	0.83	0.007
FE	0.3500742	0.8116212	0.43	0.668
BS	-0.9514168	0.7033679	-1.35	0.180
BI	14.27401	6.502736	2.20	0.031
BGD	-1.942639	7.419772	-0.26	0.794
AGE	0.1427265	0.0387439	3.68	0.000
SIZE	1.366515	1.437226	0.95	0.345

The results of the study showed that there is a positive relationship between legal expertise and the level of non-performing loans. A possible explanation for the above results can be attributed to the fact that when board members have knowledge in legal matters can help the others understand regulatory and legal issues that arises in the course of performing their duties, and they can also help resolve these issues amicably without incurring losses. Legal expertise can also help them resolve issues of non-performing loans at its early stage by applying the necessary legal actions in other to recover these monies before they turn bad loans. Again, the study also found a positive and significant relationship between industry expertise and non-performing loans. This result falls supports the findings of Minton et al, (2010 that directors who do not have knowledge in banking are unable to effectively monitor and manage banking activities which affects the level of non-performing loans. The results also suggest that there is a positive relationship between financial expertise and non-performing loans in banks, however the relationship is statistically insignificant. This result means that even though there is a relationship between financial expertise positively influences the level of non-performing loans in banks, it is not a strong determinant of the level of non-performing loans in banks. This finding however contradicts the study conducted by MD Islam (2020) and (Haan & Vlahu, 2016) whose findings clearly established a strong relationship between financial expertise and non-performing loans in banks. Some studies established that the number of board members present on a board does not affect a banks level of non- performing loans. There is a positive relationship between board independence and the level of non-performing loans. The number of years or how long a bank has been in existence has a positive relationship with non-performing loans suggesting that age of a bank has a great potential of influencing or affecting a banks' non-performing loans. The results also shows that there is a positive relationship between bank size and non-performing loans. The relationship between board gender diversity and non-performing loans even though was positive but it was insignificant.

Conclusions and Recommendations

The main objective or aim of this study was to examine the relationship between board expertise and non-performing loans. The random effects regression model was fitted, and the study found board size and board gender diversity were negatively related to non-performing loans. However, legal expertise, industry expertise, financial expertise, board independence, age and bank size had a positive relationship with the level of non-performing loans in the listed banks in Ghana, despite this the study did not find industry expertise, financial expertise and bank size significant enough to determine the level of non-performing loans reported in banks in Ghana. The study recommends based on the outcome of the study that regulatory efforts aimed at safeguarding the banking sector against instability due to liquidity challenges arising from loan default should be channelled towards ensuring that board members possess the needed expertise to serve on the apex body of banks.

EXTREME VALUE MODELING OF GHANAIAN COMMERCIAL BANKS

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Abstract

Extreme event modelling has always attracted attention in domains such as hydrology, as well as in major financial markets where modelers benefit from an abundance of available data (Embrechts et. al, 1997). Following the recent global financial crises, however, proper models for modelling such unusual events that lead to crises have become critical in the finance and risk management disciplines. This work uses extreme value theory (EVT) to fit a model to the tails of the daily stock returns data to model the extreme values of a listed commercial bank on the Ghana stock exchange, specifically Access Bank (2007–2019). An ARMA-GARCH model was fitted to the data to correct for the effects of autocorrelation and conditional heteroscedastic terms present in the return's series before the EVT method was applied. The Peaks over Threshold technique was used for estimation, which involves fitting a Generalized Pareto Distribution (GPD) model to excesses above a predetermined threshold. The results show that the GPD provides an adequate fit to the surplus data.

Background

The global financial crisis and its aftermath indicate that poor credit risk management is still a leading cause of banking crises around the world (Howells & Bain, 2008). Credit risk, operational risk, and market risk, to name a few, can all result in devastating and sudden losses resulting in insolvency (Gavril, 2009).

Extreme value theory (EVT), derived from hydrology and meteorology, has become increasingly important in financial risk modelling in recent times. According to Ren and Giles (2007), EVT evaluates the asymptotic probability of extreme values, thereby emphasizing that the theory models the tail region of the distribution where risk resides. The Peaks Over Threshold (POT) and Block Maxima methods are the two main approaches used in the EVT approach. In this paper, the POT method is used since it has been empirically demonstrated to efficiently utilize more data and so produce more reliable findings when compared to the Block Maxima approach (McNeil and Frey 2000; Matthys and Beirlant 2000; Coles 2001; Blum et al. 2002).

Method

Here, we describe the extreme value theory (EVT). Let the returns r_t be serially independent with a common CDF $F(x)$ and assume that the range associated with the return r_t is $[l, u]$. For log-returns with distribution supported on the entire real line, we have $l = -\infty$ and $u = \infty$. Then the CDF of the sample maximum $r_{(n)}$, denoted by $F_{n,n}(x)$ is given by

$$\begin{aligned} F_{n,n}(x) &= Pr[r_{(n)} \leq x] \\ &= Pr(r_1 \leq x, r_2 \leq x, \dots, r_n \leq x) \\ &= \prod_{j=1}^n Pr(r_j \leq x) \\ &= \prod_{j=1}^n F(x) = [F(x)]^n \end{aligned}$$

The CDF $F(x)$ of r_t is unknown in practice and, therefore, $F_{n,n}(x)$ of $r_{(n)}$ is also unknown. However, as $n \rightarrow \infty$, $F_{n,n}(x) \rightarrow 0$ if $x < u$ and $F_{n,n}(x) \rightarrow 1$ if $x \geq u$.

For independent samples, the limiting distribution of the normalized maximum $r_{(n^*)} \equiv (r_{(n)} - \beta_n)/\alpha_n$ where β_n and α_n are location series and scaling factors respectively is given by Gnedenko (1943):

$$F^*(x) = \begin{cases} \exp[-(1 + \xi x)^{-1/\xi}] & \xi \neq 0 \\ \exp[-\exp(-x)] & \xi = 0 \end{cases} \quad (1)$$

For $x < -1/\xi$ if $\xi < 0$ and for $x > -1/\xi$ if $\xi > 0$, where the superscript * indicates the normalized maximum. The parameter ξ is the shape parameter that is associated with the tail behaviour of the limiting distribution. The parameter $\alpha = 1/\xi$ is called the tail index of the distribution.

The result is a composition of the three types of limiting distribution of Gnedenko (1943):

Type I: $\xi = 0$, the Gumbel family. The CDF is

$$F^*(x) = \exp[-\exp(-x)] \quad -\infty < x < \infty. \quad (2)$$

Type II: $\xi > 0$, the Fréchet family. The CDF is

$$F^*(x) = \begin{cases} \exp[-(1 + \xi x)^{-1/\xi}] & \text{if } x > -1/\xi \\ 0 & \text{otherwise} \end{cases} \quad (3)$$

Type III: $\xi < 0$, the Weibull family. The CDF here is

$$F^*(x) = \begin{cases} \exp[-(1 + \xi x)^{-1/\xi}] & \text{if } x < -1/\xi \\ 1 & \text{otherwise} \end{cases} \quad (4)$$

These imply that, with EVT, the tail behaviour of the CDF $F(x)$ of r_t determines the limiting distribution $F^*(x)$ of the normalized maximum. The parameters β_n and α_n , however, depend on the CDF $F(x)$.

Additionally, the probability density function (pdf) of the generalized limiting distribution in Eq. (21) can be obtained easily by differentiation as

$$f^*(x) = \begin{cases} (1 + \xi x)^{-1/\xi-1} \exp[-(1 + \xi x)^{-1/\xi}] & \xi \neq 0 \\ \exp[-x - \exp(-x)] & \xi = 0 \end{cases} \quad (5)$$

Results and Conclusion

We can see from this paper that the extreme value theory's Peaks over Threshold approach, which fits a Generalized Pareto Distribution to extremes above a certain threshold with a Generalized Pareto Distribution, can be very efficient in modelling extreme events and assessing the size of potential extreme risks, especially in the stock market. The VaR values 1.741137, 1.782799, and expected shortfall values 1.767373, 1.787443 of probabilities 0.05 and 0.01 show a shift in value for both VaR and ES, according to the output.

Table 1: Risk Measure

RISK MEASURES FOR RISKMETRICS		
Prob	VaR	ES
[1,] 0.950	2.77	3.47
[2,] 0.990	3.92	4.49
RISK MEASURES FOR GPD		
[1,] 0.950	1.71	1.77
[2,] 0.990	1.79	1.90
RISK MEASURES FOR POT		
[1,] 0.950	1.74	1.76
[2,] 0.990	1.78	1.79

An approach to extreme value theory has been offered in the statistical literature to overcome these challenges; see Davison and Smith (1990). Rather than focusing on the extremes (maximum or minimum), the new technique (POT) focuses on measurement exceedances over a high threshold and the times when they occur.

CITIZENSHIP WELFARE DYNAMICS AND TAX REVENUE PERFORMANCE IN AFRICA

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Abstract

The paper examines the citizenship welfare dynamics and tax revenue performance in Africa. Citizenship welfare is operationalised using social welfare and economic welfare. Tax revenue performance is measured as tax revenue to gross domestic product (tax -to- GDP). Annualised secondary data from 2000 to 2020 is used for the analyses. The data are collected from World Bank, OECD and Global Economy. The analyses are conducted using Panel Dynamic Ordinary Least Square (DOLS) with Generalised Method of Moment (GMM) employed for robustness check. It is found that both social and economic welfare exhibit significant negative effect on tax revenue performance. It is therefore recommended that governments in Africa should steer up policies to strengthen the social and economic welfare of citizens to improve tax revenue in African countries.

Keywords: Tax revenue performance, Citizenship welfare, Social Welfare, Economic welfare, Dynamic Ordinary Least Square (DOLS) and Generalised Method of Moment (GMM)

Introduction

Tax revenue remains one of the main sources of revenue for governments globally. However, tax authorities in both developed and developing economies have often missed tax revenue targets and continue to struggle to meet sustainable improvement in tax revenue performance (Lee & Yoon, 2020; Seidu, Queku & Carsamer, 2021). The available statistics reveal that no government has been able to mobilise more than 50% of its gross domestic products as tax revenue performance (Eurostat, 2020; OECD, 2020; Seidu et al., 2021). Even in the advanced economies where tax systems have undermined tax leakages, still they

are still lagging in beating 50% threshold (see highest mobilisers: France: 47.4%; Denmark: 46.9% and Cuba: 40.6% for 2020) (Eurostat, 2020; OECD, 2022).

Developing economies such as countries in Africa are hard hit by the poor tax revenue performance. The average tax revenue performance in Africa for 2020 stood at 16% (a decline from 2019) in comparison of OECD average of 33.50% (OECD, 2022). In fact, large economies such as Nigeria recorded as low as 5.5% of the GDP in 2020. Unsurprisingly, researchers have explored different facets of taxation including tax administration, tax policy, tax compliance, determinants of tax compliance, tax evasion and corruption (Christina, 2019; He, Ren & Taffler, 2020; Lee & Yoon, 2020; Seidu et al, 2021). Despite the extensive research, the desired tax revenue targets have not been achieved with greater disparity between tax performance in developed economies and developing world such as those in Africa (Eurostat, 2020; OECD, 2022).

One fundamental dimension of taxation which could explain the poor tax performance dynamics and sharp disparity in tax revenue performance between the developed and developing economies is the degree of development and citizenship welfare. Although theoretically, this is the foundation of taxation, they have largely been neglected in the empirical literature. Traditional tax policies seek to develop a fair tax system that ensures that the mobilised resources through taxation raised revert to the society to improve the welfare state of citizens and more happiness (González-Vasco, Delgado-Rodríguez, de Lucas-Santos, 2019). Although, taxation is not regarded as a pleasant activity, citizenship commitment and positive response are critical for the achievement of a “Welfare State” (Angelopoulos et al., 2007; Wittle & Woodbury, 1985). Thus, the fundamental motive of taxation depicts taxation-welfare state nexus. The emerging empirical studies have shown how tax revenue contributes to achieving a ‘welfare state’ (González-Vasco et al, 2019; Oishi, Schimmack, & Diener, 2011). These studies have focused largely on the ‘Supply-Leading Perspective’ where it is believed that tax revenue drives welfare.

However, other compelling arguments exist that suggest that intuitively citizenship welfare could drive tax revenue performance. It is a standard economic argument that taxes no matter the form imposes welfare costs on taxpayers (Elena, 2015; Joint Economic Committee (JEC), 1999) and create excess burden and deadweight loss (DWL) (JEC, 1999; Tekin, Güney & Sağdıç, 2018) that reduce consumers’ surpluses and potentially lowering satisfaction. Rationally, taxpayers will fight to eliminate the DWL through tax planning or even tax evasion, but the extent of response may be dependent on the level of the citizens’ welfare (either social or economic welfare). This implies welfare is an antecedent of tax revenue performance.

Unfortunately, there is paucity of empirical evidence interrogating this nexus. As noted earlier, the existing studies have largely considered taxation as a leading indicator for welfare state neglecting the reverse consideration. The closest empirical evidence is the study by Tekin, et al (2018) which focused on among others effect of economic freedom on tax evasion. This paper differs from Tekin, et al., (2018) as it extends welfare framework to encompass both social and economic to comprehensively explore the implications on tax revenue performance. This is a still incipient dimension of tax research; and therefore, the

evidence would be of great interest to advance tax policy and leading-lagging dynamics of welfare and tax revenue performance. The investigation is situated in the African context with one of the lowest tax-to-GDP with findings presenting a guide for future analyses and policies.

Estimation Strategy and Approach

This paper employs quantitative analytical approach with secondary data. The data are collected within eleven (11) years from 2000 to 2020 using annualised data from 44 African countries with available data. The sources of the data are mainly World Bank, OECD and Global Economy. Tax revenue performance is measured by total tax revenue scaled by the GDP while citizenship welfare is measured using social welfare and economic welfare. The paper follows the existing literature to model the relationship with some vector of controls such as interest rate, inflation and exchange rate.

The hypothesis testing framework follows panel model specifications as the paper data characteristics reflect both longitudinal and cross-sectional dimensions. The generalised model is specified as follows:

The general panel model is specified as:

$$Y_{it} = \alpha_0 + \sum_{j=1}^p \beta_j Z_{it} + \sum_{k=1}^q \theta_k N_{it} + \varepsilon_{it} \quad (1)$$

Where:

Y denotes the tax revenue performance and the response variable

Z is the vector of the independent variables and represents citizenship welfare

N as the vector of the control variables which are denoted by inflation (INF), interest rate (INT) and exchange rate (EXR).

'i' is the individual country level observations

't' denotes the longitudinal dimension

β_j is the coefficients of the citizenship welfare reflecting social welfare (SW) and economic welfare (EW)

θ_p is the coefficients of all the control variables

α is the constant or the intercept

ε is the error term

The paper employs Dynamic Ordinary Least Square (DOLS) to estimate the Eqn (1). DOLS is capable of handling the problem of stationarity, endogeneity bias and serial correlation problems (Seidu et al, 2022; Sulaiman & Abdul-Rahim, 2020). The paper follows existing studies (Queku et al., 2020; Hayakawa & Kurozumi, 2006; Stock & Watson, 1993) to specify its empirical Panel DOLS estimation as:

$$TRP_{it} = \varphi_0 + \varphi_1 CW_{it} + \sum_{i=-q}^p \pi_i \Delta CW_{it-i} + \epsilon_{it} \quad (2)$$

Where:

TRP_{it} is the tax revenue performance denoting the response variable.

CW_{it} represents citizenship welfare with inclusive of the controls and it captures the matrix of the regressors measured as social welfare (SW) and economic welfare (EW) and the controls (IFN, INT and EXR).

φ_0 is the constant in the model

φ_1 and π_i are the cointegrating estimates of a change in CW_{it} on TRP_{it} ,

p and q are the lag and lead length.

ϵ_{it} is the error term.

Findings and Implications

Prior to the main estimation, the paper conducted some pre-diagnostics including stationarity and multicollinearity analyses. The diagnostics support the data and the model specification. The estimates are based primarily on the DOLS estimation. However, the paper also uses Generalised Method of Moment (GMM) to conduct sensitivity analysis on the estimates from DOLS as robustness check. The results from GMM are similarly to the DOLS results. Overall, it is found that both social and economic welfare exhibit significant negative effect on tax revenue performance with the coefficients of -0.2733^{***} and -0.1030^{***} . The implication is that when the welfare state of citizens is poor (i.e., socially and economically), they may perceive tax as worsening the already dire state and may react through tax non-compliance or arrange their affairs to minimise the tax burden causing a gap between tax performance and tax target. Another possible explanation is that poor citizens may not be able to engage in meaningful economic activities and production to generate high income to contribute to high-tax revenue culture. The findings support the disparity in tax revenue performance between developed economies and developing world such as Africa (see Eurostat, 2020; OECD, 2022; Tekin, et al, 2018).

Conclusion

The paper examines the citizenship welfare and dynamics of tax revenue performance in Africa using data from 44 African countries. Welfare is measured from social and economic perspective with both proxies exhibiting negative influence on tax revenue. It is concluded that economies with poor welfare state (social and economic) are more likely to witness poor tax revenue mobilisation. Governments in Africa should direct policies to tackle the social and economic welfare challenges of the citizens as part of the integrated approach to deepening tax revenue for fiscal consolidation gains.

Session 10: General Management and Business Survival in Periods of Economic Crisis

Chair(s): Dr. Anthony Kumassey & Dr. Isaac Boadi

PSYCHOLOGICAL CONTRACT FULFILMENT: A SUITABLE UMPIRE BETWEEN TRANSFORMATIONAL LEADERSHIP AND EMPLOYEE ENGAGEMENT IN THE GHANAIAN PUBLIC SECTOR IN PERIODS OF ECONOMIC CRISIS

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Abstract

Purpose: The study sought to examine the significant role transformational leadership play in psychological contract fulfilment and employee engagement, using the job demand resource (JD-R) theory and the social exchange theory (SET) during economic crisis.

Methodology: Using a quantitative cross-sectional study approach and a snowball sampling technique, a self-designed questionnaire was used to gather data from 247 employees from the public sector of Ghana. Hypotheses were tested by means of structural equation modelling (SEM) with maximum likelihood estimation using Stata 15 software.

Findings/Results: Transformation leadership had a positive significant relationship toward psychological contract and also towards employee engagement. Transformational leadership had a positive significant relationship towards employee engagement and also, psychological contract positively mediates the relationship between transformational leadership and employee engagement in times of economic crisis in the public sector.

Limitation/ Implication: The study was limited to transformational leadership in relation to psychological contract and employee engagement. The implication is Human Resource (HR) manager must recruit transformational leader who will always have at heart the needs of employees, and this will help them to handle psychological contract well and engaged employees properly, during times of economic crisis.

Originality: The study contributes to clarifying and extending the social exchange theory (SET) and the job demand resource (JD-R) theory by unravelling the role of transformational leaders to ensure fulfilment of psychological contract and employee engagement in periods of economic crisis in the reciprocal relationship between himself and subordinates.

Keyword: Psychological contract, employee engagement, transformational leadership, public sector.

Introduction

The modern business environment's features, including globalisation, hyper competition, economic crisis, the complexity of technical and social connections, have compelled firms to continually modify their tactics (Cascio & Aguinis, 2008; Schreyo"gg & Sydow, 2010). Leaders are crucial in fostering an empowering work environment that may lead to fruitful consequences for both individuals and organisations (Cummings et al., 2010) and therefore crucial for the modification of these changes. Although there exist different types of leadership, transformational leaders are the "perfect individuals" to have during substantial organisational change because they motivate staff to strive toward realising the organization's goal (Clegg, Kornberger, & Pitis, 2008)

The onset of the COVID-19 pandemic which has led to economic crisis in several countries including Ghana, called for substantial changes in the operation in organisation as well as the management of the human resource and this required a transformational leader and engaged employees. Employees who are engaged, according to Bakker and Demerouti (2008), are more creative, productive, and eager to go above and beyond. Employee engagement thus been cited as a prominent facilitator for organisation performance and success (Suhartanto & Brien, 2018; Sibanda et al., 2014). Several studies confirm a positive relationship between employee engagement and lower absenteeism, increased loyalty, improved citizenship behavior (Darban et al., 2022; Shrotryia et al., 2021) and enhanced customer service (Ghlichlee & Bayat, 2020). All required to for success during times of economic crisis.

Another major factor which influences employees' readiness to modify their tactics in times of change is psychological contract. The fulfilment of these psychological contract challenges calls for both leaders and subordinates to relate well to manage them. Although transformational leadership, employee engagement and psychological contract have been the subject of other research (Gordon, 2020; Sandhya & Sulphrey, 2020; Azka et al, 2021), there are very limited or no research works which attempt to study the transformational leadership style, employee engagement and psychological contract from the SET and JD-R theory perspective after such a catastrophic time where there is a level of economic crisis. This study is therefore carried out to bridge this knowledge gap, which will be useful for leaders and researchers in this field. This study therefore focusses on the viewpoint on the interaction between a transformational leadership style and the involvement of the workforce to ensure employee engagement and solve psychological contract challenges or difficulties.

Methodology

This study employs a quantitative cross-sectional study approach. This quantitative approach was chosen because it was original research, conducted in an unbiased objective manner where the researchers decided upon the questions to ask, collected quantitative data, and analysed it statistically (Creswell, 2011). The study's population entailed all employees working in the public sector specifically in Greater Accra Region, Ghana.

In sampling of the organisations for the study, purposive sampling was adopted initially, where the public sector institutions were selected. Due to the difficulty in identifying the HR Directors of the public sector institutions, snowball sampling technique, helpful technique to do research on individuals with particular features who might be challenging to identify in other ways, was employed. Survey questionnaire was prepared, and administered to the employees. Three hundred and fifty questionnaires were sent and a total of 247 completed questionnaires were returned, yielding a response rate of 70.57%.

Hypotheses were tested by means of structural equation models with maximum likelihood estimation using Stata 15 software.

Findings/results

The result of the hypothesis test indicated that transformation leadership had a positive significant relationship toward psychological contract (Beta = 0.57; p-value = 0.000) and also towards employee engagement (Beta = 0.64; p-value = 0.000). Psychological contract had a positive significant relationship towards employee engagement (Beta = 0.34; p-value = 0.000). Psychological contract positively mediates the relationship between transformational leadership and employee engagement (Beta = 0.23; p-value = 0.000).

Conclusions

Managers' attitudes and conduct toward workers are influenced by their leadership abilities. Transformational leaders are the "perfect individuals" to have during substantial organisational change and when there is economic crisis. Workers who feel the need to be inspired and empowered respond favourably to the emotive and charismatic aspects of transformational leadership. Based on the study finding, employees at the public sector institution in Ghana admits the existence of transformational leadership which plays a significant impact on psychological contracts as well as employee engagement, in these times. Psychological contract fulfilment creates room for improved relationship between transformational leadership and employee engagement.

AN EVALUATION OF THE KNOWLEDGE MANAGEMENT SYSTEM IN THE PUBLIC SECTOR: A CASE OF FOOD AND DRUGS AUTHORITY

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Abstract

This study evaluated the knowledge management systems in the public sector using Food and Drugs Authority as a case. The objectives were to investigate the existing Knowledge Management System (KMS) and its contribution to the functions of Food and Drugs Authority (FDA), including assessing challenges in order to help formulate a roadmap or strategy for effective implementation, which will allow FDA to maximize the benefits of KMS. The research provided insight into the effectiveness of the KMS at FDA by expounding the shortfalls of the existing KMS based on which recommendations were made on how to improve KMS of FDA. The result helped to develop a Knowledge Management roadmap to help FDA maximize the value of gathered knowledge thereby enhancing the organizations productivity and sustainability in the long term. The research employed a descriptive research design using both quantitative and qualitative methods. It involved interaction with 43 employees of FDA from top-level management, heads of departments, and some selected staff of the organization using both interviews and questionnaires.

The findings of the study revealed that FDA does not have a policy and strategy towards the implementation of KMS, however, FDA practices some aspects of knowledge management systems. It also concluded that the implementation of KMS in FDA has been beneficial and continues to help the organization in achieving its mandate even though some challenges exist. Therefore, recognizing the challenges and taking strategic initiative will allow FDA to maximize the benefits of KMS.

Introduction

Knowledge management tools have increasingly been recognized by most governments in the world as strategic resources within the public sector. It is also noted that knowledge management plays an imperative role in providing strategies and techniques to make knowledge more usable and accessible (Young et al., 2012).

Knowledge management is a well-structured procedure that includes retrieving knowledge from multiple sources and then processing this knowledge to extract useful information. This information is then utilized in order to improve the performance of a system and find innovative solutions to problems (Karagiannis and Reimer, 2005, as cited in Luhn et al., 2017). Knowledge management also includes all the intentional and systematic methodologies applied for keeping the retrieved knowledge intact. The extensive evolution in the market has compelled organizations to utilize their knowledge assets in order to win a competitive edge over other organizations (El-Said, 2015, as cited in Luhn et al., 2017). Knowledge Management (KM) in organizations can be studied from different perspectives: technologies for knowledge creation, knowledge sharing, organizational culture, leadership, knowledge architecture, organizational learning, etc.

Development in Knowledge Management can help managers to improve their day-to-day work, decision-making processes, create new responses, and enable a set of competitive reactions to be augmented (Monavvarian et al., 2013). Knowledge Management can be divided into knowledge generation, knowledge sharing, knowledge storage, and knowledge reuse (Li et al., 2012).

Gold et al., (2001), in their study on issues of effective KM from the perspective of organizational capabilities argued that knowledge infrastructure consisting of technology, structure, and culture along with knowledge process architecture for acquisition, conversion, application, and protection are essential organizational capabilities or preconditions for effective KM.

There has been little research that focuses on the assessment of the main components of a knowledge management system. For instance, the study of Lee and Choi (2003) proposed an integrated approach to evaluate knowledge management theories and identify the variables that are relevant to the knowledge management system. Arora (2002) also proposed that in order to assess the implications of a knowledge management system, it is very important to identify and evaluate all the components that are crucial for the success or failure of a KM system (Luhn et al, 2017). Therefore, this study sought to evaluate the knowledge management systems in a public organization using Food and Drugs Authority (FDA), Ghana as a case study.

Problem Statement

There are various examples in literature highlighting the successful use of knowledge management systems at various government levels. Investments in such systems are frequently viewed as strategic (Wickramasinghe, 2003) and it has been widely argued that KMS not only supports but also enhances KM initiatives (Metaxiotis, Ergazakis, & Psarras, 2005). It is against this background that the study sought to evaluate knowledge management systems in the public sector by using Food and Drugs Authority as a case study.

Objectives of the Study

The primary goal of the study was to evaluate the knowledge management systems in the public sector using Food and Drugs Authority as a case. It was aimed to achieve the following specific objectives:

- To investigate the KMS of FDA
- To investigate the contribution of KMS in the functions of FDA
- To assess the challenges of KMS implementation in FDA
- To design an appropriate roadmap for implementing KMS in FDA

Research Question

- Does FDA have an effective KMS in Place?
- What are the benefits of KMS in FDA?
- What are the challenges facing FDA with regards to the implementation of KMS?
- What possible solutions can be provided for an effective implementation of KMS in FDA?

Methodology

The research employed a descriptive design with both quantitative and qualitative approaches. The targeted population for the study were the top-level management, heads of departments, and some selected staff of FDA. A research questionnaire and an interview guide were used to gather data from the respondents. Data was obtained from 43 staff out of the 60 questionnaires issued online. Descriptive statistics was used to analyse the data quantitatively, while SWOT was used to analyse the data qualitatively. Confidentiality and informed consent were taken into account during the study.

Results and Discussion

Based on the investigation of the KMS at the FDA, it was observed that there was no policy for managing knowledge acquisition, storage, sharing and its use. A wide range of information and knowledge are used at different levels of the organization, and these are documented in guidelines and procedures. Also, majority of the documentation is paperwork, making it difficult to access information across different processes.

Regarding the contribution of KMS to FDA, it was observed that knowledge management plays a very important role in all key processes and functions. Some of the key benefits of using KMS in FDA include better decision making, improved service delivery, and better customer handling, to mention a few. However, it was observed that, there was no process established for documenting lessons learned making it difficult to document them for future use.

In relation to the challenges of KMS implementation, identified barriers to knowledge acquisition, storage and sharing were categorized into people (organizational cultural issues), processes, and technology. In terms of processes,

issues such as training, information silos, bureaucracy, and cultural issues were significant. Lack of policy and strategy were the main issues related to process. And for technology, concerns were related to lack of technological infrastructure to facilitate the centralization of information and inadequate computers in some areas.

Conclusions and Recommendations

The study revealed that FDA does not have a policy and strategy towards the implementation of KMS, however, FDA practices some aspects of knowledge management systems. Based on the SWOT analysis, it was observed that FDA's knowledge management system is key to achieving its mandate. However, awareness on knowledge management system is very low, and implementation across the organization is not uniform. Hence, the full benefits of KMS have not been exploited.

Following the observations made, the researcher recommended that FDA should increase awareness to understand KMS and the potential benefits it offers to the organization so as to drive policy and strategy initiatives to take a more holistic view of knowledge and its value. Also, technological improvements should be made to enhance knowledge acquisition, storage, retrieval and sharing throughout the organization so as to reduce the bulky information materials, enhance accessibility, and improve decision making and transparency. This will unequivocally improve customer satisfaction.

Figure 1: Recommended KM Roadmap

Source: (KPMG, 2000)

Based on the above recommendation the following KM roadmaps (KPMG, 2000) are suggested:

1. People
• Implementing KM training/awareness (e.g. Workshops or seminars)
• Appointing knowledge officers and creating knowledge centres (at directorate levels)
• Incentivising and rewarding knowledge working
• Building and developing "communities of practice"
• Establishing formal KM networks (e.g. Dedicated officers in communities of KM practice)
2. Process
• Benchmarking or auditing the current situation
• Creating a KM strategy
• Implementing new systems for "communities of practice"
• Designing other KM processes
• Creating a knowledge map
• Implementing knowledge policies
• Measuring intellectual capital Technology

3. Technology
• Carrying out a knowledge system audit or assessment • Implementing ways to share best practice • Use of KM software (either dedicated or Intranet or Groupware software)

STAFF DEPARTURE ON THE RISE: EXAMINING THE CAUSES AND IMPLICATIONS IN GHANA

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Abstract

Employee turnover is a significant issue for firms. Knowing why employees leave is critical to preventing it. This study will look into the reasons why employees leave their existing jobs and how to avoid them. Many variables might cause a person to resign, including job satisfaction, compensation, working climate, and career advancement. The study will look at each of these variables and how they influence an employee's decision to leave their employment. Employee satisfaction and the reasons for their resignation will be assessed through interviews. The interviews will allow participants to share their experiences that led to their resignation. Former employees will be interviewed in order to learn more about why they left their jobs. The interviews will focus on the issues that led to their resignation, such as job discontent, a lack of professional job security, professional advancement, work-life balance, advancement, and workplace culture. Data from interviews will be evaluated to find patterns and trends. The study will concentrate on the elements that influence employee resignation, such as job satisfaction, compensation, and workplace environment. The research will provide insights into why employees resign and how businesses can prevent it. The findings will be used to develop strategies to improve employee satisfaction and reduce employee turnover.

Keywords: Employee resignation, departures, job satisfaction, higher education institutions, workplace culture,

Introduction

In periods of economic crisis, employers cannot rely on paternalistic management structures to protect employees from market cycles, technological change, and competition. Employers are focusing on employee retention to ensure competitive advantage and profitability (Goldberg, 2014; Lin and Huang, 2020) because the benefits lost to the competition as a result of employee turnover are enormous. Though employee departures can be positive, and help reduce costs

and attract new talent, a high rate of turnover or departures in turbulent times can be detrimental to an organization. The purpose of this paper is to explore the reasons higher education institutions are recording higher employee turnover underpinned by the theory of institutional departure.

Employee turnover is the period within which employees leave the organization. Organizations calculate turnover rates annually or quarterly to assess the effectiveness of recruitment policy (Shweata, 2022). Organisations face intense competition to retain talented employees. Previous studies on employee departures have focused on internal and external factors that encourage to leave the organization. Employees leave the organisation because of job dissatisfaction (Ali and Anwar, 2021; Kabungaidze et al, 2021; Lin and Huang, 2021), job stress (Shatter and Ahmed, 2014), unattainable performance goals (Stritch et al., 2018), poor work climate and job design as well as pay issues (Syed and Wang, 2018) and workplace bullying (Hollis, 2017). High employee turnover affects an organisation's operations, performance and reputation. Higher resignations mean higher costs of recruitment and retention. When more employees leave the organization, it spells problems for the organization, especially in higher education institutions where manpower capacity retention is important to achieve the academic vision, mission and goals. Organisational learning culture is, therefore, essential for effective employee integration and continuous learning and transformation in a changing and dynamic environment (Lin and Huang, 2021). The literature suggests that unattained goals and workplace bullying undermine employees' capabilities. These studies indicate that in organizations where a culture of realistic goal setting and respect for the people exists can reduce or eliminate resignations.

The literature reviewed so far suggests that issues of employee departure regarding rules, controls and gender have not been explored as antecedents of employee resignations and departments. This study will explore the lived experiences of participants to find out the role the rigid rules and controls play to encourage employees to leave their organisations. Also, the nuanced issues about gender and employee departures will be explored. It is against this backdrop that this research seeks to explore how rigid rules and controls affect employees' departures from higher education institutions. In view of the reviewed literature, the prospective objectives of the study are (1) to find out the role that rules and control mechanisms play in employee departures; (2) to explore the reasons behind employee departures from the selected public universities; and (3) to investigate the effect of employee departures on operations of higher education institutions in context.

Methodology

Study Setting

The study will be conducted in the Legon-Madina Municipality within the Greater Accra Region, Ghana. The Greater Accra Region was chosen because it is the administrative capital of Ghana and the hub of career potential, which increasingly attracts quality human resources compared to the rest of the other regions. Two public universities will be used as the study settings because, one is

the oldest premier university in Ghana, and the other is one of the fastest-growing institutions of higher learning and is considered to have many future prospects for its staff. The authors are interested in having an in-depth understanding of the reasons accounting for the influx of staff departures in recent times between the two glamorous universities. Additionally, the study seeks to utilize the lived experiences of the resigned staff to gain a deeper appreciation for the causes and policy implications of their departure. The narrative design Polkinghorne (1988) within the qualitative methodology will be utilised for data collection in order to explain the underlying nuances of staff departure in Ghana.

Sampling of participants

The target population of interest for the study shall be all staff who have departed from either of the two universities within the past five years. The last five years will be used as the ceiling point because it is the conviction of the authors that the frequency of staff departures has increased within the last five years. The purposive Etikan et al. (2016) sampling regime supported by the referral techniques shall be used sequentially for participant selection and data gathering. Employing the two techniques will enable a wider coverage of respondents beyond the initial targeted interviewees. The sample size will be guided by theoretical saturation (Angeli et al. 2018), where respondents will be interviewed until information redundancy sets in. The interview will be in-depth and conducted based on the respondents' availability and willingness to participate in the survey. In terms of ethical protocol, the prior consent of respondents shall be sought for all stages of the data collection process based on the guidelines of the UPSA Ethical Committee. Pseudonyms will be assigned to participants in the data gathering process to ensure anonymity and confidentiality. An interview guide based on the key research questions will be used for the line of questioning to understand the phenomenon the study seeks to investigate. Probing questions will be used where appropriate to gain an in-depth understanding of the issue in contention. The English language shall be used as the mode of communication because the respondents are academicians.

Data analysis

The field data will be transcribed through an iterative process where the author will independently transcribe the recorded data verbatim. The authors will share the transcriptions with the interviewees for confirmation of the contents. Suggestions that may arise will be incorporated into the final transcriptions before the analysis to ensure the originality of the content and reliable findings. The transcribed files will be formatted and uploaded to the Nvivo software for analysis. The data analysis process shall involve repeated reading of all the transcripts to identify common patterns or categories. The categories will be condensed or merged into themes (Braun & Clarke, 2006) for content analysis and interpretation.

Expected Findings and Implications

It is expected that this study will unearth rich data that will reveal reasons behind employees' departure from the selected higher education institutions. It is also expected that the findings will bring to the fore innovative ways of retaining employees in an economic crisis. Implications will be drawn from participants' lived experiences and how these can contribute to creating a conducive organizational climate and policy development for employee retention.

COVID-19 AND EMPLOYMENT GENERATION OF SMEs: A STUDY OF ADENTAN MUNICIPALITY

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Abstract

This study examined the role of COVID-19 in the employment generation of SMEs. The objectives of the study were to investigate the pre-covid employment generation levels of SMEs, to assess the employment generation levels of SMEs during the COVID-19 pandemic, and to examine the role of COVID-19 in the employment generation of SMEs. A quantitative approach was used to assess how COVID-19 has contributed to the employment generation levels of SMEs. A sample size of 250 SMEs from the Adentan Municipality were used. Convenience sampling techniques were employed to sample from the population. Correlation and t-test were carried out on the data. The findings showed that employment generation levels in SMEs were greatly affected negatively by the COVID-19 pandemic as it caused businesses to lay off some workers or stop giving incentives to their workers. Therefore, government and other financial bodies should support surviving SMEs in their operations and help revive businesses that shut down at the peak of the pandemic in order to enable them create employment opportunities for the citizenry.

Introduction

The COVID-19 pandemic has negatively affected the whole world, humanity and everything that makes life worthwhile (Donthu & Gustafson, 2020). The impact of the pandemic has caused major chaos in economic activities worldwide. All aspects of human existence, especially people's professional activities, have been touched by the pandemic's lifestyle pattern. Many organizations and companies have instructed their staff to work from home and stay at home, while others have stopped manufacturing or offering services since there was little demand for their goods or services. As a result of the epidemic, imports and exports of many goods and services were significantly decreased.

The contribution of small and medium enterprises to job creation has been widely documented in the existing literature. Small and medium-sized businesses are essential to the achievement of any government's economic prosperity. It has

been proposed that in regions or economies where SMEs are promoted, poverty rates decline (Sumelius et al, 2021). The potential of the SME sector to create jobs is a key attribute. Small and medium-sized enterprises (SMEs) are thought to be crucial to solving socioeconomic problems in developing countries, such as unemployment, poor growth, and poverty (Nyoni & Bonga, 2018).

The SME sector is Ghana's most important business structure, accounting for approximately 92 percent of the country's businesses. In 2018, SMEs contributed to the Gross Domestic Product (GDP) by an estimation of 70 percent, equating to almost 90 percent of operational businesses. As a result, SMEs provided close to 85 percent of job in Ghana (Li et al, 2021). These SMEs, on the other hand, have not been spared the consequences of this COVID-19 (Korankye, 2020). Whilst some studies emphasise on the effect of COVID-19 on Small and Medium Enterprises (e.g., Al-Fadly, 2020; Korankye, 2020), this study sought to address the gap mentioned above by determining the contribution of COVID-19 to the employment generation of small and medium enterprises (SMEs) in Ghana, specifically in the Adentan municipality.

Methodology

Managers, supervisors, and business owners of the selected small and medium enterprises in Adentan Municipality in the Greater Accra Region were the target population for the study. In the light of prevailing COVID-19 constraints, the study utilized an online poll to send questionnaires to respondents, who were randomly selected using Simple Random and Stratified sampling techniques from a pool of managers, supervisors, business owners and workers. A primary data source was employed in conducting the analysis. A Population of 2000 SMEs was used for data collection. The sample size of this research was calculated using the Taro Yamane (Yamane, 1973) formula with 95% confidence level. The study used a quantitative approach and a survey design to collect data from respondents via questionnaires.

Three hundred (300) questionnaires were distributed out of which 250 viable responses were received and analysed. The data collected was analysed using the Statistical Package of Social Sciences (SPSS) software version 26.0. This software facilitated our analysis by aiding the generation of frequency tables and measurements of central tendencies.

Findings

The findings of this study revealed that COVID-19 has negatively affected the employment generation levels of SMEs. From the study, the researchers observed that, most of the respondents (supervisors, managers and directors) agreed to laying off some workers, reducing the average salary paid to their workers and ceased giving incentives to their workers due to the challenges such as high cost of operation, low orders and other financial problems faced because of the COVID-19 pandemic (Table 1).

Table1 : Contribution of COVID-19 to Employment Generation of SMEs

RANGE	FREQUENCIES	PERCENTAGES (%)
Number of employees before the pandemic		
Less than 10 persons	151	60.4
11-25 persons	90	36.0
26-50 persons	6	2.4
Above 50	3	1.2
Number of employees employed since the outbreak		
0	177	70.8
1	40	16.0
2	17	6.8
3	16	6.4
Number of workers laid off since the COVID-19 outbreak		
0	98	39.2
1-5	142	56.8
6-10 (shut down)	10	4.0
11-20	-	-

The table above shows the number of employees in the SMEs before the pandemic, number of workers employed since the outbreak of the COVID-19 pandemic, and the number of workers laid off since the outbreak.

The results from the respondents indicate that, prior to the outbreak of the pandemic, 60.4% of the selected SMEs employed less than 10 persons, 36.0% employed 11-25 persons, 2.4% employed about 26-50 persons and 1.2% employed a maximum of fifty (50) people. Comparing this to the number of people employed since the COVID-19 outbreak, 70.8% of the respondents (SMEs) did not employ even a single person, 16.0% employed one (1) person, 6.8% employed only two (2) persons and 6.4% employed only 3 persons. This implies that the maximum number of people employed was only 3 persons which was done by just 16 out of the 250 SMEs. This indicates that employment levels dropped drastically resulting from the pandemic. Furthermore, during the pandemic 56.8% of the respondents (SMEs) laid off about 1-5 persons and 4.0% laid off about 6-10 persons which was almost their entire workforce as their sales declined and they could not maintain and pay the workforce. Thus, the COVID-19 pandemic resulted in a decline in the employment generation levels of SMEs.

Conclusion

The main objective of this study was to examine the extent to which COVID-19 contributed to the employment generation levels of Small and Medium Enterprises (SMEs) in the Adentan Municipality. The findings point to the fact that COVID-19 resulted in a reduction in the employment generation levels of SMEs in the Adentan Municipality. The findings show that not only did the employment levels decline, but was also accompanied with job loss as majority of SMEs laid off some of their workers. This research confirms findings from Al-Fadly (2020) which revealed that most business owners were affected by the pandemic in such a way that they had to reduce their staff to between 20 –50% with disrupted business

and by so doing they had to keep only key staff due to the shortage in revenue. Based on the findings from the research, the Government and financial bodies should present initiatives to support the operations of surviving businesses and revive those that have collapsed as a result of the pandemic to bounce back. The government must also ensure that SMEs are not burdened by regulatory and other legislative requirements in their applications for government support. The government should assist the affected SMEs by granting them tax holidays to motivate them to carry on with their operations.

Session 11: Information Technology and Digitalization

Chair(s): Dr. Adwoa Amankwa & Mr. Emmanuel Mensah

INFORMATION TECHNOLOGY IN PUBLIC FINANCIAL MANAGEMENT: A SYSTEMATIC LITERATURE REVIEW AND META-ANALYSIS.

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Abstract

With the introduction of information technology (IT), a lot of organizations are making significant investment on them. So, this study provides a systematic literature review and meta-analysis (SLR&MA) on the impact of information technology in public financial management by following the PRIMA reporting standard. With SLR&MA as the approach for this study, the study retrieved One Hundred and Fifty-Eight (158) published records using strict search terms in recognized database such as ScienceDirect, Scopus, SpringerLink. Through a rigorous paper selection process, only 20 papers that met the inclusions rules.

The findings of the research showed 2022 as the highest number publications while 2017 was the least with no publications. On components of the budget, budget monitoring, evaluations and reporting has the most research work whereas budget implementation and budget formulations has the lowest. With regards to the type of technology used, information technology witnesses the highest technology used, followed by financial management information system and GIFMIS, green technology, integrated information management and artificial intelligent as the least record. Asia and American recorded the highest publications in the continent while Europe recorded the least publication. Regarding the methodology used in previous studies, quantitative method was widely used approach followed by qualitative and mixed method was the lowest used method.

Introduction:

Numerous corporations have made large investments in information technology (IT) and its related new technologies, such as computers and the Internet, since its inception. In order to increase their competitive advantage, Public institutions continue to seize every opportunity that comes their way, including Information Technology. Fischer et al., (2021) conducted a systematic review on the impact of digitalization in the public sector: a systematic literature review by systematically analysing research on the impact of digitalization in the public sector which 93 articles (N=93) in this article, they found out that most studies mainly analyse service provision and citizens as a target group of impact and focuses on impacts related to utilitarian instrumental public values, such as efficiency and performance. However, we recognize disciplinary differences with regard to the analysed values. We conclude that impacts with regard to different value dimensions need to be entangled and discussed together rather than separating them. That could, for example, be achieved by more interdisciplinary work. We also recommend taking the internal impact of digitalization into consideration to a greater extent, instead of mainly focusing on external effects. According to Appiahene et al., (2019) the principles of businesses are being redesigned, and a substantial portion of corporate processes are now reliant on IT. King and Crewe (2013) also criticize the gross failures and low performance of Information System in the United Kingdom central government in their book, the blunders of our governments. By providing examples of Information System failures, the authors point out the wasteful expenditure and impractical use of Information System.

Globally, public sector organizations are changing at an unprecedented rate, and as a result, they are quickly revising their operational models and market strategies by deploying Information Technology to not only survive but also benefit from these market dynamics (Zomorrodian, 2012). The extant literature has some studies on the topic (i.e., Information Technology in Public Financial Management). For instance, Simpson et al., (2020), Yaokumah and Biney, (2020) and Saedi, (2022) studied the implementation of Integrated Public Financial Management systems for government organizations. The following studies did research on Information Technology in Public organizations (Evans, 2019; Paula Monteiro et al., 2022; Weeks & Namusonge, 2016).

However, very few studies explored the topic from a systematic review and meta-analysis approach. Hence, this current paper presents a through systematic review and meta-analysis on the topic to inform future directions on the topic. This study contributes to knowledge as follows:

- A well-structured review of relevant literature with an emphasis on the various information technology that are used in public financial management
- The study also gives recognition of authors from various continents and the journals from which many of the original research were derived based on the stringent inclusion and exclusion criteria.
- A thorough and exhaustive evaluation of 20 prior state-of-the-art research on information technology and public financial management on the mix of methodologies was undertaken.
- This study established arguments for future research directions based on literature results and propose solutions for researchers' interest in

contributing to more research knowledge with the use of technology to improve public financial management.

- The review's research approach is outlined in Section 2. Section 3 contains an analysis and reporting of the papers evaluated along with discussion, Section 4 discusses the conclusion and future directions.

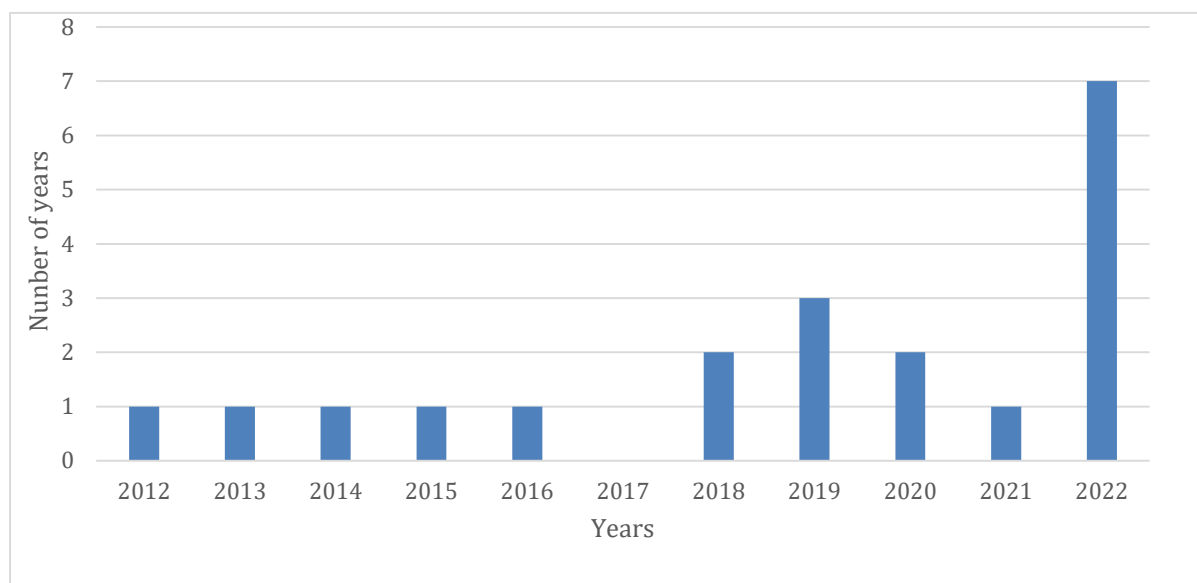
Methodology

This study undertakes a throughput analysis of literature review on information technology in public financial management in Ghana. The study included data from period 2012 to 2022. These provides strong information on information technology in public financial management which enhances the rules and procedures governing public sector. First, the research conducted an electronic search in database: ScienceDirect, Springerlink, Scopus and google search engine to ensure there is inclusion of broad range of scientific output data. The search terms use was electronic platforms, cash platforms, information technology applications and information technology in public financial management which we got 127 papers from Scopus, 15 from ScienceDirect, 7 Springlinks and 9 from search engine (connected papers, google search etc.). The eligibility criteria in reporting this systematic review, this study widely used 'Preferred Reporting Items for Systematic Reviews and Meta-Analyses' (PRISMA) (Figure 1).

Finding and Discussion

The study divided the literature review into four categories: setting of the studies analysis, components of public financial management analysis, research method used, and types of technology used in public sector findings of this research is important

Figure 3: Number of years against year of publications



RQ1: Components of public financial management against number of publications. Figure (4)

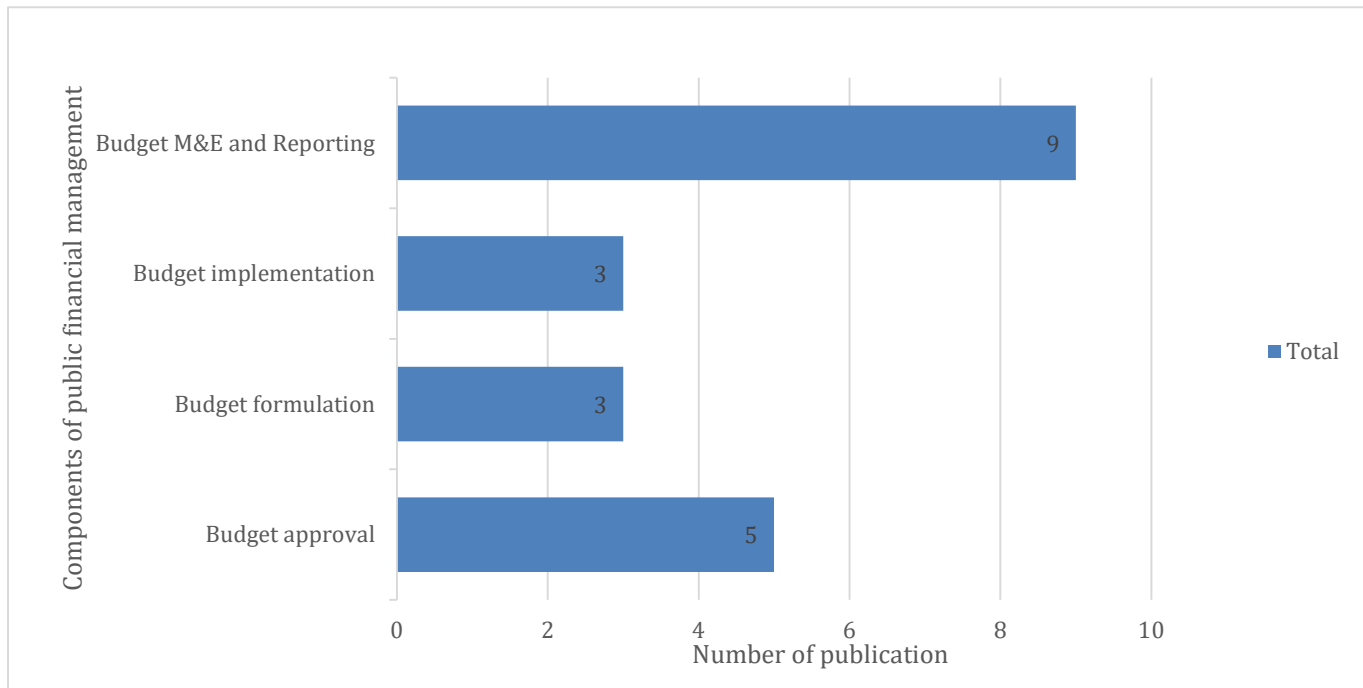


Figure 4: shows the results of a literature review on the components of public financial management.

The study discovered 9 out of the 20 publications on budget monitoring and evaluations, 5 for budget approval and budget implementation and budget formulation having 3 publications each.

Conclusions

The main of this study was to determine recent literature on information technology in public financial management to suggest the potential for future research. From the discussions and findings, budget implementation and budget formulation recorded the least research publications as compared with budget monitoring and evaluation and budget approval. Africa witnessed the second least number of studies as against America and Asia with Ghana having 2 publications out of 20 papers. Furthermore, Quantitative method recorded the highest number of publications. Finally, majority of the studies did not conduct on GIFMIS even though majority of the publications shows the used of information technology in public sector. Also, these findings are based on only 20 primary papers from high impact journals from ScienceDirect, Scopus and SpringerLink database.

TECHNOLOGY AS A PREDICTOR OF STUDENTS' VIRTUAL LEARNING EXPERIENCES IN POST- COVID ERA: EMPIRICAL ANALYSIS FROM A GHANAIAN HIGHER EDUCATION INSTITUTION

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Abstract

The devastating effect of the Covid pandemic negatively affect most economies while conspicuously changing the mode of interactions in the educational sector from the traditional face-to-face to a full online deployment or a blend of virtual and in-person interactions during the post covid. The aim of this study is to determine the impact of technology on students' virtual learning experiences after the peak of the covid pandemic. Three hundred and seventy-nine (N=379) undergraduate students participated in the study. Findings showed that the use of technology significantly predicted student online teaching and learning and also, influenced student virtual learning experiences positively. These findings will help managers of higher education institutions to invest into training and technology driven interactions to enhance students' engagement.

Keywords: Technology, virtual learning experiences, online teaching and learning, higher education

SUCCEEDING IN THE SHIFT TOWARDS DIGITAL INCLUSION: THE MEDIATING ROLE OF VALUE CREATION

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Abstract

The research explores the Amit and Zott model of value creation and proposes an extension to the model in light of the data. The data was collected from 395 respondents who have completed the online passport application. The structural equation modelling – partial least square technique was applied to test the hypotheses of this study. The effect of the latent variables on consumer delight was tested through value creation as a mediator variable. The findings suggest that efficiency, novelty, lock-in, and complementarities significantly affect consumer delight through the significant mediation of value creation. The novelty of this paper lies in the extension of the Amit and Zolt value creation model by examining the mediation effect of value creation between the model's latent variables and consumer delight. This phenomenon is arguably absent in the literature. As a practical implication, there is a diversity of interest among incumbent and potential consumers of the digital passport application; while some perceive efficiency and complementarities as major value drivers, others prefer lock-in and novelty as value drivers. As a result, online passport development should explore implementing several value drivers simultaneously or incrementally depending on the available resources.

Introduction

The twenty-first century is characterized by sophisticated technologies that have advanced business over the information super-highway. These technologies' competitive and dynamic characteristics have been an avenue for wealth creation and the delivery of distinctive value to consumers and companies worldwide (Minerbo et al., 2021). Many organizations are leveraging technology to create new online businesses, while nascent ventures, especially in emerging

economies, are transitioning from manual production characterized by local inefficiencies to creating a distinctive value proposition and leveraging technology to create a competitive advantage (Sinthupundaja et al., 2020). For instance, Statista (2021) confirms the exponential growth of e-commerce across countries worldwide. The report reveals that in 2020, over two billion people purchased goods and services online, and retail e-commerce sales worldwide surpassed USD 4.3 trillion. This trend is projected to rise in the years ahead (Statista, 2021).

Notwithstanding the initiatives by governments to drive IT-enabled economies, it is unclear whether the institutions and consumers of digital services perceive this as a source of value creation (Renner-Micah et al., 2020). The development of online service transactions and its use in developing countries predominantly focuses on health (Renner-Micah et al., 2020) and agriculture (Kieti et al., 2021; Agyekumhene et al., 2020), to the neglect of other essential services such as the online passport application system. The study addresses this research gap by focusing on the Ghanaian online passport application while uncovering the factors that create value for the service and assessing whether value creation enhances consumer delight. The novelty of this paper lies in the extension of the Amit and Zolt value creation model by examining the mediation effect of value creation between the model's latent variables and consumer delight.

Methodology

The data sampling technique used for data collection was purposive data sampling. In addition, the survey research method was used precisely the cross-sectional survey approach. A closed-ended questionnaire comprising 22 items was administered online to 395 respondents in the Greater Accra region of Ghana. These respondents were Ghanaians who have used the online passport application service. Data were collected between August and November 2021. The survey was in two sections. The first (section 1) was on the demographics of the respondents, while the second (section 2) was on the hypothesized paths. Demographic information sought included gender, age, educational level, medium of payment for the digital transaction, years of experience with a digital transaction, and the medium of engagement with the digital platform. In section 2, respondents were asked to indicate their level of agreement or disagreement with items on a 5-point Likert Scale ranging from 1, "strongly disagree," to 5, "strongly agree." Four items were used to measure the efficiency of the online passport application. For novelty, four items were used. For lock-in, four items were used. Four items were used to measure the complementarities. Three items were used to measure value creation. And finally, three items were used to measure consumer delight.

Findings/Results

Measurement model estimation

The factor loadings of the constructs exceeded the recommended threshold of 0.70 suggested by Hair et al. (2020). In addition, the Cronbach alpha indices of the

constructs were above the acceptable threshold of 0.7 suggested by Hair et al. (2020). The composite reliabilities showed an excellent internal consistency of the items for each construct, with composite reliability indices above 0.70 (Hair et al. 2020). Hair et al. (2020) state that all constructs' average variance extracted (AVE) must be greater than or equal to 0.50. The analysis revealed that the constructs' AVE is above 0.50, explaining a large portion of the variance in value creation. The highest index for heterotrait-monotrait ratio (HTMT) is 0.796, below 0.90, the most conservative critical HTMT value. (Henseler et al., 2015). Therefore, we conclude that discriminant validity has been established. Table 1 summarizes the measurement model estimation.

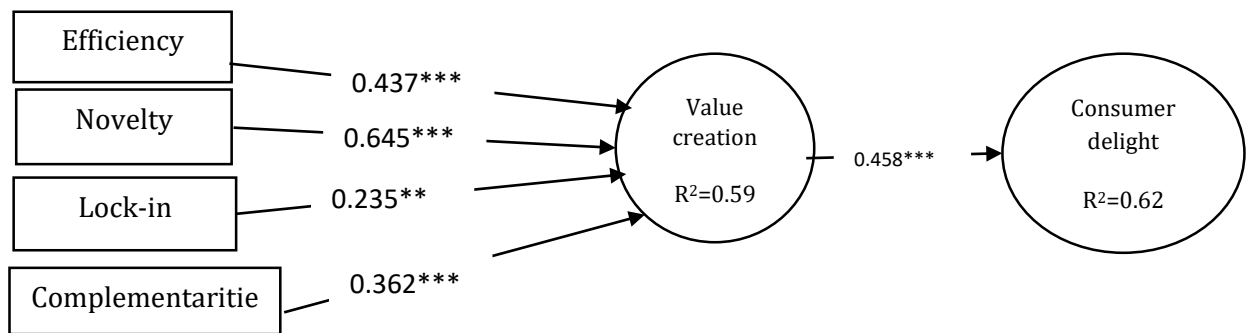
Table 1. Measurement model estimation

Test	Result	Source
Internal consistency (Cronbach alpha (α))	0.745 – 0.866	Hair et al. (2020) (α) ≥ 0.7
Composite reliability (CR)	0.673 – 0.925	Hair et al. (2020), > 0.6
Factor loadings (λ)	0.703 – 0.993	Hair et al. (2020), > 0.7
Average Variance Extracted (AVE)	0.615 – 0.877	Hair et al. (2020), > 0.5
Heterotrait-monotrait ratio (HTMT)	0.796	Henseler et al. (2015), < 0.90

Structural model assessment

The structural equation modelling path analysis revealed that the efficiency of the online passport application significantly influences consumers' perception of value creation ($\beta = 0.437$, $p < 0.01$). For this reason, H1 was accepted. Novelty significantly influenced consumers' perception of value creation ($\beta = 0.645$, $p < 0.01$), hence H2 was accepted. Furthermore, lock-in significantly affects the perception of value creation in the online passport application platform ($\beta = 0.235$, $p < 0.05$), supporting H3. In addition, complementarities significantly influence the perception of value creation in the online passport application platform ($\beta = 0.362$, $p < 0.01$) and support H4. Regarding the mediation effect, value creation significantly mediates consumer delight ($\beta = 0.458$, $p < 0.01$), hence, H5 is also supported. Figure 2 shows the research model estimation.

Figure 2: Research model estimation



Sig.*p < 0.10; **p < 0.05; ***p < 0.01

Conclusion

The findings indicate that the efficiency of the online passport application significantly influences consumers' perception of value. This result means that information symmetry, transaction simplicity, peer review, reduced search cost, and channel search cost significantly create value for the online passport application platform. The findings also show that the online passport application's novelty significantly influences consumer perception of value. This result implies that providing new products, services, or information as content in the online application platform creates value for applicants. The findings further show that lock-in significantly influences the perception of value creation. The result implies that safeguarding and ensuring the security of applicants' data through a robust security protocol increases the value-creation potential of the online passport application. The findings also show that complementarities significantly influence Ghanaians' perception of value in the online passport application platform. The results suggest that the online passport application platform can leverage complementary services (e.g., after-application service, providing applicants with visa requirements of countries) for value creation. Furthermore, the results show that the value created from the online passport application service significantly influences consumer delight. This implies that when consumers get value for the product they request, it transcends into a delight that can lead to increased repurchase intent for the core product.

The study adopted the quantitative technique of collecting and analysing data. As such, our findings are based on the one-time responses from the respondents, and as a result, they may not provide a rich and in-depth analysis of the target populations' feedback. Therefore, the generalization of the study should be tested with an in-depth qualitative study to get a deeper understanding of the population's feedback, which may go beyond what the variable's coefficient could not explain. In addition, the data source and sample from which the data was collected were located in the Greater Accra Region of Ghana. This marginalizes other populations in other regions using the online passport application service, limiting the study findings' generalization.

BLACK PROPAGANDA OR SOLUTION-ORIENTED JOURNALISM? ONLINE NEWS PORTALS FRAMING OF CEDI DEPRECIATION IN A POST-COVID ERA

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Abstract

The actual roles of online news portals in the construction of news frames during the post-COVID-19 economic crisis like the depreciation of the Ghanaian cedi is a subject of debate among media scholars. Through quantitative content analysis, the researchers deductively coded four negative and four constructive frames to examine critically how graphic.com; myjoyonline.com; 3news.com, and Ghanaweb.com have constructed their frames on the depreciation of the Ghanaian cedi using web scraping with *python* the news articles retrieve articles. The operationalization of the frames for this study was coded based on how various sub-groups and descriptions (concern, solution-oriented, solidarity, inclusiveness, blame, conflict, denial, and sensationalism) in media studies literature. The study also analysed the extent of occurrence of the phenomenon, as well as the tones and angle of reportage during the peak of the depreciation of the Ghanaian cedi (August, September, and October 2022) using *Tone Analyzer by IBM*. The findings show that graphic.com predominantly adopted constructive variables like “concern”, “solution-oriented”, “solidarity”, and “inclusiveness”, while myjoyonline.com, GhanaWeb.com, and 3news.com which have wide global access, and audiences reported negative frames such as “conflict”, “blame”, “denial”, and “sensationalism”. The analysis also showed that myjoyonline.com, GhanaWeb.com, and 3news.com adopted more blame attribution, and sensationalism frames, instead of concern, solution-oriented, and solidarity frames. The findings further suggest that there were changes in frame appearance such as concern, blame, and inclusiveness at different months of the post-COVID-19 depreciation of the cedi. This study again finds that inadequate robust online media regulatory frameworks in Ghana have led to ineffective and negative web portals reportage of issues related to the economy, especially post-COVID-19 era. In conclusion, the study recommends that the National Media Commission (NMC) and other regulatory institutions put in place strict online media regulatory frameworks to guide the operations of online media, especially web portals.

Keywords: online; news; portals; post-COVID-19; frames; depreciation; Ghana cedi

Introduction

The framing of the massive structural changes in the economies of many countries due to the twin global tragic events, of COVID-19 and the Russian invasion of Ukraine has been studied from different perspectives (Caldara et al., 2022). A critical review of previous related literature on this subject has revealed that much of the themes focused on how traditional media framed public health crises, which has its framing variables centered mostly on “conflict” to the neglect of constructive framing (Aduhene, and Osei-Assibey, 2021). Ogbodo et al. (2020) believe the media ecosystem, especially online media has drastically changed how framing is done in crisis times. Aduhene and Osei-Assibey (2021) hold a contrary view and see web portals as an adversary. Coulibaly (2021) suggests that the inclusions of constructive and negative framing are important media strategies for news reports during crises like the post-COVID-19 depreciation of national currencies. With framing theory as the theoretical framework, this study focuses on crisis communication and the incorporation of ethical journalism practice in the framing of the current depreciation of the cedi crisis in Ghana. This study aims to examine critically the framing of the post-COVID-19 depreciation of the Ghana cedi by four web portals from August, September, and October 2022.

Materials and Methods

Sampling and Data Collection

Quantitative content analysis was used for the data analysis. Using site scraping with *python* data mining was used to retrieve news on the depreciation of the cedi from the four web portals (graphic.com, myjoyonline.com, ghanaweb.com, and 3news.com). The selection of these web portals informed its large audience and national and global coverage of the media outlets. August, September, and October 2022 were the peak of the post-COVID-19-cedi depreciation, the total number of online news items searched on the cedi depreciation was ($N=90$). Further data curing resulted in the removal of 30 news items, which were not related to the subject under consideration and the final news sample for the study was ($n=60$) sixty articles.

Coding Procedure and Processing of Data

The coding was done in two ways, the first coding contains data on headlines, publication date, name of the web portals, and the reporter or editor. The second coding was on the categorization and identifications of news frames (negative and constructive frames). Hermans & Gyldensted (2019) classification and definition of constructive frames guided the researchers to identify the main themes and keywords of constructive frames (concern, solution-oriented, solidarity, and inclusiveness). On the other hand, negative frame characteristics like conflict, blame, denial, and sensationalism as prescribed by Bolsen et al. (2022) were used. As proposed by O'Connor & Joffe (2020), the coder's sample ($n=60$) news items for the double rate was 10.5%. This article also adopted data processing tools like Tone Analyzer by IBM and NRCLEX which is a word-based

approach to analyzing the emotions in the frames. The reliability of the intercoder was arrived at by adopting Krippendorff's Alpha and the agreed percentage (Weyant, 2022). Finally, the keywords or variables retrieved from the news portals were automatically inputted into the dataset by *Tone Analyzer by IBM* for analysis. The coders explained negative news reported as content that was related to the depreciation of the Ghana cedi with inclusions and exclusions coded (1 and 0) respectively.

Findings

The specific news frames were constructed on the post-COVID-19 depreciation of the cedi by the articles on the news portals

Figure 1 depicts the findings on the post-COVID-19 depreciation of the cedi for the sampled web portals (graphic.com, myjoyonline.com, GhanaWeb.com, and 3news.com). The descriptive analysis of the specific frame constructions showed that the web portals generally reported stories on the post-COVID-19 depreciation of cedi in a negative frame ("conflict", "sensationalism", "blames", and "denial"), with a score of (62 %), while constructive frames attribute like "future-oriented", and "solution-centered" frames were just (38%).

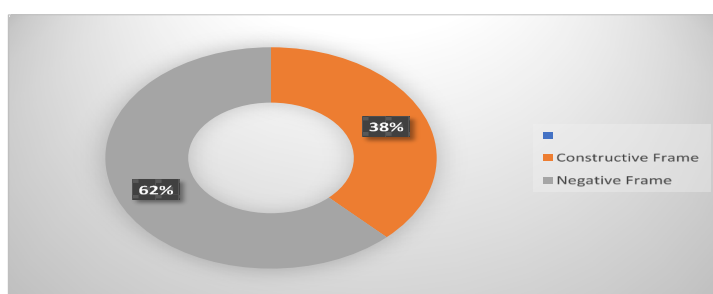


Figure 1: Specific frame construction on the text of news articles (Coding frames, n=60).

Note: Articles on the depreciation of the cedi are the unit of analysis. The appearance and percentage of occurrence in each news article were analysed based on the frame types, variables of frames, and the total number of news articles.

The tone and angle of the text of the articles in the selected months in reporting the post-COVID-19-cedi depreciation.

Figure 2 is an analysis of news articles' tone and angle of the text of the articles. August recorded 61.1% negative frames and 38.9% constructive frames. For September, and October 2022 the appearance and sensationalism in the news reported in terms of the construction of frames had similar characteristics as those in August 2022, except that the issues focused more on the extravagant lifestyles of government officials. October had the highest in terms of construction of frames on the depreciation of the cedi, thus (70.0%) negative frames and 30.0% constructive frames. The frame construction for September 2022 was (57.6%) negative frames and (43.4%) constructive frames.

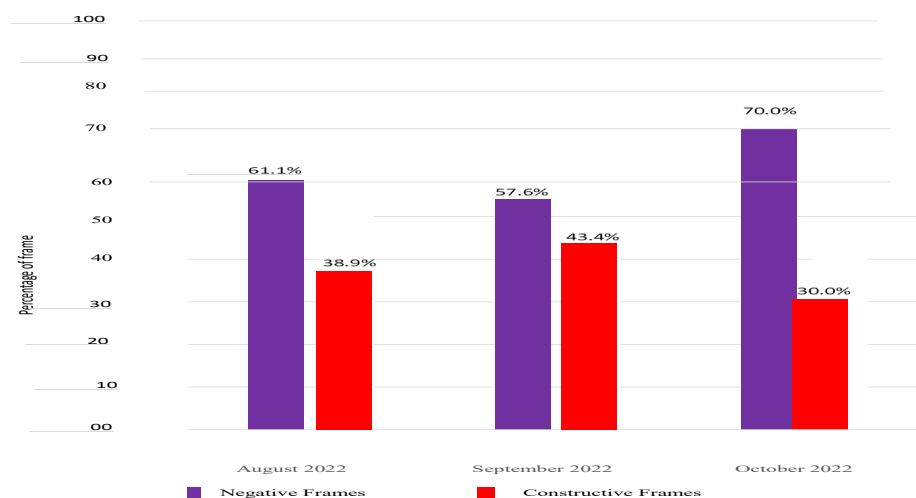


Figure 2: Monthly Frames Construction news Portals (Coding frames, n=60)

The Dominant news portals and Constructive/Negative frame variables.

With McIntyre's, definitions of constructive and negative frames, **Figure 3** analysed which web portal dominated in the use of constructive and negative frames, according to their appearance in the text of the article on the depreciation of the cedi. The constructive frames constitute news reporting from such angles as concern, solution-oriented, solidarity, and inconclusiveness. The variables for negative frames also included; sensationalism, blame, conflict, and denial.

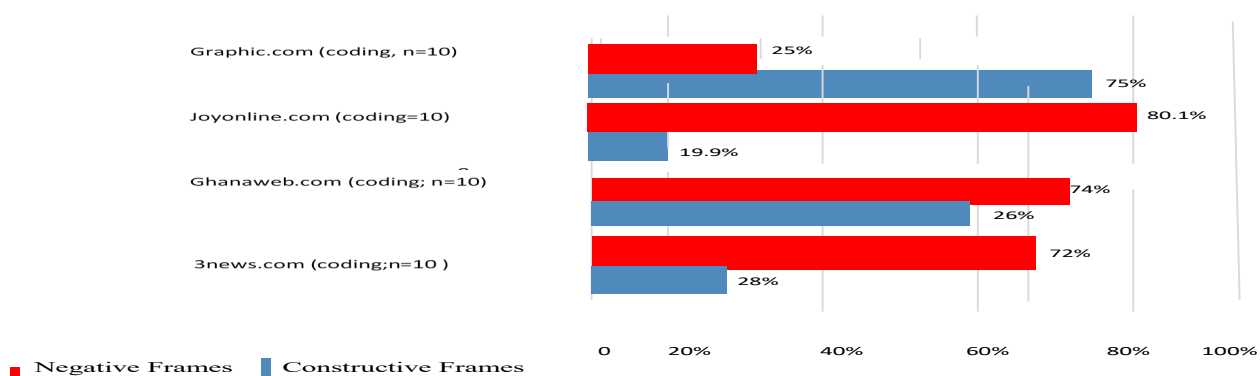


Figure 3: Dominant news portals that used Constructive/Negative frame variables (Coding frames, n=10)

Conclusion and Recommendations

The findings indicated that three out of four news portals, myjoyonline.com, ghanaweb.com, and 3news.com adapted negative frame variables like blame, conflict, sensational tones, and language on the depreciation of the cedi. Generally, the tone and angle of the frame construction of the text of the news portals showed unbalanced reportage on the post-COVID-19 depreciation of the Ghana cedi. The tone was not neutral in portraying the reality of the cedi depreciation. Our analysis shows that accurate data on depreciation, from official sources, were not used in the text. The attention was so much on how the

government was solely blamed for the currency depreciation. The findings further suggest that there were changes in frame appearance and construction at different months of the post-COVID-19 depreciation of the cedi. In a crisis, news reportage in the media relay on the constructive frame which is aimed at showing concern, a solidarity which is aimed at persuasion, and solution-oriented journalism., this study has critically analysed framed construction approach of news portals. In a nutshell, this study suggests possible ways of improving fair journalism practice, especially in a crisis. The study also recommends that the National Media Commission (NMC) implements strict monitoring compliance for online digital content creation during crisis communication.

Session 12: Marketing in Periods of Economic Crisis

Chair(s): Dr. George Agbemabiese & Mr. John Paul Kosiba

USING SOCIAL PRESENCE THEORY TO PREDICT ONLINE CONSUMER ENGAGEMENT IN THE EMERGING MARKETS

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Abstract

The purpose of this paper is to contribute to the dimension of online consumer engagement in the emerging markets. The study is based on the social presence theory (SPT) factors. The study evaluated 443 data sets obtained through a standardised Qualtrics online survey to examine social presence theory to predict online consumer engagement in the emerging markets. The study employed AMOS v24 with the covariance-based structural equation modelling (CB-SEM) technique to investigate the relationship between social context, online communication, interactivity, privacy and online consumer engagement. The study also assessed social gratification as a mediator in the relationship between online communication and online consumer engagement. Furthermore, the study evaluated technology gratification as a moderator of interaction effect in the relationship between online communication and online consumer engagement. The study results showed that the effect of social context was not significant. In contrast, the effects of online communication, interactivity, and privacy towards online consumer engagement were significant. The social gratification as a mediator and technology gratification as a moderator were significant towards online consumer engagement. This paper is pioneering in that, it generates the effects of social presence factors and some intervening variables in the context of online consumer engagement in the emerging markets at the micro-level. This area is relevant to scholars, marketing and brand practitioners in digital consumer social behaviour.

Keywords: Social presence theory, Online consumer engagement, Emerging markets, Ghana

COST-EFFECTIVE MARKETING STRATEGIES: THE CASE OF MICRO, SMALL AND MEDIUM ENTERPRISES (MSMEs)

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Introduction

According to the definition of the National Board for small-scale industries, micro, small and medium-sized businesses, Ghana employs at most 29 employees. Micro- and small- and medium-sized businesses gain importance in contemporary economies as they provide a more significant proportion of employment and employ people (Yesmin et al., 2021). Given their limited cash flows, resources, and size, small businesses are the hardest-hit segment of the economy.

In addition to a lack of workers and a decline in cash reserves, micro small- and medium-sized enterprises suffer daily income losses due to supply chain disruptions caused by the closure of supporting sectors (Rwigema, 2020). Creative strategies, such as cost-effective marketing strategies, should be implemented by entrepreneurs in order to keep up with business and operations.

Cost-effective marketing strategies are crucial for Micro, Small and Medium Enterprises (MSMEs) during crises, as they often operate with limited resources and budgets. This abstract explores the strategies that MSMEs can implement to keep their businesses afloat and maintain their customer base despite financial and market uncertainties. These strategies include leveraging digital marketing, building a brand reputation through customer engagement, and creating partnerships with other businesses. Furthermore, MSMEs can also benefit from government support and incentives. By implementing cost-effective marketing strategies, MSMEs can maintain their competitiveness and increase their resilience in the face of economic challenges. The abstract first identifies MSMEs' crisis-related marketing challenges. Second, to assess MSMEs' crisis marketing strategies' cost-effectiveness and efficiency. Finally, to assess MSMEs' competitiveness and resilience with cost-effective marketing strategies.

Methodology

Economic slowdown due to crises is an unprecedented phenomenon; hence to understand the unique barriers and opportunities, a qualitative approach will be used after the quantitative method to cover the gap between impediments and solutions available in the literature.

A mixed-method approach will be adopted. This approach combines qualitative and quantitative research methods. Using a mixed-methods approach, the study

will comprehensively understand the cost-effective marketing strategies that MSMEs can implement during crises and the challenges they face in implementing these strategies (Creswell, 2014; Sekaran & Bougie, 2016).

Surveys and questionnaires will be distributed among MSMEs to collect quantitative data on their practices, challenges and implementation of cost-effective marketing strategies during crises. The questionnaire will be adopted from existing literature using a 5-point Likert scale.

In-depth interviews will be collected with owners of the business and experts to gain a deeper understanding of the challenges and opportunities during crises. The research questions are as follows:

R1: What are the significant barriers faced by firms during crises?

R2: what strategies are adopted by firms during crises to overcome the burden?

The collected surveys and in-depth interview data will be analysed using statistical tools SPSS 26 and AMOS 26 software packages and qualitative data analysis methods (transcription and thematic analysis).

Findings/Results

This study's findings will strengthen the competitiveness and resilience of MSMEs by adding to the existing strategic marketing literature on cost-effective marketing strategies for MSMEs during economic downturns.

The survey results will reveal the common challenges that MSMEs face during crisis periods and the impact these challenges have on their marketing efforts. It will also highlight the most popular cost-effective marketing strategies that MSMEs use during crises.

The survey results will provide insights into the level of government support that MSMEs receive during the crisis period and their impact on marketing efforts. Finally offer, recommendations will be provided for MSMEs on how they can improve their cost-effective marketing strategies during crises.

Future Recommendations

The future recommendations will provide practical and actionable guidance for MSMEs to improve their cost-effective marketing strategies during periods of crises, helping them maintain their competitiveness and increase their resilience in the face of economic challenges.

Keywords: Micro, small medium enterprises (MSMEs), Cost-effective Marketing strategy, economic crises

CONSUMER BEHAVIOUR IN TIMES OF ECONOMIC CRISIS: THE INFLUENCE OF CONSUMER ETHNOCENTRISM

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Abstract

Purpose: The purpose of this paper is to deepen understanding on consumer ethnocentric behaviour in times of economic crisis.

Methodology: A model is proposed from extant literature to suggest the influence of consumer perception of economic crisis, and consumer domestic product responsibility on consumer ethnocentric intent during economic crisis with product category moderating the influences. Using a survey design approach, data was collected from some 307 respondents and examined through structural equation modelling using Amos 26.0 software.

Findings: Results suggest that consumer perception of economic crisis, and consumer domestic product responsibility strongly influence consumer ethnocentric intent during economic crisis. The findings also indicate that product-specific ethnocentric behaviour enhanced consumer ethnocentric intent during economic crisis.

Research limitations: The convenience sampling approach limits the generalization of the research findings. The study focused on respondents preferred product category and this limits the study findings.

Practical implications: The study illustrates the need for managers to recognize consumer ethnocentrism as a psycho-social construct with relevance to individual level personality systems that can be employed as an effective marketing strategy.

Originality/value: The empirical validation of the research model provides novel outlook of consumer ethnocentric behaviour during economic crisis.

Keywords: Consumer behaviour, Consumer ethnocentrism, Economic crisis, Domestic products

Introduction

Consumer purchase behaviour has assumed critical importance in many countries (Birch et al, 2018) particularly given the tremendous growth of the global marketplace in recent decades. For instance, Bizumic (2019) argues that

consumers in many developing countries are often reminded by their nations and domestic business organizations of their civic duty to purchase domestic goods. In addition, Karoui and Khemakhem (2019) argue that some consumers are more conscientious about their purchase decisions; for some these are grounded on moral considerations, for others, the consideration is the impact of their purchase on other individuals within the society. These sensitivities of consumers influence their perceptions regarding domestic and foreign products.

Consequently, these perceptions influence consumer self-concept and consumer identities in purchase consideration in many economies. Accordingly, Siamagka and Balabanis (2015) point out that ethnocentric consumers are guided by economic motives when choosing domestic products and that consumer ethnocentrism serves as a self-defence reflex of domestic economy during crisis. Thus, countries explore opportunities in domestic production and consumption to revive economies and to sustain economic growth (Karoui & Khemakhem, 2019). It is thus logical to expect consumer perception of economic crisis and consumers' domestic product responsibility to strengthen ethnocentric intent.

The concept of ethnocentrism and its measures were conceived in developed countries, where research showed that consumers have more positive attitudes towards domestic products (Kibret & Shukla, 2021). However, consumers in developing countries seem to prefer foreign products and tend to identify with global consumers (Karoui & Khemakhem, 2019). Consequently, the need to promote domestic production and consumption capacities to strengthen vulnerable developing economies is paramount (Karoui & Khemakhem, 2019). Furthermore, Gómez-Díaz (2021) admits that the survival of developing countries is even important for the global market.

In line with this, the research takes a quantitative survey to explore the influence of consumer perception of economic crisis (CPEC), and consumers' domestic product responsibility (CDPR) on consumer ethnocentric intent in times of economic crisis (CET) to achieve the following objectives: first, to examine the influence of CPEC, and CDPR on the consumer ethnocentric intent during economic crisis. Second, to investigate the moderation effects of product category (PDT). The conceptualized model below (fig.1) was used to undertake the study.

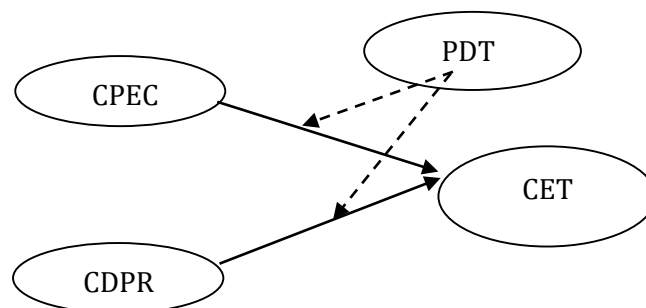


Fig.1: Influences on consumer ethnocentrism (CET)

Methodology

Following a quantitative research approach, a survey design was used in this study to better understand consumer ethnocentrism in crisis times and to test the hypothesized model (fig. 1). The survey instrument consists of a set of formalized standard questions and predetermined response options designed to solicit information from voluntary participants and this was considered appropriate to obtain measurable and objective data from the respondents and to help achieve the defined objectives of the study (Babbie, 2020). Prior to the main study, a pilot test with 20 respondents from the population of interest was conducted. A preliminary analysis of the pilot study satisfied the content validity and reliability of the data (Cronbach's $\alpha > 0.7$). In the substantive study, respondents were intercepted at some shopping malls in Accra, and after the purpose of the study was explained to them, willing participants were interviewed. Out of 350 questionnaires delivered, 327 were found useable (about 93% response rate) following comprehensive screening of completed questionnaires.

Findings/Results

In respect of respondents' profile, there were 54.0% males and 46.0% females. Most respondents (cumulatively 69%) were within the age range of 30 to 50 years, and about 31% of the respondents were under 30 years. Most respondents (about 75%) had up to university degree level and beyond (graduate and post-graduate), with about 6% having professional educational qualifications and up to 19% high school and higher national diploma levels (SHS & HND).

Preliminary analysis of these results suggests the scale items were appropriate for the study; using SPSS and Amos 26.0 software, skewness and kurtosis of the data range from -0.78 to -0.39, and -1.25 to 0.88 respectively. Further, there were significant standard loading of the items from each construct and so no item was dropped. To confirm the data's convergent validity, the composite reliability (CR) and average variance extracted (AVE) both had acceptable values (CR > 0.7; AVE > 0.5) (Fornell & Larcker, 1981). Additionally, the Cronbach alpha values of each construct demonstrate strong reliability (Cronbach's $\alpha > 0.7$).

Direct effect analysis

The results show that consumer perception of economic crisis ($\beta = 0.61$, $t = 6.39$, $p < 0.05$), and consumers' domestic product responsibility ($\beta = 0.60$, $t = 6.36$, $p < 0.05$) have significant positive association with consumer ethnocentric intent.

Moderation effect analysis

In line with established statistical practice (Ranaweera & Jayawardhena, 2014), moderation analysis was done. The results show that product categories significantly enhanced the predictive effect of consumer perception of economic crisis ($\beta = 0.63$, $t = 6.40$, $p < 0.05$) and consumers' domestic product responsibility ($\beta = 0.61$, $t = 6.38$, $p < 0.05$) on consumer ethnocentric intent.

Conclusions

The results show that changes in the market triggered by the economic crisis do influence consumer behaviour. The results affirm that consumers' perception of economic crisis and their domestic product responsibility influenced their ethnocentric intent. Furthermore, consumers affirmed that product categories enhanced their ethnocentric intent. These results expand the assertions of Karoui and Khemakhem (2019) and Siamagka and Balabanis (2015) on variables that influence consumer ethnocentric intents.

Respondents indicated their preferred product categories which means that some other products may negate the findings. From a practical point of view, managers can elicit favourable reactions in customers by subtly influencing targeted identities to enhance consumer purchase of domestic products. This study recommends that managers tap into the favourable consumer reactions to the economic crisis to attempt to institutionalize consumer preference for domestic products.

Session 13: Marketing in Periods of Economic Crisis

Chair(s): Dr. Juliana Akushika Andoh & Dr. Eric Boakye Yiadom

EXPLORING MARKET INTANGIBLES: ASSESSING SERVICE EMPLOYEES' INCLINATION TO BRAND CITIZENSHIP BEHAVIOR AS A COMPETITIVE TOOL IN TIMES OF ECONOMIC CRISIS?

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Abstract

Purpose: The purpose of this paper is to explore the intangible benefits of brand citizenship behaviour to service firm competitiveness in times of economic crisis.

Methodology: A model is proposed from extant literature to suggest the influence of organizational socialization on brand citizenship behaviour. Further, the model suggests moderation influence of brand love. Using a survey design approach, data was collected from some 268 respondents and examined through structural equation modelling using Amos 26.0 software.

Findings: Results suggest that organizational socialization significantly influence brand citizenship behaviour. The findings also indicate that varying degrees of brand love significantly moderate the impact of organizational socialization on brand citizenship behaviour.

Research limitations: The convenience sampling approach limits the generalization of the research findings.

Practical implications: In terms of managerial contributions, service organizations can effectively customize their organizational socialization as well as extending brand love to employees and other stakeholders which, in turn, enable them to work as 'brand ambassadors' towards the success of the organization. Additionally, organizations will better understand employee tenure in motivating employees to work beyond their normal duties for the brand's best interest.

Originality/value: The empirical validation of the research model provides novel outlook of brand citizenship behaviour. The study enriches existing literature of Organizational Socialization by identifying its direct importance in the formation of Brand Citizenship Behaviour, and also the moderation influence of brand love.

Keywords: Brand citizenship behaviour, Organizational socialization, Brand love

Paper type: Research paper (extended abstract)

Introduction (purpose/aim & background)

The concept of market intangibles has become fundamental performance drivers for service organizations in providing the personal connection to service brands (Pecot, 2022). A strong brand differentiates service offerings, increases customer trust and reduces perceived financial, social and safety risks (Beverland & Cankurtaran, 2022), attributes that become more relevant in times of economic crisis. To build a strong brand for the organization, service employees are encouraged to live beyond the brand's promise (Hoang et al, 2022). Such brand-related extra-role behaviours are viewed as brand citizenship behaviour (BCB).

Given the ubiquity of consumer choice, marketers are encouraged to find ways to make employees good ambassadors of the brand. In this regard, brand citizenship behaviour (BCB), the discretionary individual behaviour not directly or explicitly recognized by the formal reward system, is acknowledged to promote the effective functioning of the brand in aggregate (Hoang et al, 2022). In order to engender employee BCB, Liao et al (2022) have recognized the importance of organizational socialization to providing employees with committed relationships with brands. Organizational socialization facilitate the process of employee adjustment to enable an individual assume appropriate organizational role (Wagner & Hollenbeck, 2020) and this fosters employees living the brand, strengthening favourable attitudes towards the brand and thereby shaping appropriate employee behaviour to represent the brand. Additionally, scholars (Gumparathi & Patra, 2020) recognize the importance of employee brand love, which provides employees with intimate and passionate relationships with brands. Brand love represents the employees' affective and emotional attachment towards a brand that builds sustainable relationship with their consumers (Gumparathi & Patra, 2020). Employees' emotional attachment with a brand promote positive behaviour in respect to the brand.

In this research, we argue that Organizational Socialization influence BCB (Liao et al, 2022). In other words, employees recognize the meaningfulness and relevance of the brand through organizational socialization to 'live the brand' and for the efficient delivery of the brand promise. Additionally, we argue that employees with positive emotion (i.e., brand love) are more likely to moderate the relationship between organizational socialization and BCB as a means of maintaining or extending their good feelings towards the brand. These achieve the study objective of examining the influence of Organizational Socialization on BCB and also the moderating influence of brand love.

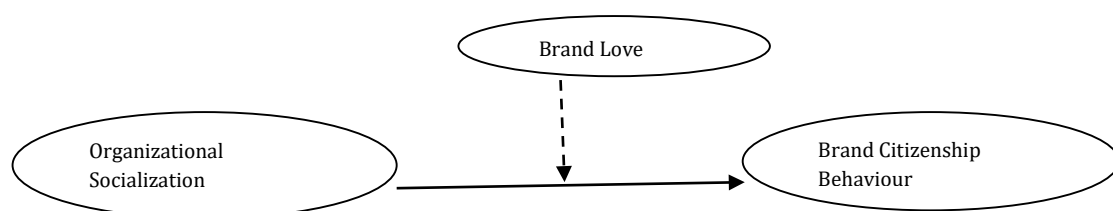


Fig.1: Antecedents of Brand Citizenship Behaviour

Methodology

Using a quantitative survey design approach to better understand brand citizenship behaviour and to test the hypothesized model (fig. 1), the study used a standard survey instrument designed to solicit information from voluntary participants to obtain measurable and objective data from the respondents and to help achieve the defined objectives of the study (Babbie, 2020). Prior to the main study, a pilot test with 10 respondents from the population of interest was conducted and it satisfied the content validity and reliability of the data (Cronbach's $\alpha > 0.7$). In the substantive study, service employees were intercepted at their various organizations in Accra, and after the purpose of the study was explained to them, willing participants were interviewed. Of the 300 responses received, 268 (89%) were found useable following comprehensive screening of completed questionnaires.

Findings/Results

In respect of respondents' profile, there were 69.0% males and 31.0% females. Most respondents (cumulatively 63%) were within the age range of 30 to 50 years, and about 37% of the respondents were between 30 and 25 years. Most respondents (about 70%) had up to university degree level, and about 30%, professional educational qualifications. About 54% of respondents have worked as employees for between 5 and 10 years and about 46% have worked for less than 5 years. About 16% of respondents were senior managers and 84% middle level employees.

Preliminary analysis of these results suggests the scale items were appropriate for the study; using SPSS and Amos 26.0 software, skewness and kurtosis of the data range from -0.75 to -0.34, and -1.23 to 0.78 respectively. Further, standard loadings of the items from each construct were significant and so no item was dropped. To confirm the data's convergent validity, the composite reliability (CR) and average variance extracted (AVE) both had acceptable values (CR > 0.7; AVE > 0.5) (Fornell & Larcker, 1981). Additionally, the Cronbach alpha values of each construct demonstrate strong reliability (Cronbach's $\alpha > 0.7$).

Direct effect analysis

Using Amos 26, the results reveal that organizational socialization ($\beta = 0.71, t = 9.36, p < 0.05$) has a significant positive association with brand citizenship behaviour.

Moderation effect analysis

In line with established statistical practice (Ranaweera & Jayawardhena, 2014), moderation analysis was done. The results show that brand love significantly enhanced the predictive effect of organizational socialization on brand citizenship behaviour ($\beta = 0.80, t = 9.65, p < 0.05$). Further simple slope tests reveal that for employees with low brand love, moderation is weak ($\beta = 0.82, p < 0.05$) and significantly stronger for individuals with moderate ($\beta = 0.85, p < 0.05$) to high brand love ($\beta = 0.88, p < 0.05$).

Conclusions

The results show that organizational socialization significantly influence brand citizenship behaviour in many service organizations. This is further enhanced at varying degrees by employee brand love.

From a practical point of view, service organizations must customize their organizational socialization and encourage employees to exhibit brand love, turn them to 'brand ambassadors' who work beyond their normal duties for the brand's best interest. The study recommends that service organizations inculcate brand citizenship behaviour as an inexpensive characteristic in times of economic crisis.

UNDERSTANDING CUSTOMER SATISFACTION, CUSTOMER TRUST, AND SUBJECTIVE WELL-BEING IN GHANA'S RIDE-SHARING ECONOMY

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Abstract

This paper examines the factors that drive customer satisfaction experience in the use of ride-sharing services. The study also looks at customer trust and well-being that results from the experience. The stimulus-organism-response theory was used as the framework for the study to investigate the effect of system availability, competency, consistency, privacy, and self-efficacy on customer satisfaction with the experience of the ride-hailing service.

Quantitative research was conducted via an online survey hosted on Qualtrics. A total number of 308 valid data was collected and analysed using IBM SPSS 20 and SMART PLS 4.0

The findings of this study show that competency and self-efficacy are key factors that contribute to customer satisfaction experience with ride-share app services. The study also shows that customer satisfaction experience has a significant positive relationship with customer trust and a negative relationship with the subjective well-being of the customer.

Regarding the effects of customer satisfaction `experience on subjective well-being, future studies might consider additional constructs such as the utilitarian, social, and hedonic aspects of ridesharing services to determine their effect on the customer well-being

Keywords: customer well-being, customer trust, customer satisfaction with the experience, ride-sharing services, stimulus organism response theory.

Introduction

The purpose of this paper is to examine the factors that drive customer satisfaction, customer trust, and subjective well-being in the ride-sharing economy of Ghana. Uber was launched in Ghana as the first ride-sharing app, in June 2016, it started in Accra and has since extended to many regions of Ghana.

There are at the moment several ride-sharing apps on the Ghanaian market namely: Uber, Yango, Bolt, Taxify, Dropyn, etc. With competition comes increased customer choices and assessment of services. Existing literature posits that the future of the sharing economy now rests within the developing and emerging countries that are faced with pressing socio-economic challenges, environmental challenges, wealth, gender inequality, climate resilience, and tumbling public transportation infrastructure (Soltysova & Modrak, 2020). Ridesharing currently is far from ubiquitous, in other words, it is still evolving and is therefore not available in some parts of the world (Alharthi et al., 2021). Most existing studies only focused on examining participation in virtual environments and measured people's intentions to participate in this sharing economy (Boateng et al., 2019). In addition, most research publications have been conducted from the Western perspective with less attention paid to emerging and developing countries. Existing research posits that developing markets provide a strong launchpad for sharing economy services (Wallenstein & Shelat, 2017). (Boateng et al., 2019) focused their study on the ride ride-sharing economy in Ghana and on factors that determine the actual consumer participation, and usage patterns and then identified the economic and socio-emotional dimensions of the use of ride-sharing services. The ride-sharing economy in Ghana is gaining popularity and has seen growth, it is time to investigate the customer's satisfaction with the experience to provide insight to scholars and help service providers to implement programs and policies that will improve the customer's satisfaction with the experience. Past research has also pointed to the need to understand the user behaviour and well-being of users of sharing economy services (Alharthi et al., 2021).

In response to this, the study addresses the gap by proposing a conceptual model based on the Stimulus Organism Response (S-O-R) theory. The proposed model suggests that customer satisfaction with the experience of using ride-sharing services is influenced by five factors: system availability, privacy, competence, consistency, and self-efficacy. The model also suggests that customer satisfaction with the experience will positively affect customer trust and customer subjective well-being.

Methodology

Participants and Procedures

Potential participants for this study were Ghanaian consumers who use ride-sharing app services in Ghana. To collect the data a standardized survey was created and hosted on Qualtrics ([http:// www.qualtrics.com](http://www.qualtrics.com)) and the link was distributed through WhatsApp. The participants were briefly informed about the objective of the survey. The profile of target sample was persons aged 18 and above who could share information on at least one ride-sharing app operating in Ghana. The convenience sampling technique was employed for this research due to the limited time and resources of the study. Data were analysed using IBM SPSS 20 and SMART PLS 4.0

Findings

Factors like consistency, privacy, and system availability are system driven and the results from this study indicate that once the technological aspect of the service is achieved, customers begin to focus on the experience in the request and use of the service. The study also revealed that customer satisfaction with the experience positively influenced customer trust but did not significantly influence the subjective well-being of the customer.

Conclusion

This study makes theoretical contributions to the stimulus organism theory (S-O-R) and shows how robust the theory is. This is evident in the possibility offered by the theory as it made it possible to add on constructs/factors that could help give further understanding to the drivers of customer satisfaction, customer trust, and subjective well-being in the ride-sharing sector of Ghana. The first contribution to the body of literature on ride-sharing app services is that customers value competency (i.e. ability to pick them up on time, get them to their destination on time, and also good car conditions). In addition, customers look forward to easy navigation and use of ride-share apps described in this study as self-efficacy. These two factors: Competency and Self-efficacy stand out in the study as factors that contribute to customer satisfaction with the experience of using ride-share app services. Regarding the effects of customer satisfaction with the experience on subjective well-being, future studies might consider additional constructs such as the utilitarian, social, and hedonic aspects of ridesharing services to determine their effect on customer well-being. Comparative studies of two different cultural backgrounds and socioeconomic differences, such as developed and developing countries, could provide better insight into customer behaviour regarding shared services. Also, future studies on driver well-being and motivation for participating in ridesharing should be examined for both developed and developing countries (Shaikh et al., 2019).

IMPACT OF ECONOMIC CRISIS ON CONSUMER FOOD CHOICES

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Abstract

Purpose: This study focuses on understanding consumer's food buying behaviour in times of economic crisis

Methodology: A model is proposed from literature to suggest the influence of price and quality of food on consumer food choice during periods of economic crisis with some socio-demographic characteristics moderating the influences. Using a survey design approach, data was collected from some 397 respondents and examined through structural equation modelling using Amos 26.0 software.

Findings: Results suggest that prices of food as well as quality of food influence consumer food choice during economic crisis. The findings also indicate that demographic characteristics such as age and income levels have moderating influence on consumer food choice.

Research limitations: The convenience sampling approach used in this study limits the generalization of the research findings. The study did not focus on specific food category, and this also limits the study findings.

Practical implications: The study illustrates the need for managers to recognize relevant socio-demographic characteristics to enhance their marketing strategy in periods of economic crisis.

Originality/value: The empirical validation of the research model provides novel outlook of consumer food choice behaviour during economic crisis.

Keywords: Consumer behaviour, Economic crisis, Food choice

Introduction

For consumers, food is a critical contributor to physical wellbeing through provision of nutrients, a major source of pleasure, a major occupant of waking time and, across the world, the single greatest category of expenditures (Fieldhouse, 2013). The food sector includes primary producers, food manufacturers and processors, retailers and food vendors. Every consumer wants good value for money in the market and in periods of economic crisis, consumer behaviour is described by consumption smoothing at various levels (Ganong et al, 2020). Consumers redefine what they consider as "necessities" and what they consider as "luxuries" and may not be willing to pay more for products that can be replaced by cheaper ones.

An economic crisis is a shock to consumers in the form of fall in incomes and influence on consumption (Ceylan & Kirgiz, 2020). This results in a disruption in the lifestyle and buying pattern of consumers affecting the psychology and expectations of all consumers. The uncertainty of economic crisis leads to a reduction in consumption, particularly in the consumption of discretionary goods (Ceylan & Kirgiz, 2020).

Food consumption is influenced by several factors such as economic factors, socio-demographic characteristics, preferences and attitudes, food availability and choice (Fieldhouse, 2013), however, during economic crisis, Blitz et al (2019) shows that consumer decisions are based mainly on prices; consumer purchase fewer products, replace luxury purchases with more economic ones and make purchases of selected products that fulfil mostly basic needs.

In the light of the above, this study conducts a quantitative survey to assess the influence of price and quality on consumer food preferences (CFP) in times of economic crisis and further explores the moderation influence of socio-demographic characteristics (SDC) of consumers (fig.1) to achieve the following objectives: first, to assess the influences of price and quality on consumer food choices. Second, to assess the moderation effects of some consumer socio-demographic characteristics.

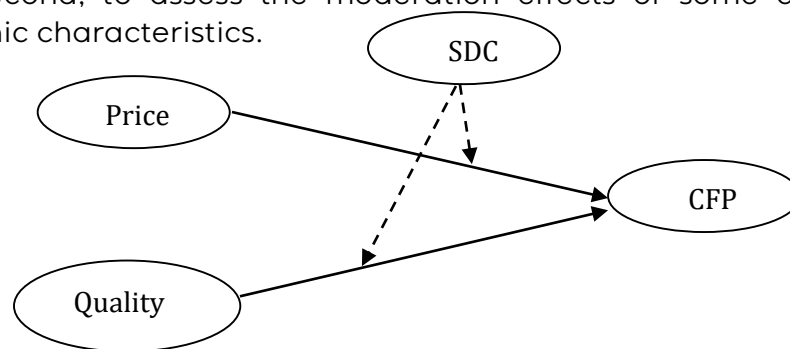


Fig. 1: Factors influencing consumer food preferences

Methodology

Using a quantitative research approach, a standard survey design was adopted in this study to better understand consumer's food buying behaviour in times of economic crisis and to test the hypothesized model (fig. 1) to obtain measurable and objective data from the respondents and to help achieve the defined objectives of the study (Babbie, 2020). Prior to the main study, a pilot test with 15 respondents from the population of interest was conducted. A preliminary analysis of the pilot study satisfied the content validity and reliability of the data (Cronbach's $\alpha > 0.7$). In the substantive study, respondents were intercepted at some shopping malls in Accra, and after the purpose of the study was explained to them, willing participants were interviewed. Out of 420 questionnaires delivered, 397 were found useable (about 94% response rate) following comprehensive screening of completed questionnaires.

Findings/Results

In respect of respondents' profile, there were 55.0% males and 45.0% females. Majority of the respondents (cumulatively 61%) were within the age range of 30 to 50 years, and about 39% of the respondents were under 30 years. Most respondents (about 75%) had up to university degree level and beyond (graduate and post-graduate), with about 25% having professional educational qualifications. About 57% of the respondents were married and 43% single. About 28% of respondents had monthly salaries up to GHC 2,000, with some 38% between GHC2, 000 and GHC5, 000. About 34% had beyond GHC5, 000.

Preliminary analysis of these results suggests the scale items were appropriate for the study; using SPSS and Amos 26.0 software, skewness and kurtosis of the data range from -0.80 to -0.37, and -1.27 to 0.89 respectively. Further, there were significant standard loading of the items from each construct and so no item was dropped. To confirm the data's convergent validity, the composite reliability (CR) and average variance extracted (AVE) both had acceptable values (CR > 0.7; AVE > 0.5) (Fornell & Larcker, 1981). Additionally, the Cronbach alpha values of each construct demonstrate strong reliability (Cronbach's $\alpha > 0.7$).

Direct effect analysis

The hypothesized assumptions were significant. For instance, food prices determine consumer food choices ($\beta = 0.44$, $t = 7.80$, $p < 0.05$), and similarly, the quality of food influence food choices ($\beta = 0.38$, $t = 6.74$, $p < 0.05$).

Moderation effect analysis

In line with established statistical practice (Ranaweera & Jayawardhena, 2014), moderation analysis was done, and the results showed mixed and varying moderation relationships. Using these four socio-demographic characteristics (Age, Education, Income and Marital), the interactions between Educational level and price had no significant effect on food choice ($\beta = -0.31$, $t = 4.63$, $p > 0.05$), same applied to educational level and quality on food choice ($\beta = -0.28$, $t = 3.36$, $p > 0.05$). Similarly, interactions between marital status and price had no significant effect on food choice ($\beta = -0.43$, $t = 1.63$, $p > 0.05$), same applied to marital status and quality on food choice ($\beta = -0.16$, $t = 5.63$, $p > 0.05$). However, Age and Income had significant interaction with price on consumer food choice, ($\beta = 0.26$, $t = 4.63$, $p < 0.05$) and ($\beta = 0.28$, $t = 4.68$, $p < 0.05$) respectively. Likewise, Age and Income had significant interaction with quality on consumer food choice, ($\beta = 0.56$, $t = 8.13$, $p < 0.05$) and ($\beta = 0.62$, $t = 5.36$, $p < 0.05$) respectively. Additionally, simple slope tests revealed that for high income individuals, price did not significantly predict food choice ($\beta = 0.12$, $p > 0.05$), but for moderate ($\beta = 0.30$, $p < 0.05$) and low ($\beta = 0.35$, $p < 0.05$) income individuals' price significantly predict food choice. In respect of quality, high income levels significantly influenced food choice ($\beta = 0.66$, $p < 0.05$) and this becomes weaker with moderate ($\beta = 0.64$, $p < 0.05$) and low-income persons ($\beta = 0.63$, $p < 0.05$). For persons in low age groups, quality significantly predict food choice ($\beta = 0.60$, $p < 0.05$) and the prediction becomes weaker with increasing age, thus ($\beta = 0.58$, $p < 0.05$) and ($\beta = 0.57$, $p < 0.05$) respectively.

Conclusions

The results show that changes in prices and quality of food occasioned by economic crisis influence consumer food choices. Further, some socio-demographic characteristics such as age and income levels have a moderation influence on consumer food choices (Fieldhouse, 2013). These underscore some level of rational food choices during turbulent economic times.

From a practical point of view, managers can adjust their stock levels of various categories of food items to optimize sales opportunities in times of economic crisis. This study recommends that managers elicit favourable consumer reactions during times of economic crisis by undertaking relevant trade promotional activities.

Session 14: Empowering SMEs to Support Economic Structural Change

Chair(s): Dr. Alexander Preko & Dr. Godwin Musah

SME SURVIVAL IN ECONOMIC CRISIS: IN PERSPECTIVE OF GHANAIAN SMES

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Abstract

Small and medium-sized enterprises in both business-to-business and consumer markets are particularly vulnerable to economic down. Economic globalization has created many challenges for small and medium enterprises (SMEs) due to the rapid increase in competition. Therefore, the downfall rate of SMEs is relatively high, a short period after their commencement. Accordingly, SMEs need to adopt survival strategies and strategic methods to succeed in confronting the various global challenges faced by the SME sector. The study critically examines SME survival in the economic crisis from the Ghanaian perspective. The study adopted a quantitative approach where 100 SMEs were selected for the study. The study relied on simple random sampling techniques to sample these SMEs. The study employed questionnaires as the research instrument to collect data from respondents. SPSS and Ms excel were used as the analytical tools where descriptive and inferential statistics were deployed. The results of the study showed factors that lead to SME survival namely, cost reduction, financial management, loyal customers, export, and no loans, among others. The study also recommends management should focus on the personality aspects to encourage managers to take control of and/or reinforce some of the characteristics that have a positive effect on the performance and survival of their business endeavours.

Keywords:

Small and medium-sized enterprises, Economic Crisis, Survival

Introduction

Small and Medium Sized Enterprises (SMEs) in periods of prolonged economic crisis may suffer disproportionately from economic downturns, because of their limited financial resources and dependence on banks' lending, paying such high-

interest rates (Bourletidis & Triantafyllopoulos, 2014). Adding to the financial aspect, their relative shortcomings in terms of technological, managerial, and human capabilities may reduce their capacity to overcome the economic crisis. On the other hand, their greater dependence on (fewer) customers and suppliers may lead to increased difficulties in maintaining their activity in the face of the crisis.

Economic globalization has created many challenges for small and medium enterprises (SMEs) due to the rapid increase in competition (Naradda Gamage et al., 2020). Therefore, the downfall rate of SMEs is relatively high, a short period after their commencement. Accordingly, SMEs need to adopt survival strategies and strategic methods to succeed in confronting the various global challenges faced by the SME sector.

Small and medium-sized businesses (SMEs) are essential to many worldwide economies. SMEs are viewed as the economic, job creation, and human development engine of the world, particularly in emerging nations (Appiah et al., 2018; Ombongi & Long, 2018). According to Fjose et al. (2010) and Kamunge et al. (2014), SMEs make up more than 90% of all firms and provide almost 50% of the continent's GDP. More than 95% of businesses in the Sub-Saharan Africa region are SMEs (Fjose et al., 2010).

SMEs play a larger role in Ghana than in other countries, where they make up 92% of formal enterprises, account for 70% of GDP, and provide over 85% of all jobs for Ghanaians (GSS, 2022; Quartey, Turkson, Abor, & Iddrisu, 2017). Agyapong (2010) contends that SMEs are crucial to Ghana's efforts to reduce poverty. Small businesses contribute to the creation of jobs that raise the income of individuals, particularly in cities and villages. Amoah and Amoah (2018) assert that the employment opportunities provided by the industry enhance people's well-being, standards of living, income levels, and social stability. The sector also aids in the utilization of resources, such as undesired raw materials that would not provide significant export revenue for the nation.

Small and medium-scale enterprises (SME) are significant contributors to the development efforts of developing nations like Ghana. Yet their high failure rate continues to intrigue academics, policymakers, SME owners, and managers. Scholars have used many approaches and their associated theories to understand the phenomenon (Ahmad et al., 2020). Despite the important role that SMEs play, they have faced a variety of difficulties, including a lack of financial support, weak management skills (Adam & Alarifi, 2021); lack of sufficient information and proper record keeping (Aladejebi & Oladimeji, 2019); investment in technologies and human resources (Weaven et al., 2021).

Small and medium enterprises in Ghana survival rate are only 60% beyond 5 years of operation (Peprah et al., 2016). Access to and use of new technologies and market information and access to credit from the banking sector is relentlessly restricted. This alarming rate of business failure or, better still, the stagnation of SMEs growth gives the Ghanaian economy reason for concern; there is therefore an urgent need for research on the survival of SMEs in economic crisis and to propose strategies to survive the economic crisis.

Methodology

The study used a quantitative approach in the collection of data for the study. This is because Tuffour et al. (2022) used a quantitative approach to sample respondents for a survey on the financial literacy of managers of SME's in Madina. The study also adopted a cross-sectional survey design. The choice of a survey design was to provide a quantitative description of trends, attitudes, or opinions of the managers of small-scale businesses. The study employed a simple random sampling technique. This gives the researcher the opportunity to randomly select participants (SMEs) for the study. Also, a sample of one hundred (100) respondents (SMEs) were sampled for the study. The components of sample respondents were SMEs that have been in operation for the past five (5) years and beyond. This sample was selected because the study wanted SMEs that have been in operation for a long to witness the various phases of the global economic crisis as well as the domestic economic crisis. The questionnaire was based on five (5) point-Likert scales which were structured questionnaires. Data for the study were sourced from both primary and secondary sources which are the self-administering of a research survey instrument (Questionnaire), and data from journals, conference papers, etc. SPSS version 21.0 was employed for descriptive statistics analysis, while correlation and regression analysis were used to run to determine the relationship between SMEs' survival and economic crisis. The first meaning of survival (operations dimension) captures the continuation or cessation of a company's activity in a given market environment, as well as being the dimension that drives the definition of firm death or failure more prevalent in the management literature, particularly regarding undiversified firms (Josefy et al., 2017). These authors observe that scholars have studied operationalized survival with various measures of mortality such as market exit, bankruptcy, or discontinuation of operations, rather than measures such as the number of years a company survived after a baseline or the overall lifespan of a firm.

Results/Findings

Table 1: Reasons and Tactics that led to survival of SMEs

Reasons that led to survival (ranking)	Tactics that led to survival (ranking)
1 Cost Reduction	Cost Reduction
2 Industry	Price Reduction
3 Hard work	New partners/Suppliers
4 Export	Export
5 Price reduction	Downsizing
6 No loans	New Products
7 Family Business	Expense Reduction
8 Financial Management	Salary reduction
9 Loyal Customers	Industry
10 Good management	Financial Management

11	Experience	Loyal Customers
12	Expense Reduction	Better Quality
13	Downsizing	New Markets
14	Salary Reduction	No Loans
15	New Product	Good management
16	Accounting liquidity	Hard Work
17	Better Quality	Family Business
18	New Partners	
19	Customer Selection	

Source: Survey Data, (2022)

Table 1 shows that, according to entrepreneurs, the main reasons for their firms' survival were: reduction of costs, the fact that the industry in which they operated was not affected as much as other industries, hard work, exports, reducing prices of their products and services, and avoiding taking loans. A closer look to these findings reveals that the reasons of survival can be grouped into six main factors that helped SMEs survive: downsizing (including cost reduction, expense and salary reductions, and general downsizing) was a key factor according to 36.5% of entrepreneurs, prudent financial management (including avoiding taking loans, general financial management and accounting liquidity) was mentioned by 25.3% of the entrepreneurs, extroversion (including export activity and finding new business partners) was a key factor according to 13.3% of entrepreneurs, marketing actions (through price reductions of products and services, launching new products and improving the quality of existing products) were indicated by 20.6% of entrepreneurs, industry was mentioned by 12.7% and other reasons (such as hard work, the fact that the company was a family business, the loyalty of the customers, good management, the fact that it was a well-established company that had experience and customer selection) were mentioned by 43.2% of entrepreneurs.

Regarding the ways of survival, while highly correlating with reasons for survival, there were changes in the rankings. Respondents highlighted the importance of reducing costs, dropping prices, finding new partners and suppliers, exporting, downsizing, and offering new products to the market. 'New partners/suppliers' was in the top three, while it was the 18th in the reason for survival. New products were also more important as a tactic for survival compared to reasons for survival.

These tactics that SMEs successfully employed in order to survive can be grouped into five main factors: downsizing (including cost reductions, general downsizing, expenses, and salary reductions) was mentioned as a successful tactic for survival by 64.7% of entrepreneurs, marketing actions (including dropping the price of the products and services, launching new products, and improving the quality of existing products) were indicated by 41.7% of the entrepreneurs, extroversion (including export activity, finding new business partners and spotting new markets) was a key tactic for their survival according to 32.2% of entrepreneurs, other tactics (such as enhancing the loyalty of customers, good management, hard work and stronger bonds within the family business) were mentioned by 8.4%

of entrepreneurs, financial management (through general financial management and avoiding taking loans) was indicated by 7.3% of the entrepreneurs.

Conclusion

The study showed how SMEs managed to survive while facing one of the most devastating and long-lasting economic crises. SMEs made it through challenging times by closely monitoring environmental developments, coordinating operations, intensifying efforts, improving productivity and efficiency, conducting financial management, downsizing, taking proper marketing actions, and developing new partnerships with supply channel members. It is evident that entrepreneurs with a proper set of traits, skills, strategic orientations, and tactics can weather financial storms that seem uncontrollable and can significantly improve their chances of survival.

Recommendation

Focus on the personality aspects encourages managers to take control of and/or reinforce some of the characteristics that have a positive effect on the performance and survival of their business endeavours.

Future research could investigate further the relationship between personality characteristics and strategies and tactics used to survive the crisis.

Finally, relating to the resources and capabilities of the firm, further research on strategic crisis navigation could also include employees and the interplay of their idiosyncratic traits, preferences, experiences, and goals.

ENTREPRENEURIAL INTENTIONS AND MOTIVATION AMONG UNIVERSITY BUSINESS STUDENTS IN GHANA: THE MODERATING ROLE OF ENVIRONMENTAL FACTORS

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Abstract

This paper is situated within entrepreneurship and environment discourse, more specifically assessing entrepreneurship intention and motivation, measuring the moderating role of environmental factors among university business students in Ghana. Evidence abounds that, the last two decades have seen a proliferation of scholarly works on entrepreneurial intentions and motivations among university students. However, majority of these studies have almost exclusively thematised Euro-American experiences of entrepreneurial behaviours. While such approaches have been extremely useful in exposing knowledge on entrepreneurial behaviours from the global north. The approach often misleads and obscure researchers to largely overlook the collective and inclusive ways of knowing in the field of entrepreneurial behaviours. Ironically such contextually limited empirical findings have in this way been erroneously posited as universal theoretical set of assumptions in the field of entrepreneurship study. Hence our focus on minimal entrepreneurial behavioural scholarship among university students is a critical contribution to theory development from the global south perspectives. It is against this background that the current study examined entrepreneurial intentions and motivations among university business students in Ghana. A structured questionnaire for 352 students were employed in the study. Data were analysed by means of Principal Component Analysis, descriptive statistics, Pairwise correlation and hierarchical multiple regression. The results reveal strong correlation between Entrepreneurial Motivation and intention. Estimates from the hierarchical regression using four models revealed that motivation to be an entrepreneur among university students was found to be highly influenced by the students' intention to be an entrepreneur. Inclusion of intention variable to the control variables improved the model's predictive ability by more than 34 percent. Moderating role of environmental factors such as social valuation, role models, support and barriers showed a strong relationship between entrepreneurial motivation on one side and environmental factors on the other hand. There is therefore the need to focus policy on such selected factors that work to motivate students into entrepreneurship especially in sub-Saharan Africa.

Keywords: Entrepreneurial intention, motivation, environmental factors, entrepreneurial behaviours, university business students, Ghana

AN ASSESSMENT OF INTRAPRENEURSHIP AND FIRM PERFORMANCE AMONG GHANAIAI STATE INSTITUTIONS

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Abstract

Introduction

This study aimed to examine the effect of intrapreneurship on firm performance among government institutions using five constructs (innovativeness, new business venturing, self-renewal or strategic renewal, risk-taking, and proactiveness). The specific objectives of the study were; to determine the effect of innovativeness on firm performance; to determine the effect of new business venturing on firm performance; to ascertain the effect of self-renewal or strategic renewal on firm performance; to examine the effect of risk-taking on firm performance; to ascertain the effect of proactiveness on firm performance.

Methodology

This study used quantitative research methodology. The sampling technique adopted for this study was non-probability. Questionnaires were administered to 225 employees from government institutions in Ghana, with 215 usable responses obtained from the employees. Data collected were analysed using SPSS software.

Findings/ Results

Innovations had a positive and significant effect on firm performance. This finding applies to the other constructs (new business venturing, self-renewal or strategic renewal, risk-taking, and proactiveness). They were all also found to have a positive effect on firm performance with each construct also being significant.

Conclusion

The study concluded that intrapreneurship has a positive and significant effect on firm performance. Although this study focused on one particular sector in Ghana, it provides relatively new insight regarding the effect of intrapreneurship on firm performance in the Ghanaian context. Future studies could look at other sectors of work to see if the result could be replicated in those sectors.

Session 15: Empowering SMEs to Support Economic Structural Change

Chair(s): Dr. Ben Ocran & Rev. Albert Akanferi

DOES ABSORPTION CAPACITY MODERATES THE RELATIONSHIP BETWEEN MANAGERS LEARNING ORIENTATION AND OPEN INNOVATION PRACTICES AMONG SMES IN GHANA?

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Abstract

The study examined the moderating role of absorption capacity on the relationship between managers learning orientation and open innovation adoption. Using SMEs in a developing economy context like Ghana, the study explored whether there is a relationship between managers learning orientation and open innovation adoption and whether such a relationship is moderated by the absorption capacity of the firm. This study used a quantitative non-experimental correlational design and collected data from 147 SMES managers. Three validated adapted survey instruments were used for the data collection. The data was analysed using Smart-PLS. The results revealed a statistically significant relationship between firms' absorption capacity and open innovation practices. The study also showed a positive significant relationship between managers' learning orientation and open innovation practices; however, the relationships was not statistically moderated by firms' absorption capacity. Management implications of the findings and some recommendations are presented therein.

Keywords; Open innovation, SMEs, Learning Orientation, Absorption Capacity

Introduction

Previous research established a relationship between open innovation performance and individual-level characteristics such as managers' leadership style, educational background, and entrepreneurial orientation (Bogers et al., 2018; Brunswicker & Chesbrough, 2018; Cunningham et al., 2021; Gomezel & Rangus, 2019; West & Bogers, 2017) but learning orientation has not been investigated. Learning orientation provides an opportunity for individuals to continually acquire knowledge and skills (Kozlowski et al., 2001), and these

attributes are antecedent for innovation activities (Jiménez-Jiménez, & Sanz-Valle, 2011). It is thus expected that learning orientation would influence open innovation activities, but this is not empirically established. Atitumpong and Badir (2018) found that learning occurs mostly through interaction, observation in the organization, and the environment and Kharabsheh et al. (2017) found a relationship between learning orientation and absorption capacity while Absorptive capacity has a relationship with open innovation (Xia & Roper, 2016). It is however not empirically tested whether absorption capacity would moderate the relationship between managers' learning orientation and open innovation practices. Significant research has been carried out in the area of open innovation (Chesbrough & Bogers, 2014; Henttonen & Lehtimäki, 2017), although available research suggested gaps remain and there is a need for further studies (Brunswick & Chesbrough, 2018; Cunningham et al., 2021; Hossain & Kauranen, 2016; Rauter et al., 2018; West & Bogers, 2017). The current paper thus examines the possibility of firm's absorption capacity moderating the relationship between learning orientation and open innovation practices. The findings may provide an avenue to better conceptualize and understand how micro foundation level factors such as managers learning orientation may be drivers of sustaining open innovation performance among SMEs.

Methodology

The study used a quantitative approach to examine the possibility of absorption capacity moderating the relationship between managers learning orientation and open innovation practices. The participants mainly SMEs managers were recruited through the database of Ghana Enterprises Agency (GEA). The target was SMEs dealing in manufacturing and IT related business. The sample frame was managers within SMEs with a minimum of a year of work experience in that firm and responsible for strategy, innovation or research and development activities. A sample size of 147 managers participated in the study. Three (3) adapted instruments were used in this study and the validity and reliability measures are well established and deemed to be appropriate. Absorption capacity was measured by Flatten, et al. (2011) *Absorptive Capacity Scale (ACAP)*, Managers learning orientation was measured by Kim and Lee's (2013) *Learning Goal Orientation Scale* while Cheng and Huizingh's (2014) *Open Innovation Scale* was used to measure open innovation. Structured equation modeling (SEM) was used as the testing of the hypotheses involves observed and latent variables (Sarstedt, et al., 2020; Green, 2016). Partial least square SEM (PLS-SEM) was considered appropriate as it is robust and accommodates small sample sizes and nonnormal data (Hair et al., 2019). Two models were assessed in this research: measurement and structural model. The aim is to validate whether both models meet the criteria for empirical research analysis.

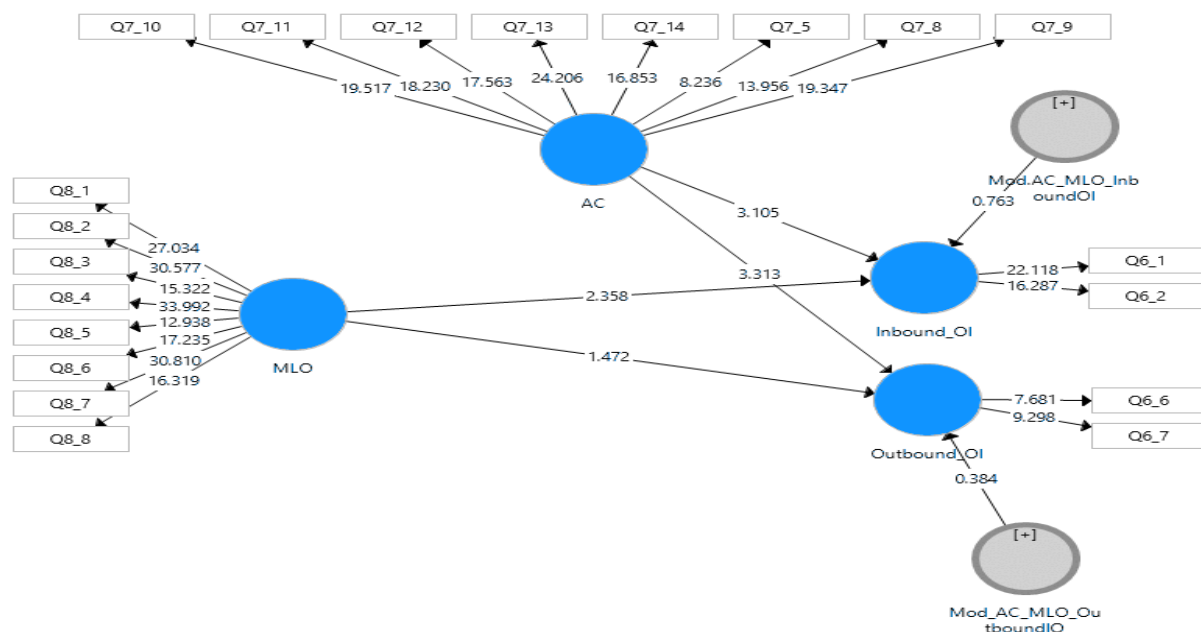
Results

Moderation Analyses were examined using latent variable interactions in the model. The study hypotheses were tested. Table 1 and figure 1 provides the details of the moderation analysis of the results.

Table 1 Moderation Summary Table

	<i>B</i>	<i>SE</i>	<i>T. Stats</i>	<i>P-Values</i>
AC -> Inbound_OI	0.288	0.093	3.105	0.002
AC -> Outbound_OI	0.343	0.103	3.313	0.001
MLO -> Inbound_OI	0.218	0.092	2.358	0.018
MLO -> Outbound_OI	-0.178	0.121	1.472	0.141
Mod.AC_MLO_InboundOI - > Inbound_OI	-0.096	0.126	0.763	0.446
Mod.AC_MLO_OutboundOI -> Outbound_OI	-0.064	0.168	0.384	0.701

Figure 1. Measurement Model



Conclusion

The study examined the moderation role of absorption capacity on the relationship between the two types of open innovation: inbound and outbound. Table 1 and figure 1 showed the moderator had an insignificant relationship with both inbound and outbound open innovation performance, $\beta = -0.096$, $t = 0.776$, $p = 0.446$) and ($\beta = -0.064$, $t = 0.382$, $p = 0.701$), respectively. The study failed to reject the null hypothesis in both situations. Hence the results revealed that absorption capacity does not moderate the relationship between managers learning

orientation and inbound and outbound open innovation. The study found that absorption capacity is a strong predictor of open innovation but does not moderate the relationship between it and managers' learning orientation. Even though the study results show there is an interaction effect of absorption capacity on the relationship between managers learning orientation and open innovation performances, it was insignificant.

DEVELOPMENT OF A NOVEL INDIGENOUS PIPELINE CORROSION CONTROL TOWARDS ECONOMIC SUSTAINABLE IN AFRICA

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Abstract

National Association of Corrosion Engineers (NACE International), corrosion costs the world \$2.5 trillion annually, or 3.4% of GDP. However, application of corrosion prevention best practices could result in global savings of 15-35% of that cost. One of these preventive methods is powder coating. Powder coating has been established to effectively prevent corrosion of pipelines against corrosion attack and water atomization is one of the appropriate ways of producing the powder of different kinds of metal for this purpose. Usually, a water atomizer is designed with an atomization chamber in a vertical orientation. Therefore, this work developed a novel mechanism for producing metallic powders for the purpose of corrosion control in oil and gas pipelines.

The fabricated equipment was used to obtain pure zinc metal via crucible furnace. It was superheated to a temperature of 600°C before it was poured into the heating chamber. The heating chamber was also heated to a temperature of about 550°C before the molten metal was poured into the device. The important factors influencing the dynamics of the water atomization process, which affect shapes, distribution of the produced metal powder particles and sizes are water flow rate, a temperature higher than melting point of liquid metal, water pressure and flow rate of liquid metal. The water atomizer in this study was developed such that the temperature factor could be adjusted.

From the results, the intended device was successfully fabricated and zinc powders with irregular shapes and a particle size of approximately 0.335mm were produced. The produced powder can be further processed for the purpose of controlling corrosion menace thereby reducing the economic loss due to components' failure and environmental pollution particularly in Africa's on-shore and off-shore regions.

Keywords: Environmental, Water pollution, Corrosion, Powder coating, Atomizer

MANAGERS LEARNING ORIENTATION AND OPEN INNOVATION PRACTICES AMONG SMES IN GHANA

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Abstract

The study examined the relationship between managers learning orientation and open innovation adoption among SMEs in Ghana. A quantitative non-experimental correlational design was used to target SMEs managers responsible for innovation related responsibilities. In line with the G*Power analysis, a sample size of 250 respondents participated in the study. Two validated adapted survey instruments were used for the data collection and the data was analysed using correlation analysis. The results revealed a statistically significant relationship between managers' learning orientation and inbound open innovation practices ($r = .33, p < .05$), while having a statistically insignificant relationship with outbound open innovation practices ($r = .04, p = .622$). SMEs leadership and human relation practitioners should focus on hiring managers with strong learning orientation in order to promote inbound open innovation practices for organizations. Further management implications of the findings are presented.

Keywords: SMEs, Open Innovation, Learning Orientation, inbound, outbound

Introduction

The contemporary business environment has become very competitive, and firms, especially small and medium scale enterprises (SMEs) are seeking novel ways to remain relevant. The repercussion of the COVID-19 pandemic on businesses and Russian-Ukraine war has further exacerbated the quest for survival and sustainability and SMEs in Ghana are not immune to these concerns. COVID-19 is considered a wicked problem, a phrase mostly used for difficult problems with interconnected and interdependent factors that are tough to solve. Innovation has, therefore, become a prerequisite for business success in this volatile, uncertainty, complex and uncertain (VUCA) and competitive environments (Aksoy, 2017; Gu et al., 2016). Popa et al. (2017) noted that opening up the innovation strategy has emerged as a trend for most SMEs as they seek research collaborations and external information. Chesbrough (2003; 2017) called this process of innovating as open innovation and discussed it as the use of ideas different from the traditional innovation thinking of relying solely on internal research and development (RD). Chesbrough (2003) explained that open innovation "means that valuable ideas can come from inside or outside the

company and can go to market from inside or outside the company as well” (p. 43). Industries have confirmed the promising gains of the concept (Chesbrough & Bogers, 2014; Henttonen & Lehtimäki, 2017) and the available literature showed that significant research has been carried out in the area of open innovation (Chesbrough & Bogers, 2014; Henttonen & Lehtimäki, 2017), although gaps remain and there is a need for further studies (Brunswick & Chesbrough, 2018; Cunningham et al., 2021; Hossain & Kauranen, 2016; Rauter et al., 2018; West & Bogers, 2017). Bogers et al. (2017) argue that most firms including SMEs are not able to integrate open innovation due to resource constraints. Few studies examined workers' characteristics on open innovation adoption and maintained that different attributes yielded different outcomes for open innovation practices (Ahn et al. 2017; Bogers et al., 2018; Cunningham et al., 2021; Naqshbandi, & Jasimuddin, 2018; Naqshbandi, & Tabche, 2018).

A considerable number of the earlier studies focused on macro level factors such as understanding the outcomes, forms, and antecedents of open innovation in organizations (Brockman, et al., 2018; Chesbrough & Bogers, 2014; Erna et al., 2019; Greco et al., 2016; Hannigan et al., 2018; Henttonen & Lehtimäki, 2017; Kim & Kim, 2018; Lewin et al., 2017; Rauter et al., 2018). There are limited studies located that investigated micro-foundations level factors such as the human side of open innovation that focus on the personal characteristics, behaviors, and attributes of managers in influencing open innovation among SMEs (Bogers et al., 2018; Cunningham et al., 2021; Dahlander et al., 2016; Salter et al., 2015). Relationship between open innovation and managers' leadership style, educational background, and entrepreneurial orientation have been established (Bogers et al., 2018; Brunswick & Chesbrough, 2018; Cunningham et al., 2021; Gomezel & Rangus, 2019; West & Bogers, 2017). Important individual behavioral characteristics of managers, such as their learning orientation and engagements and their possible influence on open innovation practices have not been of focus for previous researchers. Considering the impact of the COVID-19 pandemic on business reengineering and survival of most organizations, it appears employees learning orientation played a significant role in firms' innovativeness, and this is the focus of the current study.

Learning orientation provides an opportunity for managers to continually acquire knowledge and skills (Kozlowski et al., 2001), and these attributes are antecedent for innovation activities (Jiménez-Jiménez, & Sanz-Valle, 2011). Atitumpong and Badir (2018) found that learning occurs mostly through interaction, observation, and the business environment. Learning orientation is thus an internal mentality incentive towards knowledge acquisition as managers pursue challenges that provide learning opportunities, according to Gong et al. (2009). West and Bogers (2017) argued that employees are the key required resources to critically examine the appropriateness of outflows and inflow of knowledge in open innovation process and therefore essential in firm innovation equation. The current study therefore hypothesized a statistically significant positive relationship between managers learning orientation and inbound and outbound open innovation adoption.

Methodology

The study used a quantitative approach to examine the possibility of the relationship between the variables by testing hypotheses. This is in line with Zikmund et al. (2013) assertion that a quantitative approach is used for testing objective theories by examining the relationship among variables. A non-experimental quantitative design, specifically, a correlational design was considered the best approach. The participants were recruited through the database of Ghana Enterprises Agency (GEA). The study sample size was 250 managers, and the research followed the guidelines provided by the National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research (1979). The study used validated adapted instruments to collect the data, and these were analysed using correlation analysis.

Results and Discussion

Table 1 shows that correlation between managers learning orientation and inbound open innovation performance was found to be very low, positively, and statistically significant ($r = .33$, $p < .05$), therefore the results support the study hypothesis. This shows that an increase in managers learning orientation would lead to a lower increase in inbound open innovation.

Table 1 *Correlations Matrix*

			Inbound_O I	Outbound_ OI	MLO
Spearman's rho	Inbound_OI	Correlation Coefficient	1.000	.431**	.334**
		Sig. (2-tailed)	.	.000	.000
		N	147	147	147
	Outbound_ OI	Correlation Coefficient	.431**	1.000	.041
		Sig. (2-tailed)	.000	.	.622
		N	147	147	147
	MLO	Correlation Coefficient	.334**	.041	1.000
		Sig. (2-tailed)	.000	.622	.
		N	147	147	147

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

The results suggest that when there is higher learning orientation by managers, it results in the adoption of more inbound open innovation practices. This implies that if the managers are determined and committed to developing new knowledge and skills as in the case of MLO, there is a high tendency for them to be searching across a variety of sources such as suppliers, customers, research institutes, universities, and consultants for ideas and resources to help them gain and exploit innovation opportunities.

The second research hypothesis gauged the relationship between managers learning orientation and outbound open innovation practices. Table 1 revealed that there was a positive low relationship between managers learning orientation and outbound open innovation performance, *however, the relationship was not statistically significant* ($r = .04$, $p = .622$), therefore the results did not support the study hypothesis. The results do suggest there were relationship managers learning orientation and outbound open innovation performance, however, the relationship was not significant.

Conclusion and Implication for Practice

The study concluded that managers learning orientation had significant relationship with inbound open innovation but had no significant relationship with outbound open innovation. The finding implication is for organizational leaders and managers to develop a strong learning orientation culture to positively influence inbound open innovation practices. In the case of improving outbound open innovation, SMEs must directly invest in copyright and patent developments. Practitioners should recognize that to enhance open innovation practices among SMEs, the focus must be on creating a culture that supports strong learning orientation of managers and employees. This is explained by the fact that as workers desire and commitment to enhance their skills and new knowledge increases, it positively provides grounds for the adoption of open innovation practices among SMEs. The results also suggest that Human relation practitioners should focus on hiring managers with strong learning orientation in order to promote open innovation practices for organizations. Further studies should examine the role of the firm absorption capacity in the relationship between learning orientation and open innovation practices as empirical research revealed the significant role of firm absorption in innovation process.

Session 16: General Management and Business Survival in Periods of Economic Crisis

Chair(s): Dr. Ummu Markwei & Dr. Mercy De Souza

RE-EXAMINING THE FINANCIAL LITERACY – SME GROWTH NEXUS: FRESH EVIDENCE FROM CAUSAL MEDIATION ANALYSIS

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Abstract

The importance of SMEs to the growth of emerging economies cannot be overemphasized. SMEs remain an important source of employment and economic growth for most developing economies. However, it has been found out that, most SMEs in developing countries are unable to survive even up to their fifth year of operation due to a multiplicity of factors including the level of financial literacy and risk attitude of SME owners. The current study aims to examine the effect of financial literacy on SME growth mediated by the risk attitude of SME owners. The study's data was collected from SME owners/managers in Ghana. 500 questionnaires were administered and out of the 432 retrieved, 400 were deemed useful for analysis using causal mediation. The study found a significantly positive association between financial literacy and SME growth in the main outcome model. Also risk attitude was found to be positively related to financial literacy in the mediation model, whereas risk attitude further mediated the relationship between financial literacy and SME growth which demonstrate that risk attitude plays an intermediary role in the association between financial literacy and SME growth. Our findings affirm the dual process theory of reasoning where an entrepreneurs' decisions taken to enhance the growth and sustainability of their businesses are guided by two systems of thinking: the automatic unconscious system based on their risk attitude, and the deliberate conscious system where different considerations and models are weighed up on the basis of their financial literacy.

Keywords: SME Growth, Financial Literacy, Risk Attitude, Causal Mediation Analysis, Ghana.

Introduction

The importance of small and medium enterprises (SMEs) in most economies have been documented in prior literature. However, one of the major challenges facing SMEs in developing economies is their inability to remain in business few years after their establishment (Adomako,2016). Many factors have been attributed to this challenge and recommendations have been made to help reduce this challenge (Adomako,2016; Ye and Kulathunga,2019; Buchdadi et al.,2020). However, the problem is still persistent leading to high unemployment in many developing economies. In the World bank's recent report, about 600 million jobs are needed to absorb the growing global workforce by 2030. SME growth and sustainability will aid in achieving this feat.

Financial literacy and its role in helping entrepreneurs make prudent financial decisions for growth of their businesses has recently grown in importance (Potrich and Vieira, 2018). In developed and emerging countries, policymakers are increasingly paying attention to this field of study. Adomako (2016) noted that, the lack of financial management skills of SMEs is a major constraint to business success. Other prior studies have established the relevance of financial literacy in making sound financial decisions for business growth (Ye and Kulathunga, 2019; Buchdadi et al., 2020; Korkmaz et al., 2021). With the continuous rate of business failures in developing economies which have been attributed to a myriad of factors including, the level of financial literacy of SME owners (Potrich and Vieira, 2018) and their risk attitude (Ye and Kulathunga, 2019; Buchdadi et al., 2020), both of which are noted to aid in making sound decisions and judgements for growth and sustainability of businesses, we examine the effect of financial literacy on SME growth, and introduce risk attitude as a possible intermediary in the link between financial literacy and SME growth. We argue from a developing market perspective that, financial literacy acts as a strategically significant resource SMEs can use to attain competitive advantage in the marketplace, and mediated by risk attitude, SME managers are better placed to navigate their way through business uncertainties and ensure the growth and success of their enterprises thereby contributing to economic growth. Substantively, the current study seeks to examine the association between financial literacy and SME growth through the mediating role of risk attitude of SME owners/managers using firm samples from an African context, Ghana.

Methodology

The study's data was collected from SME owners/managers in Ghana, a sub-Saharan African country. 500 questionnaires were administered to registered SME operators purposively sampled from a list of 4,896 firms obtained from the National Board for Small Scale Industries (NBSSI). Out of the questionnaires administered, 432 were retrieved, and after 'cleaning' and removing inadequately filled questionnaires, 400 were deemed useful for the study's analysis using causal mediation via the aid of the 'paramed Stata command by proposed by Emsley and Liu (2013). The causal mediation framework proposed by Emsley and Liu was favoured above other approaches of conducting mediation analysis such as the traditional Baron and Kenny (1986) method and also the

structural equation modelling (SEM) method mainly because, it addresses the three important limitations shared by the traditional and SEM approaches; being: the 1) inability to control for mediator-outcome confounders, 2) the inability to incorporate exposure-mediator interaction, and 3) the inability to incorporate non-linearities in these two approaches.

Findings/Results

The study found a significantly positive association between financial literacy and SME growth in the main outcome model. Also risk attitude was found to be positively related to financial literacy in the mediation model, whereas risk attitude further mediated the relationship between financial literacy and SME growth which demonstrate that risk attitude plays an intermediary role in the association between financial literacy and SME growth. Our findings affirm the dual process theory of reasoning where an entrepreneurs' decisions taken to enhance the growth and sustainability of their businesses are guided by two systems of thinking: the automatic unconscious system based on their risk attitude, and the deliberate conscious system where different considerations and models are weighed up on the basis of their financial literacy.

Conclusions/Implications

Flowing from our study's findings, we conclude that, risk attitude acts as an intermediary in the relationship between financial literacy and SME growth, thus implying that, the risk attitude of SME owners tends to serve as a mechanism through which financial literacy translates to growth of SMEs. We further note that financial literacy acts as a strategically significant resource SMEs can use to attain competitive advantage in the marketplace, and mediated by risk attitude, SME managers are better placed to navigate their way through business uncertainties and ensure the growth and success of their enterprises thereby contributing to economic growth.

GREEN BUSINESS TECHNOLOGY ADOPTION AND SMEs SUSTAINABILITY IN THE LA-NKWANTANANG MUNICIPALITY

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Abstract

This study set out to determine green business technology adoption by SMEs in the La-Nkwantanang Municipality, their contributions to their operations and the challenges hindering the adoption of these green technologies. A quantitative research approach was used to conduct the study. The study also employed a non-probability sampling technique of which participants were sampled conveniently to gather primary data. Furthermore, the study employed a sample population size of one hundred (100). The findings show that most businesses were aware of green business technology and were willing to adopt it if it was going to contribute to the sustainability of their businesses and if they also perceived it to improve their profits. It is recommended that government should support these businesses in terms of funds to encourage and motivate them to adopt green business technologies in their business operations.

Introduction

In contemporary times, the dynamic society is marked by numerous; economic, financial, technical-productive, industrial, and environmental issues. At times, they became more critical, taking the form of real crises. Hence, the industrial setting had to become more profound in adopting some business practices which are more friendly to the social and natural environment. This provided the transition to green businesses (Bateman & Zeithaml 1983, Porrit & Winner 1988, as cited in Khanal, 2018).

A green business is considered a business practice valued to be environmentally friendly. It could also be defined as an enterprise performing business activities with a minimal negative effect on the local or worldwide environment, society, or community. Sustainable escalation of the business calls for mounting eco-innovations and adopting some society-oriented attitudes (Arenas, Fosse & Huc 2010).

Technology adoption was one of the green practices SMEs focused on. Thong and Yap (1995) defined technology adoption in small and medium-sized enterprises

(SMEs) as applying computer hardware and software solutions that support an organisation's operation, management, and decision-making.

Over the years, SMEs have been subjected to high business failure rates, and such rates are likely to worsen due to global economic hardships. This issue calls for the necessary attention since SMEs play a major role in economic development through employment creation and income generation. For instance, they contribute to about 98 percent of all businesses (Neumark et al., 2011). Despite the off-exponential growth of Technology within SMEs, the rate of technology adoption by these businesses has remained relatively low (Mac-Gregor and Vrazalic, 2006).

From the review of research papers, it was realised that green business technology adoptions were taken up due to several reasons such as marketability, profitability, social and environmental reasons. Also, most of the research was done outside of Ghana, meaning that not enough research had taken place in Ghana relating to this topic. According to Weng and Lin (2011), SMEs adopt green practices or innovations due to Customer pressure, regulatory pressure and organisational characteristics. Again, according to Molepo and Madzivhandila (2021), the three continents they researched (Asia, South America and Africa) were making strides towards adopting modern technologies to deal with issues of greenhouse gases and environmental sustainability. Looking at the above findings, it can be said that few pieces of research have been done concerning green business technology adoption, especially in the Ghanaian certain and how it affects the sustainability of businesses, especially SMEs in Ghana hence the need for this study.

Research Objectives

The study's main objective was to evaluate how green business technology adoption can contribute to the sustainability of SMEs in the La-Nkwantanang Municipality.

Specific objectives

- To identify some Green Business Technology adopted by SMEs in the La-Nkwantanang Municipality.
- To ascertain the drivers of green business technologies adopted by SMEs in the La-Nkwantanang Municipality.
- To assess the contribution of Green Business Technology Adoption to SMEs Sustainability in the La-Nkwantanang Municipality.
- To investigate the challenges affecting SMEs' Adoption of Green Business Technology in the La-Nkwantanang Municipality.

Research questions

- What are the drivers of Green Business Technology Adoptions in the La-Nkwantanang Municipality?
- What are some of the green business technologies adopted by SMEs in the La-Nkwantanang Municipality?
- What is the impact of Green Business Technology Adoption on SMEs Sustainability in the La-Nkwantanang Municipality?
- What are the challenges affecting SMEs' Adoption of Green Business Technology in the La-Nkwantanang Municipality?

Research Methodology

Research Design

The study adopted a quantitative approach using a descriptive design which was used to portray accurately the characteristics of particular individuals, situations, or groups.

Population and Sample Size

The population of the study was SMEs in the La-Nkwantanang municipality. The researchers employed a sample size of 100 SMEs.

Sample Techniques

The study employed a non-probability sampling strategy. Convenience sampling technique was employed to sample SME operators who were around and available during the data collection period.

Instrumentation and Data Collection

The research employed the use of primary data. Close-ended questionnaires were given to respondents to fill. They were administered by the researchers to the respondents.

Data Analysis

A quantitative method of analysing data was used in this study. The Table shows the type of Green Technology adopted as well as their proportions in the sample. SPSS version 25.0 was used to conduct a correlation between the types of green business technology and the drivers of green business technology adoption, and between the drivers of green business technology adoption and the contributions of green business technology on SMEs sustainability of which each relationship proved insignificant.

Data Analysis and Presentation

Table: Types of Green Business Technology Adopted

<i>Types of Green Business Technology</i>	<i>Frequency</i>	<i>Percentage</i>
Mobile money	48	22.22%
Online marketing	38	17.59%
Mobile banking	26	12.04%
Online store app	24	11.11%
Smart carts/cards	18	8.33%
Excel Records	16	7.41%
Solar Energy	12	5.56%
Paper packaging	10	4.63%
Smart Meters (<i>Both water & Electricity</i>)	8	3.70%
Waste-Water Electricity Generator	6	2.78%
Waste Sourced Biofuel/Pyrolysis, e.g., <i>Biogas</i>	4	1.85%
Re-useable plastic bottles	4	1.85%
None	2	0.93%
Total	216	100.00%

The study revealed that the predominant green business technologies used include mobile money (22.2%), online marketing (17.59%), mobile banking (12.04%), online store app (11.11%), and smart carts/cards (8.33%).

Some key drivers of green business technology include profit motive, business sustainability, cost saving, environmental concerns, gaining competitive advantage, customer loyalty, and brand image.

The major contribution of green business technology is the sustainability of businesses through minimum operational cost and increased profitability, improving climate and environmental benefits, and increasing customer base, among others.

The challenges however confronting the adoption of green business technology comprise of its cost, lack of technical assistance, and inadequate knowledge on the technologies resulting in the difficulties in their usage.

Summary, Conclusion and Recommendation

The study revealed that there was rich knowledge among the SMEs in the La-Nkwantanang on the various green business technologies such as mobile money, online marketing, and mobile banking. Also, most respondents are willing to adopt some form of green business technology in the future. It was further revealed that the adoption of green business technology brought some form of contribution to the business in a form of increased profit, minimized operational cost and increased customer base.

Some challenges of green business however include the cost of adopting green business technology into their business operations and the inadequate technical support and systems, inadequate education of the usage of technology and the difficulty in implementing green business technology.

It was therefore recommended that the government must prioritise the campaign and support for SMEs in the area of green business technology adoption. Also, there must be more capacity building and education for persons who wish to learn or pursue careers in green business.

THE EFFECT OF CASH TRANSFER PROGRAMS ON THE UPTAKE OF CITIZENSHIP RIGHTS

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Abstract

Introduction:

Poverty alleviation and human capital development have been the main focus of most research on cash transfer programs. However, challenges faced by people living in poverty goes beyond these two. This study aims at examining the effect of cash transfer programs on the uptake of citizenship rights among beneficiaries and how this benefits people living in poverty. Ghana's Livelihood Empowerment Against Poverty (LEAP) is examined for its influence on the uptake of citizenship rights among beneficiaries. Does LEAP which is a major point of contact between people living in poverty in Ghana and the state influence the citizenship rights of beneficiaries positively? Shai-Osudoku and Ningo-Prampram Districts have been adopted as case studies for this study.

Methodology:

The study used quantitative approach which involved the use of quantitative data collection method. The data were analysed using Chi-square tables.

Findings/Results:

The findings of the study revealed that cash transfer programs influence the uptake of citizenship rights positively. However, the dimensions of this influence differ or are similar depending on the contextual factors on the ground in Shai-Osudoku and Ningo-Prampram districts. The contextual factors include the level of education of people who are three years and older in the district, the level of poverty in the district and the number of persons per household in the district

Conclusion:

These findings recommend that cash transfer programs influence the uptake of citizenship rights by their beneficiaries.

MANAGING ORGANIZATIONAL INTEGRITY RISKS IN THE GHANAIAN PUBLIC SERVICE: AN EXPLORATORY QUALITATIVE STUDY

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Abstract

Even though there have been many reforms and interventions in the Ghanaian public sector, integrity violations have continued over time. Integrity violations impede efficient public administration and delivery of public services. Understanding the risk preferences of public servants in integrity-based decisions is necessary in the mitigation of integrity violations in this sector. Unfortunately, organisational integrity management research has paid little heed to public servants' integrity risk preferences. This study used qualitative vignettes to investigate contemporary integrity violations that exist in the Ghanaian public sector and the risk preferences adopted by public service workers (PSWs) in integrity-based decision-making. Three focus group discussions with 26 public service administrative and technical staff and 22 individual interviews with public service directors were conducted. Contemporary integrity violations identified were "bureaucratic rigidity," "opportunistic staffing," and "bureaucratic injustice." In answering the vignettes, PSWs estimated the benefits and penalties associated with either rejecting or committing these integrity violations. Depending on their perceptions of the risks and benefits associated with identifying with and engaging in these violations, three risk preferences emerged: "corruption police," "silent observer," or "game player." In instances where a greater risk of sanctions (formal or informal) was anticipated, PSWs opted to be "silent observers," thereby increasing their susceptibility to integrity violations. A better understanding of current integrity violations and PSWs' risk preferences in the Ghanaian public service will aid government leaders in drafting and implementing effective interventions to promote higher public sector integrity.

Introduction

Organizational integrity is defined as the degree to which an organization adheres to the policies, practices, regulations, and values it promotes (Huberts,

2012). To effectively manage organisational integrity risks, it is necessary to identify integrity violations as well as employee perceptions and estimations of both the formal and informal risks associated with these violations. Public service Integrity is widely recognised as a crucial and highly prized characteristic of government effectiveness (Menzel, 2015). Consequently, national laws and international recommendations mandate particular measures of integrity in public institutions such as the Ghana Public Service (Agbota et al., 2017). According to Adei and Boachie-Danquah (2004), the Ghana Public Service consists of, firstly, a civil service made up of ministries, departments, and organisations structured according to the Weberian model of bureaucracy. They are responsible for the administration of government services on a daily basis. Additionally, the public service is made up of state-owned enterprises (SOEs), comprising independent government institutions that engage in profit-generating activities. They have operational autonomy, but they also receive government funding for operations.

Even though there have been ongoing interventions and reforms, integrity violations are still common in the Ghanaian public service. This shows that it is hard to manage organisational integrity in this sector. When faced with an integrity-based decision, behavioural judgement is influenced by the opportunities and sanctions that limit or allow behaviour (Agbota et al., 2017; Kobis et al., 2018). Cognitive limitations, as suggested by the theory of bounded rationality, may render decision-makers oblivious to decision-making blind spots. In addition, they may use decision-simplifying shortcuts (heuristics) due to time constraints and the inept assessment of the immediate effects of the decision outcomes (Dietrich, 2010; Gigenrenzer & Gaissmaier, 2011). The majority of studies (Agbo & Awundi, 2015; Campbell, 2015; Gorsira et al., 2018) that examine the impact of integrity violations on public service productivity rely primarily on self-report measures and expert surveys. There appears to be a lack of in-depth attention given to the realities and limitations imposed by the integrity risk preferences of public service workers (PSWs) in integrity-based decision-making.

Unquestionably, there is a great deal more to learn in order to expand our understanding and knowledge of public service integrity management. This paper therefore contributes to the body of knowledge concerning public service integrity risk management by posing the following overarching questions:

- how do PSWs understand public service integrity?
- what are the contemporary integrity violations in the Ghana public service?
- what types of risk preferences do PSWs adopt in integrity-based decision-making?
- how do involved PSWs navigate these integrity risk preferences in decision making?

In addressing these questions, we responded to calls for an ongoing commitment to examining context-specific integrity risk management factors and provided a contextually relevant comprehension of the use of risk preferences as heuristics in Ghanaian PSWs' integrity-based decision-making.

Research Methodology

The investigation was guided by the interpretivist paradigm; therefore, social constructivism is the underlying epistemology. It was presumed that public services that provide identification documents and utility services are more exposed and vulnerable to integrity-based dilemmas due to their frequent interactions with citizens, so they were the focus of the interviews. Ten public institutions were contacted for the research, and six ultimately agreed to participate. Using snowball sampling, participants who had already been interviewed were asked to recommend willing counterparts and provide support for the researchers. Priority was given to sample availability and willingness, but efforts were made to maximise gender diversity in the sample for both individual and group interviews.

Twenty-six (26) Directors and Deputy Directors (categories A1 to A5) engaged in individual interviews, while twenty-two (22) middle level management employees (category B5 to F) participated in three (3) focused group discussions. Once data collection was completed, we transcribed the audio recordings before uploading them to the software for qualitative data analysis (MAXQDA 2020). Initial codes were analysed for similarity and overlap, and those that appeared to congregate around particular research questions were organised into themes. The themes were examined to ensure that they matched the initial data extract. Some themes were combined with others when overlaps were observed, while others were kept separate. All researchers discussed and reached a conclusion on the final themes.

Findings

PSWs believe that working with the values of impartiality, transparency, and authenticity is essential for public service integrity. In this context, impartiality was defined as providing appropriate rewards and punishments to PSWs regardless of their identity. Transparency was defined as following public service rules honestly and openly. Authenticity, on the other hand, meant being honest in working relationships. PSWs lamented that "godfatherism" and "politicisation of the public service" have introduced the following integrity violations; "deliberate bureaucratic rigidity" "opportunistic staffing", and "bureaucratic injustice, resulting in the application of rewards and punishments based on "who you know" or "who is a favourite." Most PSWs reiterated that, working strictly according to the rules and regulations of the public service was not rewarded but rather punished; therefore, one would choose to engage in an integrity violation to avoid the inconvenience of being punished with bureaucratic injustice. Consistent with the perspectives of PSWs, previous studies have found that perceptions of injustice have implications for deviant behaviour (Campbell & Goritz, 2014; Tankebe et al., 2019).

Our findings revealed that in integrity-based decision-making, the decision-maker's personal interests and the interests of corrupt partners were prioritised over the public service interests. Risk preferences (corruption police, game player and silent observer) emerged as the mental shortcuts and survival strategies adopted in integrity-based decision-making. For example, the adoption of the risk

preference "corruption police", was associated with victimisation in the public sector. Some PSWs indicated that they will passively engage in integrity violations to obtain psychological benefits, particularly tranquilly and a sense of belonging. This confirms the assumptions of the bounded rationality theory and the use of heuristics as quick, uncomplicated, and cost-effective decision-making strategies.

Conclusion

We conclude that codes of conduct and rules are needed to protect the integrity of the public service. However, the use of such external controls merely establishes the boundaries of organisational conduct and associated sanctions, but they are insufficient to address the complexity of integrity management risk factors encountered by PSWs in the exercise of organisational integrity. Effective organisational integrity management frameworks for the Ghanaian public service must account for the legal, institutional, and individual integrity management risk factors.

Session 17: PhD and Graduate Student Papers

Chair(s): Dr. Alhassan Bunyaminu & Dr. Isaac Asampana

SERVICE-SYSTEM WELLBEING AND CUSTOMER SERVICE PERFORMANCE: THE MEDIATING ROLES OF BRAND CITIZENSHIP BEHAVIOUR AND EMPLOYER BRAND TRUST

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Introduction

In recent times, the quest to understand the organisational factors that impact on employee behaviour and performance within organisations has led researchers to propose a concept of service-system wellbeing which is believed to represent a set of predictors which pertain to the wellbeing of employees and customers within the value co-creation environment (Leo et al., 2019; Laud et al., 2022). Leo et al. (2019) proposed a framework for testing the service system wellbeing and identified ten key domains of well-being, namely strategic, governance, leadership, and resource, community, social, collaborative, cultural, existential and transformational, among service system stakeholders. Since the introduction of the concept of service system well-being, scholars have paid limited attention to its effects on citizenship behaviours and customer related outcomes especially in the banking industry (Leo et al., 2019; Laud et al., 2022). Researchers have over the years investigated various concepts that seek to trace the link between employee wellbeing and firm performance outcomes (Van De Voorde et al., 2012; Krekel et al., 2019; Pap et al., 2022). Various concepts such as employer branding, employee engagement and organisational climate have been proposed as factors that influence employee behaviour with respect to value co-creation activities with customers (Miles & Mangold, 2004; Miles & Mangold, 2005; Dhiman & Arora, 2020). In the service sector, the role of employees remains important as they are the bridge between firms and their customers (Sok et al., 2018; Chikazhe & Nyakunuwa, 2022). Nonetheless, in spite of these concepts and findings over the years, the literature still remains silent on the role of service system well-being on employee related outcomes in the banking industry, one of the active and high-profile service sectors.

Even though these dimensions have been proposed, little attempt has been made to empirically validate them, especially considering important outcomes such as customer service performance of employees and brand citizenship behaviours. It is therefore essential that the dimensions proposed by Laud et al. (2022) for measuring service system well-being to subject to empirical investigation using relevant outcome variables pertaining to employee behaviour within the firm.

A scan of the extant literature reveals a paucity of studies addressing the issue of service system wellbeing. The few studies that exist comprise of the initial conceptual paper by Leo et al. (2019), a follow-up paper which proposed a measurement scale for testing service system wellbeing against other firm outcomes (Laud et al., 2022) and also a paper discussing the role of transformative service networks and its effect on value co-creation (Black & Gallan, 2015). These few studies have revealed that the quality-of-service systems can have a profound effect on value co-creation processes. Other similar studies in this domain have also featured discussions on customer wellbeing and smart service systems (Henkens et al., 2021) and outcomes of service ecosystems (Baccarani & Cassia, 2017).

In spite of these studies and their findings, there is still more to be discovered in relation to the effects of service system wellbeing on employee related outcomes in organisations. For instance, if the argument by proponents Leo et al. (2019) that service system wellbeing is an interconnection of relationships at the micro, meso and macro levels which impact employee and customer outcomes in organisations is to be believed, then it stands to reason that there could be a link between service system wellbeing and important employee behavioural outcomes such as brand citizenship behaviours. Yet, this dynamic has not been investigated and remains unclear. The importance of investigating the link between service system well-being, brand citizenship behaviour, employer brand trust, employer promise fulfilment and customer service performance is that the outcome of such an investigation can help to determine which of the elements of service system well-being has the greatest effect on customer service performance in the banking industry.

Methodology

In this study, the population is defined as all employees of banks in Ghana based in Accra. This population comprises employees working in both local and foreign-owned banks in good standing with the Bank of Ghana as at the time of research. This study will select a sample of five hundred (620) respondents from various banks in Accra, Ghana. In selecting the sample size, the purposive and convenience sampling techniques will be used to select respondents. The purposive sampling is used because the researcher seeks to select employees who have worked in the banking industry for a minimum of three years, and who have engaged in direct frontline activity leading to customer service behaviours and interactions with customers. In this study, primary data will be collected from respondents. To achieve the aim and objectives of this study, primary data will be collected from respondents using a structured self-administered questionnaire designed with Likert scales, which will measure the variables SSWB, BCB, EBT and CSP. Data will be collected through a process of informed consent which will begin with the researcher contacting management of selected banks to provide them with a letter seeking permission to administer questionnaires to employees as part of the data collection phase of this research. SEM will be used to analyse data via confirmatory factor, path analysis mediation and moderation analysis.

EXAMINING THE EFFECTS OF SERVICE RECOVERY TRANSPARENCY ON CUSTOMER SATISFACTION VIA SOCIAL MEDIA

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Abstract

Introduction

The aim of this study is to examine the effect of service recovery transparency on customer satisfaction through social media. The specific objectives of the study were; to investigate the mediating role of customer forgiveness on service recovery transparency and customers satisfaction; to ascertain the role of complaint handling strategies (apology and apologia) on the relationship between service recovery transparency and customer forgiveness; and to investigate the role of severity of service failure on the relationship between service recovery transparency and customer forgiveness.

Methodology

This study is descriptive and quantitative in nature. The sampling technique adopted for this study was non-probability (purposive sampling). Questionnaires were administered online to customers who had complained on social media platforms. 302 usable responses were obtained from the respondent, with SPSS AMOS employed to test hypotheses of the study.

Findings/ Results

The study found that service recovery transparency significantly and positively influences customer forgiveness. The study also found customer forgiveness to positively influence customer satisfaction but the influence was statistically insignificant. Additionally, the study found complaint handling strategies and severity of service failure not to moderate the relationship between service recovery transparency and customer forgiveness.

Conclusions

From the findings it was concluded that without a mediator or a moderator, service recovery transparency by banks directly influences customers

satisfaction. Although this study focused on a single industry in Ghana, it provides relatively new insight regarding the effect of service recovery transparency on customer satisfaction in the Ghanaian contexts. Also, this study is among the first to provide insight of the moderating effect of complaint handling strategies and severity of service failure on the relationship between service recovery transparency and customer forgiveness.

Session 18: PhD and Graduate Student Papers

Chair(s): Dr. Richard Amankwa Fosu & Dr. Godfred Koi-Akrofi

THE NATURE OF DIRTY WORK IN THE CONTEXT OF THE SUB – SAHARAN AFRICA

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Abstract

Over the years, how context affects people's perceptions of physically, socially, and morally stigmatized "dirty work" has not received much scholarly attention. And this is in spite of the fact that these constructs are socially created. Using qualitative data gathered through interviews from 51 participants in a multiple case study design, we extend the dirty work literature. We do this by examining the nature of occupational taint faced by dirty workers in organizations' whose core business is not dirty work, i.e., peripheral dirty workers, and how power distance (level of education) affects one's perception and judgement of dirty work. We investigated how macro and micro-orientations affect how dirty work is socially constructed. It was discovered that dirty workers suffer from physical, social, or moral taint. Some suffer from a combination of these. It was revealed that the highly educated (those with high power distance) tend to have a poor opinion of dirty work, whilst the opposite is true for those with lower levels of education (those with low power-distance). Security officers, morticians, and housekeepers were studied from the educational, health, and hospitality (hotel) sectors respectively.

Introduction

Hughes (1951) coined the term "dirty work" to refer to jobs and tasks that are likely to be viewed as disgusting or demeaning. Dirty work is associated with physical, social, and moral taint because persons performing them are stigmatized by society despite their necessity (Ashforth and Kreiner 1999; Ashforth & Kreiner, 2014) to society's health and comfort. Physical stigma is evident in occupations where the workers are in direct contact with filth (e.g., bodily fluid) or the work is regarded as dangerous (e.g. firefighting); social stigma is evident in occupations

where employees interact with stigmatized persons or groups such as (e.g. prison guards or correction officers); morally stigmatized occupations are those that a great majority of the society classify as morally unacceptable, sinful, or culturally reprehensible. An example is prostitution or commercial sex work (Tracy & Scott, 2006; Ashforth & Kreiner, 2014)

The perception of dirty work is obviously based on subjective norms and thus, are socially constructed (Hughes, 2012). What is considered dirty can change depending on the context. Therefore, it is crucial to comprehend how the context impacts what is considered to be "dirty work." Johns (2006, p. 386) defines context as "situational possibilities and restrictions that determine organizational behaviour's occurrence and meaning as well as functional linkages between variables". Context is therefore the situation or environment in which a particular entity or phenomenon exists (Johns, 2006). This situation or environment shapes the emergence and manifestation of that particular phenomenon's attributes as well as how they are interpreted.

Even though a lot of research has been conducted on dirty work and the nature it assumes in other contexts, (e.g., Tracy & Scott, 2006; Ashforth & Kreiner, 2014) there is a paucity of studies examining the nature of dirty work in the sub-Saharan African context especially for peripheral dirty workers, and the factors in that context that influence people's perception of dirty work and their attitude towards those engaged in it. The roles that dirty workers play in the health and wellbeing of any society cannot be underrated. Therefore, knowledge as to the dynamics of the industry is necessary to influence policy to ensure that their important services are not interrupted. This is even more pertinent in countries where institutions are weak and ineffective such as those in sub-Saharan Africa. We therefore set out in this paper to answer the research question: *What is the nature of occupational stigma faced by employees engaged in dirty work?*

Methodology

This study is set in Ghana's national capital, Accra for important reasons. Accra was purposefully chosen because of the greater number of institutions — educational, health, and hospitality — with many dirty works roles are peripheral to the core businesses of the organizations. Second, Accra is a national capital town located in sub-Saharan Africa, a region with voids in its regulative institutional setup (Peprah et al., 2021). These voids make it possible for organizations to fail to provide the necessary protective equipment for the workers including dirty workers thereby worsening the condition and status. This suggests that the public perception of dirty work may in these contexts may vary from that of people in places with different institutional conditions. This makes Accra an appropriate setting for exploring our research question.

We carried out a qualitative field study, which was necessitated by the fact that qualitative data is gathered in close proximity to the subject being investigated and highlights the lived experiences of people by enquiring and discovering the meanings they attach to the daily events of their lives (Miles et al., 2013). Interpretative case study is used when the nature of the problem under investigation requires an in-depth exploration of the phenomenon rather than the

breath. In this context, a qualitative case study design is appropriate since it is used to investigate the meanings individuals or groups associate with a person or a societal issue (Creswell, 2013).

We purposively selected some tertiary educational institutions, hospitals and hotels as our cases because of the large numbers of peripheral dirty workers they have due to their sizes. From these institutions, we purposively selected dirty workers to study. After contacting the first dirty worker through the management of the institutions, we used the snowball technique to get to other dirty workers. In all, we studied a total of 51 dirty workers in 8 organizations. Since the study is interpretive and qualitative, the researcher relied on face-to-face interviews and focus group discussion (FGDs), as modes of data collection. FGD was used alongside the interviews as FGDs offer environment where participants can influence one another and be affected in a more real way (Casey & Crueger, 2000).

Data analysis

We used the methodology developed by (Gioia, 2013;2021) to analyse the data. Two main reasons prompted the choice of that analytical tool: First, the rigor that characterizes the methodology's analysis of qualitative data. Second, the systematic, step-by-step manner in which the methodology displays the analysis procedure from the raw data to the aggregate dimensions instils quality and authenticity findings of the research. The Gioia methodology has three main phases: The first phase which produces the first-order concepts gives voice to the respondents by directly using their language and term. The second phase is where the second-order themes are derived from the concepts coming from the raw data. The third phase is when the Second-order themes ultimately distill into a few aggregate dimensions (Gioia et al., 2013).

Findings

The analysis of the interview responses revealed that the workers define dirty work according to three main types of taint – physical dirty work, social dirty work, and moral dirty work as depicted in Figure 1 below. Further analysis pointed to intersections of two or in some extreme cases three of this main typification of dirty work.

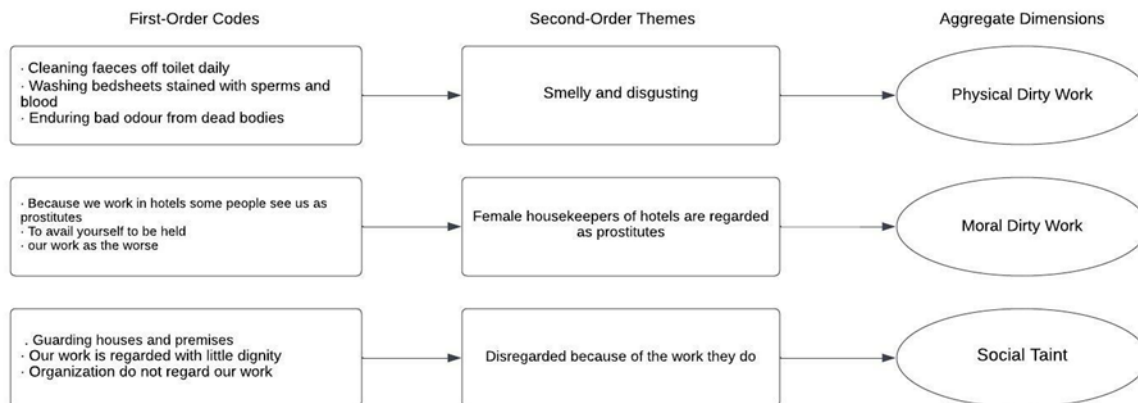


Figure 1: Data structure of the nature of dirty work

Physically unpleasant tasks

The tasks undertaken by all the workers interviewed can literally be described as physically “dirty”. *“Most of the students are dirty, even though we have bins around they still put their pads and used toilet rolls on the floor as if it is machines which will be picking them. Meanwhile, we are also not given cloves to wear to work with.....”* (JD 2).

Physically dangerous tasks

The nature of work undertaken by some of the interviewees (security guards, housekeepers) puts them at danger of attack by intruders and threatening clients. As one participant (SD 5) recounted: *“Here, people try to intimidate us with their ranks and level. Some lecturers will verbally abuse you if they violate some measures put in place by the school and you try to tell them”*.

Tasks posing health risks

It emerged from the interview responses that, in some janitorial tasks are performed with bare hands. JD 3 recounted that *“apart from the chemicals, we also need things to protect ourselves like cloves and nose marks to work with. I had to ask for some cloves from a friend who is a hair dresser to work with. If I don’t get, I have to use my bare hands because I don’t have the money to buy it. How much is my salary?”*

Moral Dirty Work

Moral dirty work emerged from the analysis of the responses provided by some category of workers who participated in the study. One participant associated her job at a hotel with moral dirty work by recounting the following: *“Sometimes if you tell someone that you work in the hotel the way the person reacts makes you see your work as the worse. They assume you are a bad person when the customers arrive, they want the girl to go with them to the room. I don’t know if other places do that, that is why they have that perception. If he comes to the bar and sees you around he wants to get close to you, he wants to hold you, he wants you to avail yourself to be held by him or he wants to tell you something or something of that*

sort, sometimes if it happens like that I feel so sad and I ask that which kind of work is this". (HKD 12).

Social Dirty work

This kind of work involves servile relationship or where workers are associated with stigmatized group. In the same way that some people have been observed to lounge in the reflected splendor of others, a great number of people have also been tarnished by the reflected flaws of others. One janitor for instance noted that: *"People don't associate with us because of the nature of our work. You know our work involves a lot of sweat, when you go to work, by all means you will sweat so imagine you come to work, sweat and you don't clean yourself or wash your clothes and you use the same clothes to enter some body's office with the air condition on you will see that, that kind of scent will be everywhere. (JD 3).* These janitors work in the organization and need washrooms to clean themselves to become acceptable among the co-workers and the community they live in.

Intersection of Dirty Work

This can be either moral and social, moral and physical, social and physical and moral, social, and physical. A discussion of the different categories follows next:

Moral and Social Occupational Taint

The data also indicated that some of dirty workers occupation fall under the moral and the social taint category, a double hit taint. That is the work is not acceptable by the society, and workers regularly come in contact with stigmatized others, or involves servile relationship (Asforth & Kreiner, 2013). For example, HKD 11 mentioned: *"Some of my colleagues do laugh at me some times; they say someone will sleep in a room and have sex with another and my job is to remove that bedsheet and wash it but as for me I see it to be a normal."*

Social and Physical Occupational Taint

Janitors are overwhelmed with feelings of feebleness and powerlessness when they undertake repulsive tasks, especially toilet cleaning. JD 3 finds toilet cleaning as the most difficult task: *"These students do not even greet us when they pass by us to their class rooms because they regard us as mere cleaners and servants for cleaning the mess they create. However, when we clean the washrooms these same students sometimes the upcoming lawyer's squat on the toilet messing the whole plays up. And they rather think our work is dirty forgetting that they are contributing to the dirtiness"* (JD 3).

Moral, Social and Physical Occupational Taint

The data also revealed that some of the dirty workers are tainted by three types of stigmas moral, social and physical. An example is MD 9 "My work is a dirty work,

that I know for sure. But it is working for mankind. Without our work the whole country will be affected by a pandemic even greater than COVID-19”.

Conclusion

The data revealed that dirty workers experienced physical, moral and social stigma. The study also found that some of the respondents experienced two or three types of stigmas in the course of their work; that is, either social and moral, physical and social, physical and moral and/or all the three types of stigmas. They also acknowledge the filth and dangers that accompany the position, and mentioned the sources of taint from co-workers and some managers in the organization, and client and family members from outside the organization.

KEY SUCCESS FACTORS OF SMALL AND MEDIUM SCALE ENTERPRISES IN GHANA

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Abstract

Introduction

It is generally accepted that small and medium enterprises (SMEs) play a significant role in economies around the world (Naser, 1999). Small companies are competing with big businesses in whole new ways (Mele, 2015). They are thinking and acting globally, competing with rivals of all sizes and investing aggressively in technology to improve operations and make themselves nimbler (Oxford Economics, 2013).

Furthermore, SMEs are being considered as engines of economic growth worldwide (Ardic et al., 2011; Caner, 2010). One of the most important roles of SMEs in this context includes poverty alleviation through job creation (Jasra et al., 2011). In developing countries, SMEs are a major source of income, a breeding ground for entrepreneurs and a provider of employment (UNIDO, 2000).

There have been different definitions provided for SMEs in Ghana, yet the most often used standard is the number of workers of the business (Kusi et al., 2015). The Ghana Statistical Service recognizes businesses with less than ten workers as small-scale enterprises and their colleagues with more than ten workers as medium- and large-sized businesses (Cofie, 2012).

However, the National Board for Small Scale Industries in Ghana explains a small-scale enterprise as a business with less than nine employees and has machinery and plant size (without vehicles, land and buildings) not more than 10m Ghanaian cedis. In defining small-scale businesses in Ghana, Abor and Quartey (2010) use 30 employees as a cut-off point. Osei et al. (1993) nevertheless categorized small-scale enterprises into three: i.e. hiring below six workers as micro, hiring six to nine workers as very small and hiring 10-29 workers as small. The current definition was given by Regional Project on Enterprise Development Ghana manufacturing, which classified businesses into micro, small, medium and large enterprise, i.e. five workers, 5-29 workers, 30-99 workers and more than 100 workers, respectively. The important role part that SMEs have played in the improvement of a nation's economic advancement has been recognized. In South Africa, it is projected that SMEs form 91 per cent of the formal business (Hassbroeck, 1996; Malefane, 2013). Also, 52-57 per cent of gross domestic product (GDP) is supposed to be contributed by SMEs, and SMEs are also to provide 61 per cent of employment to the people (Gumede, 2000; Malefane, 2013).

In Ghana, small businesses represent 92% of all businesses; they contribute 70% to GDP and employ more than 80% of the workforce (Abor & Quartey, 2010). Despite the acknowledgment of the significant impacts SMEs have in these nations, their advancement is to a great extent compelled by various factors, for example, the absence of access to suitable technology; restricted access to global markets; the presence of laws, rules and regulations that hinder the improvement of the sector; the absence of administration abilities and training; weak institutional capacity; and, most significantly, finance (Abor and Quartey, 2010; Cook and Nixon, 2000). Despite the above limitations, SMEs have been viewed as important contributors to the improvement of economies, mobilization of incomes, major employers of the population and promoters of technology improvement in both developing and advanced nations (Zacharakis et al., 2002). Further, several of the earlier research on SMEs has focused on failure factors, that if avoided will become success factors. Nevertheless, whether they are failure or success factors, they are not specific, holistic and coherent enough to constitute key success factors (KSFs) of SMEs (Alfoqahaa, 2018; Laguna et al., 2012; Jasra et al., 2011). As a result, the knowledge base on KSFs for SMEs is limited. Further, some earlier studies, especially in Ghana looked at success versus failure prediction models but did not come up with the modeling of variables that led to successful performances of such businesses.

Key success factors (KSFs) are the critical factors that are necessary for a business or organization to achieve its goals and objectives. They are the specific aspects of a business that need to be prioritized and executed well in order to achieve success. Examples of KSFs include Here are some examples of key success factors quality of products or services, customer satisfaction, Strong leadership, efficient processes, skilled work force, sustainable methods, innovation, unique brand image, financial stability, among others. The above variables are small in number but can explain a major part of the variance in perceived value and/or relative costs (Grunert and Ellegaard, 1992). This study research aims at adding to the body of knowledge on the KSFs of SMEs in Ghana, specifically those operating within the southern, middle and Northern zones of the country.

Methodology

The research employed a quantitative approach where a survey of a convenience sample of 620 SMEs operating within the southern, middle and Northern zones of the country.

A convenience sample was chosen for the survey purposes as a probability sample was impossible because of the huge number of SMEs in Ghana, as well as the lack of accurate or reliable statistics about the number of small and medium-sized enterprises with no clear-cut classification for these enterprises. Of the 620 questionnaires distributed, 572 questionnaires were returned to the researcher. Questionnaires were administered to the managers or owners or legal representatives of SMEs within the southern, middle and Northern zones of the country using two types of interviewing methods consisting of a face-to-face approach and where possible, online questionnaires. The questionnaire was administered in English.

The survey instrument contained a short introduction which briefed respondents on the overall purpose of the study and some guiding instructions to enhance valid responses.

Upon the completion of the questionnaire collection process, data analysis was conducted using different statistical techniques including multiple regression to test the effect of IV's on the DV by regression equations. Also, other descriptive statistics have been used to describe the demographics of the research sample.

All of the research independent and dependent variables were measured by a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree) with 3 (neutral point), while demographic variables were measured using dichotomous scales to describe the sample elements. Independent and dependent variables were measured through sets of items which adopted from established scales in literature.

Findings and practical implications

The results show that perceived service quality, reliable delivery and sustainability strongly affect SME business performance. ss, while product innovation is weakly linked to SME business success. These results show that a business's growth is linked to customers and competition more than to production, structures or finance. That is, firms that employ sustainable methods, that offers a delightful experience and delivers reliably to specification contribute to success according to the results of this study.

The research underscores the need for Ghanaian SMEs to employ sustainable approaches, be consistent in the meeting and exceeding stakeholders and introducing modern logistical systems and practices. Generally, the study suggests that there are specific investment areas for SMEs that can contribute to achieving success. Specifically, excellence in customer service was found to be the factor most linked to the success of SMEs, followed by reliable delivery and then by sustainability and innovation.

THE MODERATING EFFECT OF LEADERSHIP STYLES ON THE RELATIONSHIP BETWEEN THE DELTA MODEL AS A STRATEGY AND ENROLMENT MANAGEMENT IN PRIVATE UNIVERSITIES IN GHANA

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Abstract

Though there exist lot of work on strategies, enrolment management and leadership styles, there is paucity or no study that tries to combine all the three in a single work. Similarly, there is no study that look at the Delta Model as a strategy and its impact on enrolment management in private universities with leadership style as a moderator. It is against this background that this study seeks to examine the moderating role of leadership styles on the relationship between the Delta Model as a competitive strategy and enrolment management in Private Universities. The philosophical assumptions underpinning this study is the positivism ideology which promotes the idea that scientific knowledge is derived from the idea that anything that cannot be observed and, in some way, quantified is of little or no importance. Quantitative method is being considered for this research through a deductive approach by the use of descriptive and regression analysis to analyse the relationship of variables. The research will be aided by a self-administered questionnaire to respondents in nine (9) selected private universities who are directly involved in managing enrolment. This research is expected to establish the influence of leadership styles on the relationship between strategies and enrolment management; establish how management in private universities can manage their enrolment for business sustainability and continuity; and serve as a foundation towards the development of a strategic framework on strategy formulation and deployment towards effective enrolment management in private universities and add to literature in enrolment management.

KEYWORDS: Leadership Style, Enrolment Management, Strategies, Delta Model, Private Universities

Introduction

Enrolment management defines an organizational concept and a systematic set of activities designed to enable educational institutions to exert more influence over the number of students that successfully register till graduation. It has become a primary driver in the field of private universities (Dei & Anane-Donkor, 2021). As private universities try to attract the right students, balance academics with the needs of the market, and focus on long-term student success in a

challenging economy, the science of enrolment management will only become more important (Nakae et al., 2021). This can only be done with the private universities coming up with the right strategies to meet the current competitive market so as to be sustained. Strategies identify the activities and resources of organizations and allocate and integrate these resources by aligning them to the outlines and general direction of organizations within the organizational environment so as to meet the goals and objectives of the organization (Ogbudinkpa, 2020). This clearly means that these private universities need leaders who will be able to deploy goods strategies to manage enrolment.

Literature has established that leadership style is a critical factor in the success or failure of private universities and it affects the current or future condition of private universities. The leader's ability to lead and moderate activities or the relationship between variables is contingent upon various situational factors including the leader's preferred style. The concepts of strategies in Private universities have been raised by many researchers such as Falqueto et al. (2019), Samimi et al. (2020) and Wilkins (2020). These scholars posit that strategies and their impact vary from organization, industry, and sector. Private universities whose core activities include teaching, research, learning, and innovation have made it more complex to apply the same strategy on its management since they are different from other organizations. The well-known strategies such as the Potters strategy represented the customers as buyers without the concept of studentship in mind (Hendry, 1990). Other scholars and researchers sought to use the Resources and Capacities (or Resource-Based View (RBV)) strategy which has no explicit mention of the customer (Lafuente et al., 2020). The students as customers and key players are missing in the potters and RBV approach. Also, despite the use of the Delta Model in other studies as a strategy (Hax, 2010) and its relationship to organizational performance (Hajipour & Esfahani, 2019), the researcher is yet to come across any study that sought to adopt the Delta Model to establish the relationship between strategies and enrolment management in general and specifically in Private universities. Anabila et al. (2020) have established that Private universities in Ghana are facing a series of challenges arising from the absence of strategy to manage enrolment. This, therefore, calls for the deployment of strategies that specifically views students as customers (Delta Model) instead of the generic customers as buyers and consumers in general for all organizations. Students are the key elements and requirements that need to be satisfied when dealing with enrolment management in Private universities. It is against this background that this study seeks to establish the influence of leadership styles on strategies and enrolment management in private universities in Ghana.

The scope of the study will be made up of nine (9) Private universities. The selection of the 9 Private universities took into consideration the need to have representation from all 9 categories of Private universities identified by the Ghana Tertiary Education Commission (GTEC).

Methodology

The philosophical assumptions underpinning this study is the positivism ideology which promotes the idea that scientific knowledge is derived from the idea that anything that cannot be observed and, in some way, quantified is of little or no importance (Park et al., 2020). Quantitative method is being considered for this research through a deductive approach by the use of descriptive and regression analysis to analyze the relationship of independent variables (Delta Model as strategies) to a dependent variable (Enrolment management) by **focusing on how enrolment management** changes in relation to the Deltal Strategies. The research will be aided by a self-administered questionnaire to respondents of nine (9) selected private universities who are directly involved in managing enrolment. The data will be analyzed by the use of SPSS (Statistical Package for the social sciences).

Expected Outcomes

Once a strategy and framework is determined, private universities would be provided with means that would probably be able to manage their enrolment. The study is expected to add to literature. It will also establish how management in these private universities can manage their enrolment for business sustainability and continuity. It is also expected that the research when done will serve as a foundation towards the development of a strategic framework on strategy formulation and deployment towards effective enrolment management in private universities.

Session 19: PhD and Graduate Student Papers

Chair(s): Dr. Joshua Ofoeda & Dr. Edward Atta-Botchwey

ANTECEDENTS, MODERATORS AND CONSEQUENCES OF SWITCHING INTENTIONS: AN EMPIRICAL STUDY OF RETAIL BANKING CUSTOMERS IN GHANA

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Abstract

Customer switching within the financial industry has been identified as serious threat due to the high costs of acquiring and retaining new customers. However, literature on customer switching intentions is sparse especially within the retail banking context as majority of the studies have focused on the incentives and factor that causes customers to switch with little attention on the consequences and moderators of customers' switching intentions. This study therefore attempts to address these gaps by examining the influence of the various drivers (i.e., pricing perception, service failure, response to service failure, alternative attractiveness, variety seeking) and consequences (i.e., brand avoidance, NWOM) of switching intentions as well as moderators (inertia, financial literacy) of retail banking customers in Ghana. Data were collected through a questionnaire survey with responses from 725 retail banking customers and path analysis using structural equation modelling (SEM) was employed to test the hypothesized relationships. Response to service failures, alternative attractiveness and variety seeking were found to positively influence customers' switching intentions with brand avoidance and negative word-of-mouth as the outcomes of customer switching intentions. In addition, financial literacy and inertia moderated the relationships between variety seeking and switching intentions. These findings have implications for both scholars and practitioners in developing appropriate strategies in minimizing customer churn.

Introduction

With increasing similarities in products and services offered, consumers are now faced with proliferation of choices or alternatives (Ghasrodashti, 2018), making the era of complete customer loyalty a thing of the past (Su et al., 2017). Therefore, many organizations are being pushed to adopt customer-centric strategies that could effectively manage customer relationships and reduce customer churn. Customer switching, described as the affirmed likelihood of exchanging the

current service provider with another (Han et al., 2011; Quoquab et al., 2018), can pose a serious problem for financial institutions due to the high costs of acquiring and retaining new customers (Yan et al., 2015). Therefore, the identification of the underlying factors that cause customers to switch banks, and resulting behavioural outcomes of such intentions is crucial for the development of an effective marketing strategies to reverse it (Thaichon et al., 2017) and for the sustainability of banks profitability (Hauff, 2019). Despite its relevance, literature on customer switching intentions is sparse especially within the retail banking context. Even though factors such as pricing issues (Clemes et al., 2010; Narteh, 2013), and service failures (Clemes et al., 2010; Narteh, 2013), effective advertising by competitors (Clemes et al., 2010; Thaichon et al., 2017), ease of banking (Thaichon et al., 2017), high switching cost (Clemes et al., 2010) among others, have been found to influence customer switching within the banking industry, there have been calls to investigate other latent factors that may influence retail banking customers' bank switching intentions and behaviour (Ghamry & Shamma, 2020; Noman et al., 2021). Furthermore, some of these factors have been found to produce contrary results as exhibited with pricing. For instance, pricing has been found to be a positive factor that pushes banking customers to other financial services providers (e.g. (Colgate & Hedge, 2001; Noman et al., 2021). However, the results of studies by Ghamry and Shamma (2020), Hati et al. (2021) and Noman et al. (2021) revealed that pricing had a negative influence on banking customers' intention to switch banks. Therefore a re-examining some of these factors such as pricing is important especially in the face of the recent banking reforms in Ghana. Farah's (2017) highlights that mergers and acquisitions can influence the switching behaviour of banking customers and as such, it is plausible to suggest that the recent banking customers may act as a conduit for driving the switching intentions and alter the perceptions of customers towards the factors that are important for their switching intentions. Moreover, studies that have examined the antecedents of customer switching intentions by considering the internal, external, and environmental factors as well as personal disposition of customers in a single framework is lacking within the banking context (Mosavi et al., 2018).

Majority of literature on customer switching behaviour and intentions has focused exclusively on the drivers of switching intentions (Chuang & Tai, 2016), with little attention to its potential consequences except for studies by Wangenheim (2005), who examined negative word- of -mouth as a result of customer switching away from one service provider to another and Swanson et al. (2011)'s study which focused on cultural differences regarding consumer verbal behaviours in the context of a service provider switching incident. Therefore, it can be argued that there is a dearth of research on post-switching intentions.

In addition, there has been calls for further research to assess the role of inertia (Gray et al., , 2017) and financial literacy (Diepstraten & van der Cruisen, 2019; Hauff, 2019) in the switching intentions of customers within the financial services market as these factors have been suggested as potential factors that could alter customers' switching intentions. Furthermore, the factors that influence the switching intentions of customers vary in context (Lui et al., 2021). However, most of the studies involving customer switching intentions and behaviour within the

banking context have been limited to developed countries (e.g. Clemes et al., 2010; Diepstraten & van der Crujsen, 2019; Farah, 2017) with few studies within the emerging markets and is particular scant within the Ghanaian Banking industry context. This study therefore attempts to address these gaps by adopting the push-pull-mooring framework and the cognitive dissonance theory to investigate the influence of the various drivers (i.e., pricing perception, service failure, response to service failure, alternative attractiveness, variety seeking) and consequences (i.e., brand avoidance, NWOM) of switching intentions as well as moderators (inertia, financial literacy) of retail banking customers in Ghana.

This study contributes to the existing literature by considering the drivers of customer switching in a holistic manner through the examining of factors that relate to the incumbent bank, the alternative financial institutions as well from the individual customer dispositions. In addition, this study further adds value to literature by examining the consequences of the switching intentions which is limited within the literature of customer switching intention. Furthermore, this study extends the knowledge on customer switching intention as this thesis provides a unique context by examining the switching intention after an implementation of banking reforms within an emerging economy context. This thesis offers avenues to formulate strategies and policies to prevent customer churn and to achieve competitive advantage. Furthermore, identification of the underlying factors that cause customers to switch banks is crucial for the development of an effective marketing plan and for the sustainability of banks profitability.

Methodology

This study adopted a quantitative descriptive research design. Data were collected with questionnaire survey with responses from 725 retail banking customers. The questionnaire used was pre-tested using 50 conveniently selected respondents to ensure the expected data would address the research objectives. Data was collected through convenience sampling by employing the bank-intercept method. All the items used on the questionnaire were adapted from previous studies and were measured with a 5-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5). The analysis comprised descriptive analysis, exploratory factor analysis, confirmatory factor analysis of the main variables, path analysis using structural equation modelling (SEM) in testing the hypotheses and conceptual model and moderation analysis. The validity and reliability of the instrument were also tested, as well as testing of the normality of the data by testing for common method bias and multicollinearity. Age, gender, education and length of relationship with bank were used as control variables.

Findings

The results revealed that response to service failures, alternative attractiveness and variety seeking are important drivers of retail banking customers' switching intention in Ghana with alternative attractiveness being the most important factor. Therefore, hypotheses H1c, H2 and H3 were confirmed. The results further

indicated that switching intention positively influenced brand avoidance and negative word-of-mouth, giving support to Hypothesis H4 and H5 respectively. Financial literacy was found to moderate the relationship between variety seeking and switching intention, resulting the acceptance of H6e. The results further indicate that financial literacy strengthens positive relationship between variety seeking and switching intention such that customers with low financial literacy exhibit low switching intention. Furthermore, the relationship variety seeking and switching intention was found to be moderated by inertia, which lead to the acceptance of H7e, where inertia was found to dampen the positive relationship between variety seeking and switching intention in that, customers with high inertia exhibit lower tendency to switch.

Conclusion

The empirical findings give credence to PPM framework as factors that relate to the incumbent service failures, alternative service provider as well as personal dispositions were found to contribute to the switching intention of retail banking customers. For practitioners, this study results show that managers should focus on building strategies to respond efficiently to customer complaints and make their brand attractive to customers. In addition, the study adds to theory on cognitive dissonance theory as switching intention was confirmed to influence brand avoidance and negative word of mouth. Thus, customer switching has been confirmed as a serious threat to business survival in this current competitive business era. Despite the significance of this study to knowledge and to practice, caution should be exercised in generalizing the results as the study is cross-sectional in nature and causality can therefore not be established. Future studies can be extended to other industries and other countries. It will also be interesting to do a comparative study between customers of private and public-owned banks to examine the difference with respect to the ranking of the factors that drive their switching intentions.

EXPLORING MARKET DYNAMICS IN PUBLIC-PRIVATE PARTNERSHIP ARRANGEMENTS: THE CASE OF GHANA TELECOMMUNICATION INDUSTRY

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Introduction

In view of the very limited public resources available to managers of the economy in developing countries (Brogaard & Petersen, 2018), governments of middle-income countries have resorted to Public-Private Partnership (PPP) arrangements that are targeted at fostering their economic growth as middle-income earners (Samargandi, Fidrmuc, & Ghosh, 2015). Notwithstanding claims by reputable organizations (e.g. The World Bank and The Organization for Economic Cooperation and Development that governments in Africa are radically dependent on public-private partnerships for infrastructural development to enhance service delivery for its people, this policy strategy is burdened with the miseries of different market dynamics that have been cited for the rate of failure in PPP projects (Bayliss & Van Waeyenberge, 2018). This study will therefore identify and explore market dynamics in the telecommunication sector believed to impact the outcome of public-private partnerships.

Predictably, some of these dynamics are sector-specific and the telecommunication sector, with all its unique complexities, has not yet received the needed attention. There are challenges associated with appropriating telecommunication projects into PPP models as a result of the wide-ranging market dynamics that can affect the outcome of PPP projects (Klakegg, Pollack, & Crawford, 2020). Like the world's leading governments, developing nations like Ghana are dependent on PPP policies to attract private sector financing, and promote asset delivery through the provision of efficient services that close the infrastructure gap in the country (Deladem, Xiao, Siueia, Doku, & Tettey, 2021).

Methodology

By conducting an in-depth interview using the purposive and snowball sampling technique, the study will adopt the qualitative research method and use the case study design in interviewing parties from both the private and public sectors of PPP agreements. The respondents to be interviewed will be managers of government agencies and telecom private firms; employees with PPP experience, workers with practical knowledge on the policy and community members who witnessed the process of PPP projects in their community. Specifically, the research study will interview 30 participants; however, this number will be guided by the idea of information saturation. For purposes of gaining an in-depth understanding and linking primary data with secondary data, available

documents on PPP projects from both the public and private sectors will be analysed.

Conclusion

For ethical reasons, no participant will be under any compulsion to give out any information they are not comfortable with, as recommended by the Institutional Research Ethics Committee (IREC) Issues with anonymity and confidentiality will be taken seriously to protect the identities of all participants. All participants will be informed of the purpose, benefits, and risks (if any) associated with participating in the interview before consenting to participate in it. Finally, this research study shall be free from plagiarism and any known research misconduct.

CAPITAL STRUCTURE AND PERFORMANCE OF COMMERCIAL BANKS: EVIDENCE FROM SUB-SAHARAN AFRICA

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Abstract

Firms can use either debt or equity capital to finance their assets and making of such crucial decision is one of the important areas in financial management to increase shareholders' wealth. The purpose of this study is to determine the influence of capital structure on the performance of banks operating in six Sub-Saharan African countries. The study will be guided by the Modigliani and Miller (1958) irrelevance propositions of capital structure theory (MM model). The data for pre and post Covid-19 outbreak would be obtained from the financial statements of banks and it would be comparatively analysed to assess the performance of banks. The data will be analysed using two models with Return on Assets (ROA) and Net Profit Margin (NPM) being the dependent variables. Multiple regression analysis would be used to determine the relationship between the two variables. The expected finding of the study would be direct and indirect influence of capital structure on performance of banks.

Introduction

Capital structure is the combination of debt and equity used to finance firm's assets, operations and growth. A firm can be financed by the shareholders or debt holders or hybrid (Mudany et al., 2020). If financed entirely by share subscription, then the entire profits go to the shareholders. An optimal capital structure and how to calculate one that maximises a firm's profits has remained elusive to date. A great dilemma for management and investors alike is whether there exists an optimal capital structure and how it influences financial performance.

A study conducted by Kum et al. (2021) in Ghana considered the effect of capital structure on profitability of listed banks on Ghana Stock Exchange. They concluded that capital structure had significant influence on profitability of banks. Also, Mustapha et al. (2020) conducted a study in Nigeria. They considered fifteen banks listed on the Nigeria Stock Exchange and used data from the banks' financial statements from 2007 to 2016. The study concluded that debt-equity ratio has significant negative impact on financial health of the commercial banks.

A number of studies have been conducted either before Covid-19 or after Covid-19 outbreak. However, no study has been done on a pre Covid-19 and post Covid-

19 comparative analysis of the effect of capital structure on performance of banks. Again, a different variable for profitability would be used by this researcher as compared to the one used for the performance of the banks by Kum el al. (2021). They used Earning per Share (EPS) but this researcher would be using Return on Asset (ROA) and Net Profit Margin (NPM) Also, the different results from the earlier researchers also means that an unequivocal relationship has not yet been established between the capital structure and firms' performance. Therefore, this study seeks to do comparative analysis about the relationship between the two variables taking into consideration the performance of commercial banks during pre-Covid-19 and post Covid-19 outbreak.

The objective of the study is to determine the relationship between capital structure and performance of commercial banks in Sub-Saharan Africa. In order to achieve this objective, the study would examine the impact of equity on performance of commercial banks, determine the impact of short-term debt and long-term debt on the performance of commercial banks, evaluate the impact of total debt and asset tangibility on the performance of commercial banks and ascertain the effect size of commercial banks has on their performance taking into consideration pre and post Covid-19 performance of the banks.

Methodology

Research Design

The study would use a correlational design. This design is used when the researcher wishes to establish relationship between two variables (Bloomfield & Fisher, 2019). A multiple regression analysis will be used to determine the relationship between capital structure and financial performances of banks. Equations would be estimated using balanced panel data technique for the period of ten years, while E-views 7 statistical software version will be used to analyse the data. The use of panel regression analysis is appropriate because there will be six hundred (600) data points.

Scope

The study will cover ten year period from 2013 to 2022 involving 60 commercials banks from six sub-Saharan Africa countries. The researcher will purposively select one country from Central, South, West and North sub-Saharan Africa. In each of the country the ten top commercial banks would be selected for the study. The selection would be based on the best performing banks in terms of profitability.

Sources of Data

Secondary data would be used for this research work. The data needed for the study would be extracted from the banks' financial statements. The financial statements of banks will be obtained from the research department of Ecobank Ghana Limited and the website of the various banks in the six Sub-Saharan

African countries. The data would consist mainly of the statement of financial position and income statements from all the commercial banks in operation during 2013 to 2022 financial year.

Data Analysis

Multiple regression analysis would be used to determine the relationship between the two variables. In order to determine this relationship a model would be established with profitability being used as dependent variable and capital structure as independent variable. Return on Assets (ROA) and Net Profit Margin (NPM) would be used as a proxy to profitability while Equity to Debt Ratio, Short Term Debt to Current Assets Ratio, Long Term Debt to Total Assets ratio and Total Debt to Total Assets ratio would be used as proxies to capital structure. Mediating variables that would be used in the model include Size of banks, Assets Tangibility, and Interest Rate. Below will be the models:

$$\text{Model 1: } ROA_{it} = \alpha + \beta_1(ED) + \beta_2(STD) + \beta_3(LTD) + \beta_4(TD) + \beta_5(SIZE) + \beta_6(TANG) + \beta_7(IR) + \varepsilon_{it}$$

$$\text{Model 2: } NPM_{it} = \gamma + \lambda_1(ED) + \lambda_2(STD) + \lambda_3(LTD) + \lambda_4(TD) + \lambda_5(SIZE) + \lambda_6(TANG) + \lambda_7(IR) + \varepsilon_{it}$$

Expected Findings

Two regression models would be used to answer the research questions which will invariably help in achieving the main objective of the study. A test would be conducted to determine whether the models are statistically significant. It is expected that there would be direct and indirect influence of capital structure on commercial banks' performance. It is also expected that the mediating variables would have direct and indirect influence on performance of the banks.

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