

THE IMPACT OF DIGITAL BANKING SERVICES ON PERFORMANCE OF COMMERCIAL BANKS

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ABSTRACT

The integration of digitalization in the banking sector in Zimbabwe is expected to affect the way in which banks come up with financial products and services and consequently customer satisfaction and the performance of these banks. To accomplish this, this study made an attempt to investigate the effect of digital banking on financial performance of commercial banks in Zimbabwe. Quantitative research methodology was adopted. The target population for the study was one commercial bank. Data collection sheet was used in data collection Pearson correlation coefficient helped evaluate the effect of digital banking on the banks' financial performance. The other inferential test multiple regression analysis was used to analyse the effects of digital banking on financial performance. The study revealed that ROA in CBZ a commercial bank in Zimbabwe increased in upwards trends due to an increase in online customer deposits through DIGITAL banking platforms. The study established that online bank transaction to total asset ratio increased in an upwards trend over the specified study period. Further increase in ICT expenses, fees and commissions to total asset ratio increased. The study concluded that online banking transaction significantly and positively predicted ROA and that an increase online banking transactions led to increase in ROA. The study recommends that bank management should enhance digital banking to improve financial performance in commercial banks.

Keywords: Digital Banking, Performance, Commercial Banks, Developing Country.

INTRODUCTION

Digital banking services in the millennium modern days banking activity has become the trending topic of the financial industry. Digital Banking services as defined by Chikoko & Munongo (2015) is the use of the internet, mobile phones, and any other electronic mediums as a delivery channel for banking services, which includes all the traditional services such as balance enquiry, statement printing, transfer of funds to other accounts, bills payment and new banking services such as electronic bill presentment and payment without necessarily visiting a bank. According to Steven (2002) online banking also referred to as vital banking, digital banking or electronic banking is indicated by the use of telecommunication networks and internet to provide an extensive array of financial services and products to clients through a website or a system operated by financial institutions. E-banking can be defined as the deployment of banking services and products over electronic and communication networks directly to customers (Kriplani et al., 2004; Wadesango et al., 2016a). Digital banking according to Sibanda (2014) is the digitization (or moving online) of all the traditional banking activities and programs that historically were only available to customers when physically inside of a bank branch, which include activities like, Money deposits,

Withdrawals, and Transfers, Checking/Savings account management, Bill payment, account services.

Although Digital Banking yields a vast of benefits, several scholars found that its global appreciation still remains at infancy stage (Desta, 2016; Wadesango et al., 2017a). Drehmann & Nikolaou (2013) further indicated that the acceptance of Digital Banking is yet to meet the industrial hopes. Sabi (2014), stressed out that the diffusion of electronic banking is more resolute by the customer acceptance than by the seller offers. Not enough is known about perception and evaluation of corporate's performance.

According to Stephen & Sandeep (2015), corporate performance is a composite assessment of how well an organisation executes on its most important parameters, typically financial, market and shareholder performance. Financial performance measures are used to gauge the effectiveness and efficiency by which organisations utilise their investments to generate value for shareholders. The most used and recommended measure for financial performance analysis include profitability, liquidity and solvency (Zenios et al., 1989; Wadesango et al., 2017b). The useful profitability ratios and measures are the return on assets (ROA), return on equity (ROE), and the operating profit margin in addition on the net revenues.

The response to the introduction of Digital Banking seems to be low, according to Sathye (2005) indicating resistance to change mainly by customers which is now leading to low performance in terms of returns to CBZ. CBZ is a commercial financial institute in Zimbabwe, whose full name is CBZ Holdings and it was established in 1980 as the Bank of Credit and Commerce Zimbabwe Limited (BCCZ).

However, there has been low usage of Digital services in most Zimbabwean banks and CBZ Bank has not been spared. According to internal statistics from CBZ (2017), the number of online customers at CBZ Gweru Branch is still very low compared to offline customers even after CBZ Bank has invested heavily in their digital services. The response to the introduction of Digital Banking seems to be low, indicating resistance to change. Although, CBZ Bank has constantly searched for solutions to reduce their cost of operations, improving customer satisfaction levels, and gaining customer loyalty through overture of robust digital banking services, the bank continuously faced challenges with user acceptance of Digital services channels available.

According to a study conducted by Sibanda (2014) digital banking services were initially introduced in Zimbabwe in 2010 and has triggered a lot of activity and banking institutions are continuously scuttle for their share in the digital financial services space but a gap remains open on the aspects to be researched by the researcher. There is still a gap that needs to be researched on in accordance to the implementation of Digital banking systems which is the performance part of the institution. Below are a few citations of the problems of Digital banking to performance:

Attaining App Perfection

They remain difficult to navigate, at times, and frequently crash. This can be detrimental to the company's progress as it would represent poor quality.

Technology Upgrades

Five years ago, smartphones were only just becoming popular. Today, the functionality largely defines the device that is owned. Those who travel frequently on business depend on Apple and Android tablets, those who work as freelancers depend on high quality cameras

and digital notebooks, while those who work the 9-5 routine prefer robust laptops and high-performance desktops. In addition, we have products like Amazon Echo thrown in the mix, for daily alerts and to perk up the overall lifestyle. Knowing which audience to target is only the half of it; understanding who would use what device under which circumstances is equally important. This means a serious amount of investment for banking and financial entities in digital capabilities and formulating effective digital strategies.

Cyber Crime

Most banking and financial applications are subject to cyber-attacks the most. If not money unswervingly, there is always the threat of data being compromised leading to leading to low or poor financial performance.

Spearheading with Innovation

Spearheading the marketplace by offering innovative services is not just desired, but also required in order to stay ahead of the curve and attract a wide customer base. Especially with a large base of young users, it becomes important to differentiate your company in the ever-growing and competitive marketplace. However, companies are often tentative to take the leap, as they are aware that things can horribly backfire and cause instant backlash from irate customers.

Sustainability

An organization's sustainability as a leader is attainable only through synergy. Only when the users acknowledge the value of the product or service will the organizational value skyrocket to success and remain there. In this context, the power of social media is often overlooked. While consistently good reviews uplift the organization to a better status, consistently bad reviews can destroy even an entire empire.

Delivering Quality at Speed

In the rush of wanting to deliver products and services at an accelerated speed, companies often tend to compromise on the quality. The issue with quality is that there is no such thing as a small bug; a bug is a bug. There have been several instances of organizations knowingly turning a blind-eye to defects in products and software even before the item hit the market.

Digital banking is now common and is being used on a daily basis in Zimbabwe. Many scholars have researched about digital banking but were mainly focused on its adaptation and its ability to customer service deliver as well as customer satisfaction, nothing much has been said about Digital banking in relation to the institution's performance. Some scholars like Wadesango & Mhaka (2017) and Getahun (2015) only focused on mobile banking services, which is a part of Digital banking as a whole. The response to the usage of Digital Banking Services seems to be low, indicating resistance to change. Therefore, this study sought to examine the effectiveness of Digital Banking services in relation to company performance.

RESEARCH QUESTIONS

Is there a significant impact of internet banking on performance?

Does mobile banking lead to effective performance?

Does E-wallet services lead to better financial performance?

Is there a relationship between Digital banking and financial performance?

RESEARCH METHODOLOGY

The study adopted the quantitative research methodology. Specific population about which information is desired is referred to as a target population. The researchers selected a target population of 25 respondents drawn from the bank under study inclusive of top managers. The study will use the self-administered questionnaire method. The study made use of the simple and expert random sampling in the selection of all the respondents. In this research the sample will be limited to the banks' retail managers, and staff who interface with Digital Banking Services queries and installations in their operations on a day to day basis. The sample was seen as representative enough as these respondents are involved in the day to day business with Digital Banking Services. The sample is outlined below in Table 1.

Category	Population Size	Sample Size	Sample (%)	Sampling Technique
Managers	3	2	66.67%	Expert Random
Staff	22	13	59.09%	Simple Random
Total	25	15	60%	

The research used the Statistical Package for Social Scientists (SPSS) software to see what information it can provide before conclusions and recommendations are made. Data was presented in tables to demonstrate the relationship of the variables. The package will be used to construct frequency tables.

Analytical Model

The regression model used was:

$$Y_{it} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + e_t$$

Y_{it} - Financial performance as measured by Return on Asset of bank i at time t, (Net interest income/Asset growth rate)

α - Estimated value of Y when all the other variables are zero

X_1 - Online Customer Deposits/Total Assets

X_2 - Online Banking Transactions/Total Assets

X_3 - Internet Fees and Commissions/Total Assets

X_4 - Internet Banking Expenditure/Total Assets

e_t - Error term

Where β_j , $j=1, 2, 3$ are coefficients whose sign shows the how significant the effect internet banking on financial performance of banks indexed by the return in assets. Moreover, the test of hypotheses to find out the level of significance of an independent variable against

the dependent variable also be tested through the multiple regression and correlation with the significance level of 95% confidence level or a p -value <0.05 .

This study used both inferential and descriptive statistics in analysing data. Data analysis procedure followed the usual four-stage phases used in research: data cleaning, reduction, differentiation and explanation. Cleaning data was involving editing, coding and tabulation with an aim of detecting errors. Analysis was done mainly using (SPSS) program. Descriptive statistics: frequencies, percentages and mean for each specified variable was calculated. To unearth the nature of the relationship among the variables, inferential tests of Pearson correlation coefficient and multiple regression analysis was used. Pearson correlation coefficient helped evaluate the effect of internet banking on the banks' financial performance. Exploration of the relationships was based on the Pearson's correlation coefficient. The correlation coefficient shows the linear association strength of two variables and lies between -1 and +1. A correlation that is close to +1 indicates a significant positive relationship. Correlation that is closer to -1 shows a strong negative relationship while a correlation of 0 indicates no relationship between the two variables.

Test of Significance

The study used multivariate regression model to find the value of α_0 and β_i which clarifies the correlation among the independent variables and dependent variable. The reliability of the approximations of the individual variable beta was tested by p -value in the ANOVA table. The results from the ANOVA tested the suitability of the model from a statistical point of view. Adjusted R^2 was used to evaluate the magnitude of variance in the dependent variable that explained the independent variables to a maximum of 1. Further, the F-test was used to test the significance of R , which is similar to testing the significance of R^2 and testing the significance of the whole regression model while the t -test was utilised to show how each variable's beta is significant.

DATA ANALYSIS

Descriptive Statistics

From descriptive results in Table 2, commercial bank financial performance was measured using ROA as it is the most stable measure of financial performance. The study found that the ROA improved in upwards trends from 2015 at 0.016 to 0.029 in 2018 with a $Min M = 0.016$, $Max M = 0.029$ and $Mean M = 0.020$. The findings in Table 2 indicated that CBZ a commercial bank's online customer deposits to total asset ratio also had an upward trend increasing from 0.315 in year 2015, 0.321 in year 2016, 0.354 in year 2017 and 0.378 in the year 2018 indicating upturn on online customer's deposits recording a $Max Mean = 0.378$ and a $Min Mean = 0.205$.

Year	ROA	Online Customer Deposit/Total Assets	Online Bank Transaction/Total Assets	Fees And Commissions/Total Assets	Internet Banking Expenditure/Total Assets
2015	0.016	0.315	0.1254	0.1254	0.242
2016	0.021	0.321	0.1733	0.1733	0.286

2017	0.023	0.354	0.1691	0.1691	0.301
2018	0.029	0.378	0.2065	0.2065	0.297
Mean	0.020	0.3146	0.1553	0.1553	0,2714
Max	0.029	0.378	0.215	0.2065	0.301
Min	0.016	0.205	0.1254	0.1254	0.242

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The descriptive results in Table 2 indicated that online bank transaction to total Asset ratio exhibited an upward increase in year 2015 from 0.0117, to 0.120 in year 2016, 0.128 in 2017 and lastly to 0.215 in year 2018 recording a *Mean* of 0.1362 with a *Max Mean* = 0.215 and *Min Mean* = 0.101. The descriptive results in Table 2 showed that fees and commissions to total asset ratio exhibited unstable trend with year 2015 and 2016 indicated an upward trend from 0.1254 to to 0.1733 respectively before declining to in year 2017 to 0.1691 before it increased to 0.2065 attaining a mean of 0.1553 with a *Max Mean* = 0.2065 and a *Min mean* = 0.1023. Descriptive results further highlighted that internet banking Expenditure to total asset ratio have a positive trend from 0.242 in year 2015, 0.286 in year 2016 to 0.301 in year 2017 before declining to 0.297 in year 2018 leading to a mean of 0.2715, a *Max mean* = 0.301 and *Min Mean* = 0.231 an indication of variation in internet banking expenditure among the banks.

Correlation Analysis

TABLE 3 CORRELATION BETWEEN INTERNET BANKING AND RETURN ON ASSETS						
		(ROA)	OCD	OBT	F&C	IBE
	Pearson Correlation	1				
(ROA)	Sig. (2-tailed)	0.000				
	N	15				
OCD	Pearson Correlation	0.792**	1			
	Sig. (2-tailed)	0.001	0.0015			
	N	15	15			
OBT	Pearson Correlation	0.617*	0.409	1		

	Sig. (2-tailed)	0.0012	0.013			
	N	15	15	15		
F&C	Pearson Correlation	-0.469*	0.659	0.324	1	
	Sig. (2-tailed)	0.0011	0.025	0.476	0.638	
	N	15	15	15	15	
IBE	Pearson Correlation	-0.682*	0.655	0.411	0.345	1
	Sig. (2-tailed)	0.012	0.332	0.254	0.761	0.776
	N	15	15	15	15	15

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

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

The correlation between internet banking and financial performance in neither direction either positive or negative and strength of link were determined using Pearson Product Moment correlation coefficient as reflected in Table 3. This would help in weighing whether there is existence of any sort of association between the study variables before further regression analysis. The criterion applied was that correlation coefficient of 0.7 and above was strong, while 0.4 and less than 0.7 was regarded to be moderate while 0 and less than 0.4 weak (Wadesango & Wadesango, 2016b). The correlation coefficient also was used to test whether there existed were if the correlation coefficient if more than 0.9 ($r > 0.9$) there exist high multicollinearity which may lead to unreliable regression model (Sibanda, 2014; Wadesango, et al., 2017c, d). The results in Table 3 shows that there is a strong, substantial and positive correlation between online customer deposit (OCD) and ROA where $r = 0.792$, $PV = 0.000$), there is a moderate, significant and positive correlation between Online banking transactions and ROA where $r = 0.617$, $PV = 0.0012$, Internet transaction fees and commissions (F&Cs) has a moderate while negative correlation with ROA, $r = 0.469$, $PV = 0.0011 < 0.05$ and that there exist a strong, significant and negative relationship between internet banking expenditure and ROA, as $r = -0.682$, $PV = 0.012$. The study also found that online customer deposits, online banking transaction has a significant relationship with ROA while fees and commissions on internet banking and internet banking expenditure had a negative relationship with ROA in commercial banks.

Regression Model Summary

For the determination of the effect and relationship of digital banking and financial performance of CBZ, regression analysis results are needed Table 4.

Regression Analysis Results

The regression model used in the study had an adjusted $R^2 = 0.6681$ and standard error of 0.041 which denote that the mean deviation of ROA predicted resultant regression model at 95% confidence interval level internet banking account for 66.81% variance of ROA in CBZ as reflected in Table 4. The findings in Table 3 show that the variable had a significant goodness of fit between variable as F - calculate, 16.424 (0.67/0.04).

The results in Table 4 shows that ROA of bank was significantly predicted by online customer deposits (OCD) ($\beta = 0.78936$, $P = 0.000 < 0.05$). This implication is that increase in Online Customer Deposits would lead to significant increase in ROA in commercial banks locally.

The outcome of online banking transaction significantly predicts ROA ($\beta = 0.20064$, $P = 0.0014 < 0.05$), fees and commissions on internet banking predict a negatively and significant influence on ROA ($\beta_3 = -0.62259$, $P = 0.033 < 0.05$) and internet banking expenditure predict significant and negative effect on ROA in banks ($\beta_4 = -0.24806$, $P = 0.018 < 0.05$).

INTERPRETATION OF THE FINDINGS

The study recognised that ROA in banks increased in aloft trends due to internet banking as from 2015 at 0.016 to 0.029 in 2018 with a $M = 0.020$. The results indicated that commercial bank online customer deposits to total asset ratio upsurge from 0.215 in year 2015, to 0.378 in the year 2018 indicating increase on online customers' deposits. The results concurred with Ali & Ali (2014) who publicized that online based bank services increase customer base.

Results indicated also that online bank transaction to total Asset ratio moved in an upwards trend from 0.117 in year 2015, to 0.215 in year 2018 with a Mean of 0.1307. The increase in internet banking expenses fees and commissions to total asset ratio had an increased mean of 0.1362 but exhibited unstable trend with year 2015 and 2016 indicated an upward trend from 0.1254 to 0.1733 respectively before declining to in year 2017 to 0.1691 before increasing to 0.2065.

Descriptive results unveiled an increasing trend of internet banking Expenditure to total asset ratio with a mean of 0.30. The correlation results indicated there is a strong, significant and positive correlation between OCD and ROA where, $r = 0.792$, $PV = 0.000$, there is a moderate, significant and positive correlation between Online banking transactions and ROA where $r = 0.617$, $PV = 0.0012$. The study agreed with Ngango (2015) and Wadesango et al. (2016a) who revealed that revealed that online banking services improve banks' performance and increased profits and return on equity, improved bank's managers' competence, increased bank asset and promoted the banks growth and its expansion in Rwanda. There exist a moderate and negative correlation between F&Cs and ROA ($r = 0.469$, $PV = 0.0011 < 0.05$). The study established the presence of a strong, significant and negative relationship between internet banking expenditure and ROA ($r = -0.682$, $PV = 0.012$). The study found that online customer deposits, online banking transaction has a significant relationship with ROA while fees and commissions on internet banking and internet banking expenditure had a negative relationship with ROA in commercial banks.

Regression results showed that ROA was significantly predicted by online customer deposits (OCD) ($\beta = 0.78936$, $P = 0.000 < 0.05$) hence increase in online customer deposits would lead to significant increase in ROA in commercial banks in Zimbabwe. The findings concurred with Rudolf (2009) who found that internet banking usage leads to mobilization of as many online customer deposits as promising at reasonably low interest rates, leading the hoarded deposits to long term investors at a higher rate able to cover the operation costs as well as attaining high bank profit. Findings in regression model indicated that online banking transaction significantly and positively predicted ROA ($\beta = 0.20064$, $P = 0.0014 < 0.05$) hence an upward trend of online banking transactions led to increase in ROA. The findings concurred with Ovidiu & Alina (2015) who revealed that the adoption of internet leads to lower transactional costs thus attracting some more customers for such banks

and improve bank return on assets. On the other hand, the fees and commissions on internet banking predicted a negatively and significant influence on ROA in banks ($\beta_3 = -0.62259$, $P = 0.033 < 0.05$) and therefore a rise in internet fees and commission led to decrease in ROA while IBE predicted significant and negative effect on ROA in banks ($\beta_4 = -0.24806$, $P = 0.018 < 0.05$) hence increase in internet banking expenditure led to decrease in ROA in banks.

Major Findings

The study revealed that ROA rose up due to digital banking. Increase in commercial bank online customer deposits and up rise on online customers' deposits led to increase in bank ROA. The study established that online bank transaction to total Asset ratio increased upwardly over the specified study period. Further increase in internet banking expenses fees and commissions to total asset ratio increased over the study specified period but exhibited unstable trend as it oscillated as it declined. The study established an upward shift of internet banking Expenditure to total asset ratio.

The study established a strong, significant and positive correlation between online customer deposit (OCD) and return on Assets (ROA). There is a moderate, significant and positive correlation between online banking transactions and ROA. The study however found that exist a reasonable and adverse correlation between Internet transaction fees and commissions (F&Cs) and ROA. The study results went on to reveal that there exist a strong, significant and negative relationship between internet banking expenditure and ROA.

This study also found that OCD and online banking transaction has a significant relationship with ROA while fees and commissions on internet banking and internet banking expenditure had a negative relationship with ROA in commercial banks. Regression results established that ROA significantly predicted by (OCD) and increase in online customer deposits would lead to significant increase in ROA of CBZ Bank. Findings in regression revealed that online banking transaction significantly and positively predicted ROA and that an increase online banking transactions led to increase in ROA. However, the fees and commissions on internet banking predicted a negatively and significant influence on ROA in banks hence increase in internet fees and commission led to decrease in ROA while internet banking expenditure predicted significant and negative effect on ROA in banks increase in internet banking expenditure led to decrease in ROA in banks.

CONCLUSIONS

The study concludes that online customer deposits, online banking transaction has a significant relationship with ROA while fees and commissions on internet banking and internet banking expenditure had a negative relationship with ROA in commercial banks. The ROA of bank was significantly predicted by online customer deposits (OCD) and increase in online customer deposits would lead to significant increase in ROA in commercial banks in Kenya. Online banking transaction increase customers banking transaction such as increase deposit volume positively predicting ROA and that an increase online banking transactions led to increase in ROA. Increase in commercial bank online customer deposits through internet banking and increase on online customers' deposits led to increase in bank ROA. The Fees and Commissions on internet banking predicted a negatively and significant influence on ROA in banks hence increase in internet fees and commission led to decrease in ROA. An increase in internet banking expenses fees and commissions lower total bank asset hindering bank profitability. The study finally concluded that internet banking expenditure predicted significant and negative effect on ROA in banks increase in internet banking expenditure led

to decrease in ROA in banks, Increased trend of internet banking Expenditure lower bank asset and lower bank profitability. All being said and done the researcher concluded that, there is an effect to financial performance derived from the adoption of digital banking and its platforms.

RECOMMENDATIONS

The recommendations of the study are:

The bank management should enhance digital banking to improve financial performance in commercial banks. The need for adoption of internet banking in commercial banks is evident, since this has provided the benefit of constant access to certain core services reducing the need to interact with bank staff for many people and increase banks' ROA.

Government through the financial sector regulatory authorities, more so RBZ, should encourage banks to improve digital banking but at the same time closely regulating such expenditure on developments to assure on the integrity of more so the payment systems. Digital banking is the engine of increase ROA in banks. Faster and more financial service delivery spurs development of businesses and economic growth in all other sectors in addition to facilitating financial deepening.

Improve on adoption of digital banking to increase bank return on assets. The regression results confirmed that ROA of bank was significantly predicted by online customer Deposits (OCD) and increase in online customer deposits would lead to significant increase in ROA in commercial banks in RBZ.

REFERENCES

- Ali, A., & Ali, H. (2014). Customers' perception of m-banking adoption in kingdom of Bahrain: an empirical assessment of an extended tam model. *International Journal of Managing Information Technology*, 6(1), 1-13.
- Chikoko, L., & Munongo, S. (2015). Extending the technology acceptance model to mobile banking adoption in rural Zimbabwe. *Journal of Business Administration and Education*, 3(1), 51-79.
- Dest, T. S. (2016). Financial performance of the best African banks: a comparative analysis through CAMEL Rating. *Journal of Accounting and Management*, 6(1), 1-20.
- Drehmann, M., & Nikolaou, K. (2013). Funding liquidity risk: definition and measurement. *Journal of Banking & Finance*, 37(7), 2173-2182.
- Getahun, M. (2015). *Analysing financial performance of commercial banks in Ethiopia: CAMEL Approach*. Unpublished Thesis, Addis Ababa University Ethiopia.
- Kriplani, A., Singh, B. M., & Meena, S. (2004). One-step hysteroscopic myomectomy: unusual cases and a review of the literature. *Journal of Laparoendoscopic & Advanced Surgical Techniques*, 14(6), 390-394.
- Ngango, M. A. (2015). *Electronic banking and financial performance of commercial banks in Rwanda: a case study of bank of Kigali*. Unpublished Banking Report.
- Ovidiu, S., & Alina, S. (2015). The impact of internet banking on the performance of Romanian banks: DEA and PCA approach. *Procedia Economics and Finance*, 20, 610-622.
- Sabi, H. M. (2014). Research trends in the diffusion of internet banking in developing countries. *Journal of Internet Banking and Commerce*, 19(2), 1-31.
- Sathye, M. (2005). The impact of internet banking on performance and risk profile: evidence from Australian credit unions. *The Journal of International Banking Regulation*, 6(2), 789-895.
- Sibanda, L., (2014). *Factors influencing consumer intentions to adopt online banking in Zimbabwean Commercial Banks; Case of CBZ Bank*, Chinhoyi University.
- Stephen, K. C., & Sandeep, B. J. (2015). Strategic context for internet banking: how traditional banks manage e-commerce to build IT capabilities and improve performance. *Journal of Internet Banking and Commerce*, 20(1), 1-30.
- Steven, A. (2002). *Information Systems: The Information of E-Business*. Natalie Anderson, pp 11-36.

- Wadesango, N., & Mhaka, C. (2017). The effectiveness of enterprise risk management and internal audit function on quality of financial reporting in universities. *Journal of Economics and Behavioral Studies*, 9(4), 230-241.
- Wadesango, N., & Wadesango, O. (2016). The need for financial statements to disclose true business performance to stakeholders. *Corporate Board: Role, duties and composition*, 12(2), 77-84.
- Wadesango, N., Chinamasa, T., Mhaka, C., & Wadesango, V. O. (2017b). Challenges faced by management in implementing audit recommendations: A literature review. *Risk Governance and Control: Financial Markets & Institutions*, 7(4), 51-61.
- Wadesango, N., Katiyo, E., Mhaka, C., & Wadesango, O.V. (2017e). An evaluation of the effectiveness of Financial Statements in disclosing true business performance to stakeholders in hospitality industry (A case of Lester-Lesley Limited). *Academy of Accounting and Financial Studies Journal*, 21(3), 1-22.
- Wadesango, N., Mhaka, C., & Wadesango, V. O. (2017a). Contribution of enterprise risk management and internal audit function towards quality of financial reporting in universities in a developing country. *Risk Governance and control: Financial markets & institutions*, 7(2), 170-176.
- Wadesango, N., Mhaka, C., Chinamasa, T., & Wadesango, V. O. (2017c). An investigation into management's reluctance in implementing audit recommendations and its effects to risk. *Corporate Board: Role, Duties & Composition*, 13(2), 61-70.
- Wadesango, N., Nani, L., Mhaka, C., & Wadesango, V. O. (2017d). An Analysis of the impacts of liquidity constraints on new financial product development. *Risk governance & control: Financial Markets & Institutions*, 7(3), 65-76.
- Wadesango, N., Tasa, E., Milondzo, K., & Wadesango, V. O. (2016a). An empirical study of the influence of IAS/IFRS and regulations on quality of financial reporting of listed companies. *Risk Governance and control: Financial markets & institutions*, 6(4), 76-83.
- Wadesango, N., Tasa, E., Milondzo, K., & Wadesango, V. O. (2016b). A literature review on the impact of IAS/IFRS and regulations on quality of financial reporting. *Risk Governance and control: Financial markets & institutions*, 6(4), 102-108.
- Zenios, W. T., Jackson, D. W. R., & Ostrom, L. L. (1989). Examining product managers' job satisfaction and performance using selected organizational behaviour variables. *Journal of the Academy of Marketing Science*, 17, 147-156.