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FACULTY OF COMMERCE

DEPARTMENT OF ACCOUNTING

**AN INVESTIGATION ON THE IMPACT OF ACCOUNTS
RECEIVABLES MANAGEMENT ON FINANCIAL PERFORMANCE: A
CASE OF ZIMBABWE ELECTRICITY TRANSMISSION AND
DISTRIBUTION COMPANY**

BY

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**THIS DISSERTATION IS SUBMITTED IN PARTIAL FULFILMENT
OF THE REQUIREMENTS OF THE BACHELOR OF COMMERCE
HONOURS DEGREE IN ACCOUNTING IN THE DEPARTMENT OF
ACCOUNTING AT MIDLANDS STATE UNIVERSITY.**

GWERU, ZIMBABWE

MARCH 2021

DECLARATION

I **BRANDON NYASHA MANDEVERE** do hereby declare that this dissertation is a product of my own work and research; that it has not been submitted in full or partial fulfilment of any other degree or at any other university or institution. All materials used in the research are fully acknowledged and cited; and references, list of tables, list of figures and appendices are also included.

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Management on financial performance: A case of Zimbabwe
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DEDICATION

I dedicate this dissertation to my mother and my grandmother, whom have been and always will be my support and strength ever since birth and also during my dissertation development. And above all else, all glory and honour is bestowed to God Almighty.

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Firstly, I would like to thank Lord God for life, knowledge and wisdom which have made me reach where I am today. I would also like to gratitude and love to my family for their daily guidance and immense involvement throughout my entire life. I would also like to thank the Zimbabwe Electricity Transmission and Distribution Company, staff employees and managers for their unwavering assistance in making this thesis a possible success; and for also providing me with the information I requested for.

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ABSTRACT

The study targets to investigate the impact of accounts receivables management on the financial performance of an entity, with the selection of ZETDC as the case study. The objectives of the study were to determine the effect of Average Receivables Collection period on the profitability of ZETDC, to assess the effect of cash conversion cycle on the liquidity position of ZETDC, to examine the impact of accounts receivables management on sales revenue generation within the organisation and to determine the relationship between accounts receivables management and financial performance indicators of ZETDC. A positivistic philosophy was utilised to guide the research; as well the utilisation of a mixed approach. Judgmental sampling was utilised on a size population of 50 ZETDC staff, resulting in a sample size of 21 staff comprising employees and managers. Descriptive and correlational analysis were utilised for data analysis and interpretation. The financial records utilised were annual audited financial statements from the periods from 2014-2016. The findings of the study indicated that the overall account receivables management has a significant and positive impact on financial performance, mostly in regards with profitability. It also deduced a positive relationship and correlation between return on total assets and average receivables collection period as well as net profit and average receivables collection period. Also, there was no significant relationship established between receivables turnover ratio and receivables to sales ratio, as well as between cash conversion cycle and current ratio. The study concluded therefore that accounts receivables management had a significant and vital impact on financial performance in relation to the indicator of profitability, but was not as significant on impact with regards to liquidity.

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

The main aim of this study is the investigation of the impact of accounts receivables management on financial performance of the Zimbabwe Transmission and Distribution Company. In this chapter, the researcher seeks to outline the background of the study before explaining the statement of the problem of this project. The researcher will go further on to provide an insight of the research objectives; research questions; the significance of the study; delimitations and assumptions; limitations and definition of terms; as well as a summary to round up the whole chapter.

1.1 Background of the Study

In the corporate world, management has the utmost responsibility of ensuring that profitability exists and is ensured, as well as ensuring to increase the firm's value to its shareholders. As such, liquidity or working capital decision is one of the major financial management decisions in an entity. Jindal, Simran and Vartika (2017) noted that receivables management is considered as a significant component of working capital management.

Wiley (2018) noted that accounts receivables represent amount due from customers arising from transactions in the ordinary course of business. Accounts receivables management have received a great deal of attention in current periods, most notably in public utility companies within developing countries. Darko and Donkor (2016) stated that this attention was partly because power utility companies within developing countries on Africa are perceived as inefficient in their service provisions; with ineffective management of accounts receivables being one principal cause. An analysis on the Electricity Company of Ghana on the behavioural bill payment factors of customers and stakeholders by Sualihu and Rahman (2014), made them note that the company itself like many other electrical utilities within developing countries was finding it more difficult than ever to keep customers current with their electricity bills. Bills are the universal primary means by which utilities report usage data to consumers and provide them with the essential information of

how much they owe in relation to their consumption as per period, as well as when such owing is due.

During the previous decades dating from 2000 to 2020, Zimbabwe’s economy has been getting hit hard by a turmoil of events. Most African countries have been subjected to heavy economic woes as a result of political and economic instability due to fluctuant exchange rates and unstable price surges, sanctions, as well as ongoing war for minerals and territory among others. According to IMF (2019), the Sub-Saharan region suffered from weather-related shocks such as the El Nino; that brought several droughts affecting Angola, Botswana, Ethiopia, Zambia and Zimbabwe. This in turn has led to food insecurity, migration, inflationary pressures due to supply constraints, fiscal pressures and electricity shortages. The following table indicates the percentage change and percent outlook for Zimbabwe in relation to certain macroeconomic variables:

Table 1.1: Regional Economic Outlook-Sub Saharan Africa: Zimbabwe

ZIMBABWE	PERIOD					
	2010-2015	2016	2017	2018	2019	2020
VARIABLES						
Real GDP (Annual Percent Change)	9.4	0.7	4.7	3.5	-7.1	2.7
Consumer Prices, Annual Average (Annual Percent Change)	1.5	-1.6	0.9	10.6	161.8	49.7
Government Debt (Percent of GDP)	41.5	54.2	52.9	37.1	17.7	15.1
External Debt, Official Debt, Debtor Based (Percent of GDP)	37	33.8	31.1	33.6	56	55.5

Source: IMF-Common Surveillance Database and IMF World Economic Outlook Database, October 2019

Zaba (2016) noted in an article that ZETDC proposed to hike the electricity tariff by 49%; but it would seem impossible for every sector represented to afford any tariff increase. Some companies under these sectors were already struggling to pay electricity tariffs at the current levels, as well as other consumers who were struggling to pay their bills. The US\$1 billion owed to ZETDC by some consumers was such evidence of the struggling situation hitting on the parastatal. During this time, Zimbabwe already had the highest and least competitive tariff rates in the southern region; as well as having to experience a disabling liquidity squeeze, company closures and low capacity utilisation. She added that such tariff hikes would adversely affect the mining and manufacturing sectors; in as much as the former was being affected by falling mineral prices and downscaling of operations, and the latter struggling from stiff imports competition. Such economic and socio-economic woes

would gradually affect any such company on closure or individual laid off from work whom already had an impending owing towards electricity consumption.

According to Mambo (2016) in an article, ZETDC was failing to service its debts totalling US\$1,3 billion. It was stated that ZETDC owed creditors and other owings to loans amounting to US\$987 million and US\$330 million respectively. The article also indicated that ZETDC itself was owed US\$1 075 billion by consumers, mostly parastatals, local authorities and private companies. Table 1.2 below illustrates the Related Party receivables for the Group for the periods 2015 to 2016.

Table 1.2: Related Party Receivables Summary

NAME	GROUP		COMPANY	
	2016	2015	2016	2015
	US\$	US\$	US\$	US\$
	615,424,050	460,783,239	537,783,919	368,090,099
ZETDC	756,328,251	624,635,380	661,796,431	519,119,791
Less: Allowance for Credit Losses	(140,904,201)	(163,852,141)	(124,012,512)	(151,029,692)
ZESA Holdings	2,488,505	97,447	2,488,505	97,447
Zesa Enterprises	1,272	8,105	1,272	8,105
Powertel	1,972	140	1,972	140
KHPC	0	0	85,820,413	86,198,342
	<u>617,915,799</u>	<u>460,888,931</u>	<u>626,096,081</u>	<u>454,394,115</u>

Source: Zimbabwe Power Company Annual Report 2016

Table 1.1 above displays the group related party receivables as per each subsidiary entity under the Zimbabwe Power Company illustrated under their notes to the consolidated financial statements for the periods 2015-2016. According to the information, ZETDC's receivables contribution in the group rose from the totals of US\$ 624,635,380 in 2015 to US\$756,328,251 in 2016, indicating a 21.08% increase. However, due to the presence of allowance for credit losses, the actual increase would be a measurement of the balance of the difference between ZETDC total receivables and the allowances for credit losses, which resulted to US\$460,783,239 in 2015 to US\$615,424,050 in 2016 indicating a 33.56% increase. The allowances for credit losses decreases from US\$163,852,141 in 2015 to US\$140,904,201 in 2016, depicting a 14.00% decrease.

Whereas, in relation to the subsidiary itself, ZETDC's total receivables rose from US\$519,119,791 in 2015 to US\$661,796,431 in 2016 indicating a 27.48% increase. As the adjustment for the allowance for credit losses is made, the balance of receivables resulted to US\$368,090,099 in 2015 and US\$537,783,919 in 2016, indicating a 46.10% increase. The allowances for credit losses declined from US\$151,029,692 in 2015 to US\$124,012,512 indicating a 17.89% decline. These figures are important mainly due to the nature of the relationship between account receivables and allowance for credit losses. The allowance for credit losses is an estimate of the debt that a company is unlikely to recover, and is taken from the perspective of the company that extends credit to its buyers. Liberto (2019) states that this allowance is an accounting technique enabling companies to take these anticipated losses into consideration in financial statements to restrain overstatement of potential income.

With the use of a panel data estimation technique, Onchangwa, Memba and Nasieku (2018) noted that listed firms should embrace robust receivable management techniques as reducing the average collection period would reduce financial distress of the listed firms. Kevin and Omagwa (2017) noted that debt collection policies were statistically significant in influencing financial performance of selected microfinance institutions at Nairobi City County in Kenya. Their use of a descriptive research design and purposive sampling criterion, as well as multiple regression analysis assisted them with the aid of respondent's data to bring out this evaluation. Tirop and Nganga (2018) and Jindal, Simran and Vartika (2017) viewed that there is a strong significant relationship between profitability of the company and average collection days, bad debts and bill accuracy; in which accounts receivables were managed well.

On the contrary, Kumaraswamy and George (2019) on an investigation of trade credit management and firm profitability revealed that a carefully devised credit policy may not prove efficient if the firm does not collect receivables diligently. This was noted as the results of their analysis of Daily sales outstanding as an accounts receivables measure demonstrated a weak, adverse relationship with earnings of listed Saudi manufacturing firms. Utilising the average collection period in days to measure receivables management, Obeidat and Jawabri (2016) noted that there was no significant effect of receivables management on the profitability of listed construction equipment firms mainly due to the nature or type of the construction firm. Loo and Lau (2019) noted that managers should pay deeper attention on managing their receivables as receivables management reflects a robust significant negative relationship towards most element of returns on investment, return on equity and stock management.

1.2 Statement of the Problem

ZETDC is facing a surge in its accounts receivables as a result of proposed increased tariff hikes, in which adds an additional costly burden to stakeholder consumers already owing electricity bills as a result of their failure to purchase or repay current or past consumption bills. Moreover, due to a destabilizing and eroding economic status of the country as a result of poor, ineffective and dissatisfactory policy measures; most electricity consumers namely in the mining, manufacturing, agricultural and government sector are dealing with pressurised economic woes and costs. This in turn makes it more difficult for companies under these sectors to effectively settle their bills owing to energy consumption. Due to prior periods mismanagement decisions, dubious project and costly contract deals, as well as corruption among top rank management officials; their efforts to even adjust their tariffs to compensate for and align with the rapidly surging hyperinflationary pressures of the Zimbabwean economy, financial woes continue. As such, this study seeks to investigate the impact of accounts receivables management on the financial performance of ZETDC.

1.3 Research Objectives

The main objective is to investigate the availability of strong and effective accounts receivables management techniques which may enable ZETDC to efficiently perform financially and control their credit risks. This study seeks to:

- To determine the effect of Average Receivables Collection period on the profitability of ZETDC
- To assess the effect of cash conversion cycle on the liquidity position of ZETDC
- To examine the impact of accounts receivables management on sales revenue generation within the organisation
- To determine the relationship between accounts receivables management and financial performance indicators of ZETDC

1.4 Research Questions

- To what extent does accounts receivables management affect the financial performance of ZETDC?

- What is the effect of the accounts receivables collection period on the profitability of ZETDC?
- To what extent does ZETDC's accounts receivables contribute towards the working capital structure of the organisation?
- What is the effect of the cash conversion cycle on the liquidity of ZETDC?

1.5 Significance of the Study

➤ To the Researcher

The study is done in partial fulfilment of the requirements for the Bachelor of Commerce Honours Degree in Accounting of the Midlands State University. It is also expected to provide a platform for the researcher to apply the theoretical knowledge he obtained at college, as well as the researcher's analytical and judgmental skills getting enhanced as a result of this research.

➤ To the University

The information gathered and obtained by the researcher will be of importance and value to the university, as fellow students will benefit as they may make reference and utilise some of the results obtained in this research.

➤ To ZETDC

The research will provide the management of ZETDC with strategies and tools that will enable them to apply effective accounts receivables management techniques. It will also assist management in determining appropriate and functional analysis of their accounts receivables so as to focus and attempt to improve on the financial performance and eliminate the issue of recurring debts or owing.

1.6 Assumptions

The study was carried out assuming that ZETDC has no changed regulations over the period of the study taken into account. Another assumption was that accounts receivables alone was the only measure affecting financial performance; without taking into account other factors of macroeconomic variables such as inflation and economic growth as they were assumed to be constant.

1.7 Delimitations

The research will cover the operations of ZETDC from the period of 2016 to 2019. This subsidiary has offices in every province in Zimbabwe, but the research will focus on ZETDC Southern Region-Regional Office located in Gweru. The study will focus on individuals within the Sales and Finance sections of the company.

1.8 Limitations

The study was based on the data of ZETDC, but access to detailed and specific information of the accounts receivables as well as the computations of accounts receivables information for other periods under study was a challenge, due to failure to obtain such information during research. The limitation was tackled by researching the vital areas that are similar and considerably present in any organisations. There is also limited research and study on the impact of accounts receivables management of or accounts receivables management at ZETDC. Previous researches on accounts receivables management focused mostly on its impact within manufacturing firms, allied firms or large corporations listed on stock exchanges and small to medium sized entities in different countries. This limitation was tackled by exhausting every nearer reference wherever possible and reference any dissimilar sources where a local source could not be discovered.

1.9 Definition of Key Terms

- Working Capital: These are short-term assets needed or utilised by a entity to support its usual business operations, as defined by Loo (2019). CIMA (2007) views it as the capital available for conducting the day-to-day operations of an entity; normally the excess of current assets over current liabilities.
- Accounts Receivables: Adenugba *et al* (2019) defines account receivable as credit in the provision of goods or services to a person or entity on agreed terms and conditions where payments are to be made later with or without interest. Manyo (2013) defines accounts receivable as debts owed a company by her valuable customers who are trusted with the goods and services taking into account the integrity and character of the customer.

1.10 Summary

This chapter focused on the introduction into the purpose and overview need of the research study being carried out. The section covered the background of the study in regards to ZETDC, the study's significance, research objectives and questions, as well as the assumptions, delimitations, limitations and key term definitions. The following chapter will focus on the literature review of the phenomena under study.

CHAPTER TWO

LITERATURE REVIEW

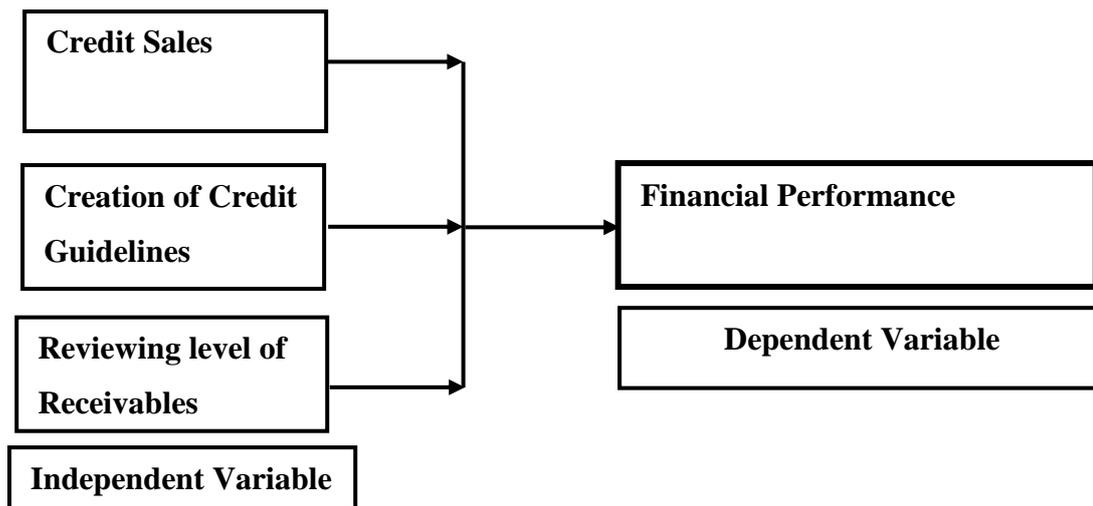
2.0 Introduction

This chapter of the study seeks to analyse and induce further on applicable scholarly literature pertaining to the subject of the impact of accounts receivables management on financial performance. The conceptual framework vital to highlight the practical and or theoretical relationship between the study's variables will be illustrated in this chapter. Previous research and observatory studies carried out by academic scholars on the subject under study, as well as their arguments and evaluations will be discussed in this section. The author will also attempt to highlight the research gap in relation to the base of the academic scholars' scope of argument, so as to supplement towards the existing criteria of conflict.

2.1 Conceptual Framework

According to Adom and Hussein (2018), a conceptual framework depicts the relationship between main concepts of a study. It is a presentation model conceptualizing or illustrates diagrammatically the relationship between variables, which is between the independent variable and dependent variable under study. Accounts receivables management is the independent variable whereas financial performance is the dependent variable. Figure 2.1 below illustrates the relationship between accounts receivables management practises and financial performance.

Figure 2.1: Conceptual Framework



Source: Odoni, Nteere and Njeru (2017)

2.1.1 Credit Sales

According to Bragg (2018), credit sales are acquisitions made by customers for which payment is delayed; and such delayed payments allow customers to generate cash with those goods bought which is then utilised to pay back to the supplier. Kozarevic, Delic and Omerovic (2019) noted that credit sales are when customers are offered the option of the possibility of deferred payment when buying products of service.

They furthermore noted that once a customer extends beyond the delayed payment period given to them, an account receivable may be recognised by the organisation. It is the crucial nature of credit sales management for any organisation to determine the surge and accountability in regards to the control and monitoring of an entity's receivables.

2.1.2 Creation of Credit Guidelines

Creation of credit is a technique mainly carried out by banks to supplement for monetary flow or status within its reserves. Schumpeter (2016) noted that banks establish credit by creating deposits within their act of lending, adding to the notion that as a consequence of their accounting treatment of liabilities as well as the exemption from client money rules; banks have the ability to create new credit money. Creation of credit is usually found as a practice utilised by banking institutions so as to accumulate more money from monetary deposits and continuous lending.

2.1.3 Reviewing Level of Receivables

Reviewing level of receivables is the process and procedure whereby management and where possible with auditors or accountants review and analyse the current receivables level present and viable within the organisation. According to Lauwers *et al* (2018), internal auditors can perform periodic reviews of balances of customers by sending confirmations to such customers to ensure and affirm that their unpaid debt totals are accurate and reliably measured.

Other significant elements that may be reviewed in connection to the receivables balance include reviewing receivables' aged analysis schedules for any large credits and long-term receivables, matching aggregate of the aged receivables listing to the sales ledger control account as well as reviewing subsequent cash receipts from customers and discussions with credit managers over unpaid accounts. Lessambo (2018) deduced that one of the key objectives under receivables review is to appreciate the aspects whereby sampling through non-probability may have the receivables not gaining a specific objective towards their review in the engagement.

Accounts receivables management as an independent variable has been measured either with accounts receivables under current assets as an element or measured using any of the generally accepted accounting ratios or receivables management techniques utilised within the particular sectors or organisations. Jindal, Simran and Vartika (2017), Gill *et al* (2019) and Ejiofor, Adigwe and John-Akamelu (2015) made use of accounts receivables turnover or debtors turnover ratio as a variable measure for receivables.

2.1.4 Financial Performance

Financial performance in its own right does not have a universal definition, however several unique, different and similar calculations, components and variables have been utilised to analyse its concept. Batchimeg (2017) noted the impossibility of having similar determinants of financial performance in every sector due to their different characteristics and operational framework. As he investigated such determinants within Mongolian companies, he selected to utilise dependent variables such as return on assets, return on sales and return on equity to represent financial performance. Bogicevic, Domanovic and Krstic (2016) also agreed on the notion that no single

definition existed for financial performance within the accounting and business economics field; but it could be systematized into two groups namely; financial performance in the narrow sense and in the broader sense. The narrow sense concept focused on evaluating performance solely on indicators of profitability; whereas the broader sense focused not only on profitability; but also liquidity, activity and solvency indicators.

2.2 Theoretical Framework

Managing accounts receivables serve as one of the driving forces for a firm's growth and success, as due to market imperfections; one of the main investments to consider is investing in accounts receivables. As a result; entities attempt to institutionalise key and sound policies to monitor, control and reliably cater for receivables so as to address the aspects of profitability, liquidity and firm growth. In addition, there are existent receivables theories that establish the reason as to the firm's decision to provide credit facilities to their customers. Some of those theories are as follows.

2.2.1 Credit Policy Theory

Policies of providing credit facilities in regards to sales made to customers are one of the crucial policy framework that any firm may set. It serves as a guideline set that sets out the payment and credit terms and conditions for all customers, while also establishing a clear path of action for any delayed payments. Boopathi and Leeson (2016) noted that credit terms which were dependent mostly on industry norms required confidentiality and flexibility; and to avoid unnecessary amounts being tied up in the debt accounts require a systematically based credit policy set on the credit standing basis of consumers and other stakeholders.

The credit policy in its own aspect has to cater for unique and advisably utilisable appraisal techniques for credit management. Such appraisal techniques including the examination of the historic reputation and capacity of repayment of the borrower; as well as the ability to compute a measurement for credit anomalies effectively have the potential to improve the management of risk; as noted by Mirzaev (2018). Credit policy provides the framework and authenticity towards an administration of the credit portfolio effectively

2.2.2 Credit Risk Theory

The risk of credit worthiness is a vital aspect in assessing whether or not it is viable to lend credit facilities to borrowers. It entails the loss risk which may happen from the inability of a knowledgeable party in adhering to the agreements and terms of the binding financial contract. According to Zamore *et al* (2018), credit risk serves to ascertain qualitative or quantitative models of credit scores utilised to deduce the extent of default borrowers into specific risk groups.

Accounts receivable constitute a significant portion of an entity's overall assets in regards to the trade of exchange and even in non-financial sectors such as the service sectors. As such, Odonkor (2018) viewed the perspective that receivables have the likelihood demerit of defaulting on their obligations as a result of a vigorously fluctuating economy. Furthermore, he noted that management of the credit risks policies are a decisive component of the comprehensive approach towards minimising incurring risks.

2.3 Empirical Literature Review

Literature review is the procedure an author of a research study begins by describing former research in order to assess and map the area of research; so as to incite the motive of the study as well as justifying the research question. It implies the analysing of past academic studies which are identical to the study being conducted, with the aim to obtain knowledge of the specific information required for the research criteria. Numerous academic scholars have studied accounts receivables; either as a separate and single accounting element topic, or in relation to their management or risk control techniques or as mostly being a component of Working Capital Management within an organisation; each from various viewpoints.

Odondi, Nteere and Njeru (2017) noted that proper management of receivables establishes an organisation's position in relation to financial performance. They moreover noted that receivables have a significant influence on financial performance by analysing the effect of elements such as credit sales preparation, credit guidelines and reviewing level of receivables on financial performance. They analysed the relationship between these variables within Deloitte East Africa Limited in Kenya. With the usage of judgmental sampling for identifying respondents, they got a target

population of eighty-two management personnel; to whom they issued open and closed ended questionnaires in order to collect primary data. They also made use of a case study research design and a secondary data descriptive study of their financial statements.

An investigation on various American production firms for a period between 2013-2017 of efficient working capital management, debt refinancing risk and bond quality ratings was carried out by Gill *et al* (2019). They observed through the use of a single-equation regression model and correlation coefficient matrix that accounts receivables turnover and inventory turnover were positively and notably correlated to corporate bond ratings. They furthermore noted that higher accounts receivables turnover and inventory turnover indicated that a firm efficiently operates to improve operating cash flow, therefore improving corporate bond quality ratings as well as reducing risks of refinancing for the firm.

Jindal, Simran and Vartika (2017) examined the effect of receivables management on profitability within the commercial vehicle industry in India with a sample of six companies. They noted a significant statistically positive relationship indicated by the multiple regression statistics between the debtors' turnover ratio which was the independent variable for receivables management and return on capital employed as the profitability dependent variable measure. They moreover observed through the correlation matrix among different variables that the debtors' turnover ratio and financial growth were positively and significantly correlated with return on capital employed.

Utilising a mixed research design, a sample survey method that gave a population of 5 401 SMEs and then stratifying the SMEs according to geographical location and using proportionate random sampling for a final sample of 359 SMEs for equal stratum representation in Kakamega Central Sub-County in Kenya; Lyani Sindani, Namusonge and Sakwa (2016) investigated on accounts receivables risk management practices and SMEs' growth in that area. Through also the use of the OLS technique and a linear regression model to determine cause-and-effect, as well as degree and magnitude of the existent relationship among variables; they deduced that accounts receivable risk practices and growth of SMEs had a positive and symbolic relationship from the bivariate regression results.

Nwude, Allison and Nwude (2020) carried out a correlational study to analyse the relationship between corporate returns and working capital management of the cement industry within an emerging market. They made use of descriptive statistics, multiple regressions, panel data that entailed pooling many data points on each variable and correlation coefficient; as well as a sample of three cement firms listed on the NSE and data for each for the periods 2007 to 2018 from approved audited financial annual reports. On analysing working capital items and variables such as accounts collection period, working capital turnover ratio, return on equity and return on asset among others; results indicated a positive relationship between return on asset, accounts collection period, working capital turnover ratio and sales growth rate. This indicated that since return on asset was a proxy for profitability, the positive changes in the independent variables such as accounts collection period and sales growth rate caused a positive impact in profitability.

Ezejiolor, Adigwe and John-Akamelu (2015) assessed the effects of credit management on profitability and liquidity positions of a Nigerian manufacturing firm. They made use of an accessible population of two companies listed on the Nigerian Stock exchange, two yearly reports and bank accounts from 2011 to 2013, a statistical non-parametric test as well as a SPSS software package. Through their tested results, they concluded that there was a significant correlation between debtors' turnover and the liquidity position. This indicated that the high debtors' turnover had a positive impact on the ability of the firm to satisfy its obligations towards their own creditors.

Employing an explanatory research design within a deductive approach, Kwatiah and Asiamah (2020) examined working capital management's relationship with profitability within listed manufacturing firms in Ghana. Their independent variables were represented by working capital management components such as accounts receivable and cash conversion cycle to mention a few, whereas profitability being the dependent variable was analysed proxied by return on assets and return on equity. Utilising static panel models, descriptive statistics and correlation analysis; they noted that return on assets and account receivables had a positive and significant correlation coefficient, indicating that increasing account receivable as a component of working capital by manufacturing firms increases profitability.

To assess the working capital management's impact on Smart Bags Limited Manufacturing Firm in Zimbabwe; a research study utilising a case study approach, with both qualitative and quantitative data being used was carried out by Ngendakumana, Jagero and Gondo (2015). They made use of eight variables with one dependent and seven independent including gross operating profitability, average collection period, cash conversion periods and others; as well as a general regression model and Pearson's correlation coefficient for measuring the pair wise association between the variables. It was deduced from the correlation analysis that there was a weak negative relationship between average collection period and the profitability of the firm, as well as a negative correlation between the gross profit margin and the cash conversion cycle.

Onchangwa, Memba and Nasieku (2018) observed and analysed the relationship between receivables management and financial distress within non-financial firms listed at NSE in Kenya over the ten-year period dating from 2007 to 2016. Adopting a panel data estimation technique to authenticate the relationship between the variables and also Pearson's correlation coefficient, a negative relationship between financial distress and managing receivables of non-financial firms was noted. Gorondutse, Ali and Ali (2016) on their investigation on the effect of trade receivables and inventory management on SMEs performance used similar statistical methods as well as quantitative and secondary data collected from yearly financial reports from a sample of sixty-six manufacturing SME entities. They discovered that working capital measures as days account receivables and inventory turnover in days have a negative relationship with profitability proxies of SMEs such as return on equity and net operating profit.

Kwenda (2015) explored practises of managing working capital within Zimbabwean listed non-financial firms in the multiple currency adoption regime around 2009. Utilising a sample of fifty-five non-financial firms and data of the firms mainly consisting financial statements for the accounting periods 2009 to 2014; as well as an unbalanced panel method for calculations, it was noted that a negative net trade credit existed as a result of strict credit policy which was intact within some firms. Kwenda (2015) also indicated that the average collection period was improving from 103 days

in 2009 to 64 days in 2010, and then increasing to 89 days in 2013 and decreasing to 78 days in 2014.

Danga, Kaudunde and Kadilikansimba (2019) analysed management of accounts receivables and its effect on the performance of Tanzanian agricultural firms. They made purposive sampling to sample a size of thirty-four agricultural companies, financial statements as secondary data for the periods between 2006 and 2017 and panel data analysis using the fixed-effect model. Through the use of a pairwise correlation, they deduced and revealed negative associations between the average collection period and return on total assets, as well as a negative relationship between debts ratio and return on total assets. In relation to the current ratio, it had a negative relationship with debts ratio and a positive relationship with the average collection period.

Muturi, Kinyariro and Maina (2016) analysed the influence of receivables collection period on the profitability of Meru County Tea factories in Kenya. They utilised statistical cause-effect methods such as correlation and regression analysis as well as a target of all seven tea factories in Meru County. Also, making use of a linear regression model for the dependent and independent variable under study, it was revealed that there is a strong negative relationship between receivables collection period as the independent variable and profitability which was the dependent variable.

2.4 Research Gap Analysis

Obtaining a research gap for the purpose of the study is crucial to establish whether the study will cover new ground which former and existing studies carried out on the similar variables did not cover on, or to supplement and improve more towards similar or dissimilar prior theoretical hypothesis. In relation of this study, an empirical gap was viewed as the research gap within substance of the past academicians' studies whom were analysed. As noted by Miles (2017), an empirical gap is one where research findings from prior studies need to be evaluated and reviewed empirically.

Most of the investigations carried out in relation to accounts receivables management on its own or as part of working capital management extends to almost every sector of the industry or economy. For example, Gill *et al* (2019) investigated American production firms; Jindal, Simran and Vartika (2017) in the commercial vehicle industry; Nwude, Allison and Nwude (2020) in the cement industry; as well as Muturi, Kinyariro

and Maina (2016) investigating tea factories in Kenya. Due to a lack of investigations of receivables management's effect within the power utilities sector, this study seeks to analyse the presence and effect of accounts receivables management on the financial performance of the power utility company.

Different measures to measure accounts receivables or receivables management's impact on profitability or other measures of financial performance by scholars yielded similar or opposite results. Utilising average collection period as the singular measure for receivables; Ngendakumana, Jagero and Gondo (2015) noted a negative weak relationship between it and profitability; and a negative significant relationship was observed between return on total assets and average collection period by Danga, Kaudunde and Kadilikansimba (2019). Other scholars made use of their different suitable approaches to measure such as credit scoring, debtors turnover ratio among others. As a result, this study seeks to examine accounts receivables management within the utility sector by measuring variables approximately suitable within the extent of the utility industry, accounts receivables as well as its relation to financial performance.

On investigating SMEs growth and managing receivables risk practices; Lyani Sindani, Namusongwe and Saka (2016) noted a positive and notable relationship between the two variables. Whereas, on investigating trade receivables and inventory management's effects on SMEs performance; Gorondutse, Ali and Ali (2016) noted that trade receivables had a negative relationship with proxies of profitability. The former revealed how receivables assessment practices played a key role in SMEs growth, however utilising a lesser population target of SMEs in comparison to their aggregate number. The latter despite their limitation, focused on mainly SMEs in Malaysia in the manufacturing sector; implying that the results weren't generalised to include other sectors with SMEs. Due to the backdrop of these conclusions, this study seeks to critically highlight the link between accounts receivables management and financial performance, taking into account all major target population sectors within the power utility company.

Therefore, this study will seek to decisively investigate the impact of accounts receivables management on financial performance; without too much distortion towards information analysis.

2.5 Summary

This chapter was essential in evaluating and deducing the key literature work and scholarly studies previously carried out in relation to the investigation of the relationship between accounts receivables management and financial performance; as well as providing the key research gaps necessary for the notion of the research. The next chapter will dive into the concept of understanding the research methodology utilised for the study, as well as the reasons behind the selection of the research procedures carried out.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

In this chapter, the writer seeks to evaluate and provide a concise outline of the research methodology which was adopted, so as to assist in achieving the research objectives. This chapter comprises of the research philosophy, research design, research approach, population and sample, sources of data utilised, research instruments as well as concluding with the summary.

3.1 Research Philosophy

Zukauskas, Vveinhardt and Andriukaitiene (2018) noted that a research philosophy is the development of the research's assumptions, its nature and knowledge. It establishes the intellectual basis of the research, taking into account the establishing concept of what, how and why such information was gathered and analysed to produce the research study. The research study was carried out from a positivistic research philosophy point of view.

Rahi (2017) deduced that supporters of the positivist paradigm acknowledge the use of experiments and observation of the scientific nature in order to obtain true knowledge. It possesses the characteristics where the researcher should not affect or influence analysis of data so as to focus of the what-part of a reality, as noted by Askarzai and Unhelkar (2017). The positivistic approach is suitable for this research study as measurement, identification and evaluation of the phenomena under study can ensue and seek to provide rational explanation. Such explanation will attempt to establish the casual links and relationship between or among different variables of the research whilst also relating them to a particular practice.

3.2 Research Design

Johnson and Christensen (2014) stated that a research design provides the outline, strategy or plan that is utilised to answer the research question under study. It is an essential component of the research as a whole as it lays out an appropriate framework

for the research study. For the purpose of this study, a correlational research design was utilised. According to Kumar (2017), this type of design entails to describe the relationships between variables under study within the research itself; as well as to discover and establish existence of such a relationship between two or more aspects of a phenomenon. It also examines the extent to which differences in one variable are associated with differences in one or more other variables.

3.3 Research Approach

A research approach is the strategy, procedures or tactics for research which span the stages from broad assumptions to detailed methods of analysing data; collection and interpretation. Its selection depends on the nature of the audience for the study, the research problem being addressed and the personal experiences of the researcher. Therefore; this study will be carried out with the use of a mixed methods research approach.

Mixed methods research provides a broader and in-depth understanding of the phenomena being studied, basing on the complementary of both qualitative and quantitative approaches focusing on different phenomena aspects. For instance, Frey (2018) noted with an example in relation to receivables management that; the quantitative aspect would rigorously measure account receivables management's impact on financial performance of an entity, with the qualitative aspect focusing on how account receivables management is perceived by management and the methods by which it was implemented in the study settings.

3.4 Population and Sample

3.4.1 Population

Population represents the group or aggregate of elements from which claims may be made by the researcher. Kumar (2017) noted that the population may be a class, families or other group types to whom the researcher questions so as to obtain answers for their research questions. Population within the study is selected and utilised by the researcher, given the specific and particular research variables within study and how such the population contributes to the gathering of data.

For the purpose of this study, the researcher will utilise the target population of 50 individuals consisting of management and employees from both ZETDC Gweru

District office and those whom operate as well at the ZETDC Southern Region Regional office. The district office is mainly responsible for the sales operations and mainly encompasses the sales department, with staff and personnel whom oversee and work with accounts receivables and all stakeholders of ZETDC within the southern region. The southern regional office serves as the main office for the region which facilitates the finance department; where most of the key reports in relation to electricity sales revenue, cost reports and ageing analysis reports are sent and analysed for final review and preparation from all cities in the region.

3.4.2 Sample

A sample represents a small proportion or group of the target population from which the researcher gathers the required information. It stands as a subset where the researcher utilises their deductive reasoning as to how the sample is to be selected. Sampling can be categorised to be either probability-based and or non-probability based sampling techniques. According to Kumar (2016), probability sampling is the utilisation of a strategy or procedure where samples selection is done in a manner that every known element in the study population has a known or non-zero chance of being selected. Whereas, non-probability sampling uses tactics where there is no method of estimating the probability of an element being included in the sample.

For the purpose of this research study, a non-probability sampling technique known as judgmental or purposive sampling is essential. This is because judgmental sampling renders for the researcher the opportunity to judge as to whom can provide the best possible information and are willing to share such information. The following table will illustrate the sample from the target population.

Table 3.1: Sample for Southern Regional and Gweru District Office

	Sales Department	Finance Department	Credit Control Department
Office or Branch			
ZETDC Southern Regional Office:	SAMPLE	SAMPLE	SAMPLE
Management	Nil	2	2
Staff/Employees	Nil	3	3
ZETDC Gweru District Office:			
Management	1	Nil	2

Staff/Employees	5	Nil	3
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3.5 Data Analysis

Data analysis is the procedure of performing specific or certain calculations and evaluations so as to extract relevant information from the data gathered. Judd, McClelland and Ryan (2017) viewed that the data analysed process could be viewed by a simple equation where; $DATA = MODEL + ERROR$. DATA would denote the observations or basic results which usually but not always need to be numerical that need to be analysed, MODEL as the more compact representation of the data and the index of the degree to which the model fails to represent data accurately being represented by ERROR.

According to Ibrahim (2015), data analysis in relation to measuring relationships between variables can be categorised into either correlation or regression. The choice as to how data is to be analysed however varies within research, even on research of similar phenomena by different scholars; and this is usually intertwined depending on the research model or research paradigm which was utilised.

3.5.1 Research Model

Research model or research paradigm is the representation of study variables under review through a graphical, pictorial or computation of formulae. This entails the utilisation of statistical computations; mostly regression or correlational analysis tools so as to analyse the data representative for each variable within the research study. Johnson and Christensen (2014) noted that regression analysis is essential given its utilisation to predict values of a dependent variable on the basis of values of one or more independent variables.

3.5.1.1 Research Model – Accounts Receivables Management

Accounts receivables management has been analysed through similar regression analysis tools, but in different criteria of thought as prior scholars assessed its contribution either on its own or as part of a component of working capital management. Even the ratios or independent variable measurement bases used to represent accounts receivables management had a profound part in the determination of the data analysis tool to apply.

Obeidat and Jawabri (2016) utilised a simple linear regression method. This method was used to test their first three hypotheses under working capital management; one of which was to view that receivables management affected the profitability of listed equipment construction firms in the Abu Dhabi stock exchange. Average collection period in days represented receivables management whereas Rate of Return On Total Assets Ratio was used to measure profitability.

Lyani Sindani, Namusange and Sakwa (2016) analysed accounts receivable risk management practises and SMEs' growth. They made use of descriptive and inferential statistics for analysing data; Ordinary Least Squares technique to determine cause-and-effect relationships between variables and a linear regression model to show relationship between SMEs' growth and account receivables risk management practises. The formulae for which was:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_\epsilon X_\epsilon; \text{ where:}$$

Y represents the dependent variable (i.e.: SMEs' growth), β_0 is the regression constant, β_1 is the change in Y in respect to a unit change in X_1 , X_1 represents account receivables risk assessment practises being measured by expert system, credit scoring model, internal rating system and internal rating and ϵ representing the error item.

On investigating financial performance with prepaid electricity billing; Tirop and Nganga (2018) made use of not only E-views Version 5 software for analysing data; but quantitatively analysed it through Ordinary Least Squares method. They modelled their along the OLS regression method in which a linear relationship is established between independent variables and the dependent variable. The general model they made reference from was:

$Y = \alpha_0 + \beta X + \epsilon$; where: Y represents the financial performance as the dependent variable, α_0 as the constant in the model, β as the coefficient, X as the independent variables postulated to affect profitability and ϵ as the error item. Therefore, with the guidance of the general model, the model established for the research study became:

$$Y = \beta_{0it} + \beta_1 CC_{it} + \beta_2 BA_{it} + \rho_{it}; \text{ where:}$$

Y is the financial performance in terms of profitability; CC is the cost for collection; BA is the accuracy of billing expressed in terms of measurement of number of bills complaints per month, ρ is the error item and i represents a branch and t is the measure of time.

3.5.1.2 Research Model – Financial Performance

Just as accounts receivables management varied in relation to measurement variables utilised per research study, the same was implemented in analysing data techniques used to assess its relationship against financial performance. The form of financial performance would depend on whether it was to assess all or two or more indicators of financial performance measures.

On investigating debtors' management and financial performance of microfinance institutions, Kevin and Omagwa (2017) utilised descriptive and inferential statistics, as well as the multiple regression analysis and SPSS software which assisted in presenting and analysing the data. The linear regression model established for the study became:

$$Y_i = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon; \text{ where:}$$

Y_i represents financial performance (being measured through ROA, Net Income and NPL); X_1 representing the policy for collection of debt; X_2 is internal control system, X_3 is client appraisal, X_4 is legal framework, β_1 to β_4 represents the coefficient and β_0 represents the intercept.

Nwude, Allison and Nwude (2020) utilised the ordinary least squares regression estimator as they analysed the relationship between corporate returns and working capital management. On analysing financial performance, different indicators or variables for the phenomenon were included in the equation, with the equation being set to assess two key measures of financial performance which are Return on Asset and Return on Equity. The model equations ended up becoming:

$$ROA_{it} = \beta_0 + \beta_1 ICP_{it} + \beta_2 ACP_{it} + \beta_3 APP_{it} + \beta_4 CRR_{it} + \beta_5 WCR_{it} + \beta_6 CLR_{it} + \beta_7 SGR_{it} + \beta_8 FSZ_{it} + \beta_9 WCT_{it} + \beta_{10} TDR_{it}$$

$$ROE_{it} = \beta_0 + \beta_1 ICP_{it} + \beta_2 ACP_{it} + \beta_3 APP_{it} + \beta_4 CRR_{it} + \beta_5 WCR_{it} + \beta_6 CLR_{it} + \beta_7 SGR_{it} + \beta_8 FSZ_{it} + \beta_9 WCT_{it} + \beta_{10} TDR_{it}$$

Where:

WCR is the Working capital to Total Asset ratio, FSZ is size of firm, WCT is gross working capital turnover, CLR is current liabilities ratio, SGR is sales growth rate, TDR representing total financial leverage, ACP as average collection period, APP is the Average Payables Period, ICP is the inventory collection period and *i* represents a branch and *t* represents a time measure.

3.6 Data Collection Methods and Techniques

3.6.1 Research Instruments

These are tools or sources of data which enable and assist in investigating the phenomena under study; of which specific research instruments are utilised to gather the data required so as to achieve the specific motives of different research objectives or problems.

For the purpose of this study, secondary data sources derived from the annual financial statements of ZETDC from the period of 2014 to 2016 was utilised. One of the key fundamentals for selecting to use secondary data sources was because the crucial information within the annual financial statements in relation to accounts receivables and related line items will serve to unveil the need and answer of each research objective and research question. Terrell (2016) noted that secondary sources analyse and interpret primary sources or are a form of literature read which discuss and report on the work of primary authors in a given field.

3.7 Data Analysis

According to Dagnino and Cinici (2016), data analysis is a process of bringing structure, order and interpretation in the mass of collected data. It involves statistical analysis being performed on the collected data gathered together by a researcher or scholar for the purposes of the research study.

For the purposes of this study, the data collected will be analysed by manner of utilising Pearson's correlational analysis at a 5% level of significance, descriptive statistics and both simple and multiple regression analysis methods. A multivariate linear regression model will be utilised to evaluate how the set of explanatory independent variables affect the dependent variable. The information to be provided was coded and input using the statistical software package Microsoft Excel version 2016; as it possesses the

ability to simplify repetitive commands or tasks as well as compute and handle complex data analysis and manipulation.

3.7.1 Definition and Measurement of Variables

Table 3.2 Dependent Variables for Financial Performance- Profitability

Profitability	Definition and Interpretation	Measurement
Return On Total Assets (ROTA)	It shows the percentage of by how profitable a business's assets are in the generation of revenue	$ROTA = \frac{\text{Net Income}}{\text{Total Assets}} * 100$
Net Profit Margin (NPM)	It measures how much net profit or net income is generated as a percentage of the company's revenue	$NPM = \frac{\text{Net Income/Net Profit}}{\text{Sales/Revenue}} * 100$

Table 3.3 Dependent Variables for Financial Performance -Liquidity

Liquidity Measure	Definition and Interpretation	Measurement
Working Capital or Current Ratio (CR)	It measures a company's ability to settle short-term obligations with current resources	$CR = \frac{\text{Current Assets}}{\text{Current Liabilities}}$
Receivables to Sales Ratio (RSR)	It measures how much of an entity's sales occur on credit basis	$RSR = \frac{\text{Accounts Receivables}}{\text{Sales}} * 100$

3.7.2 Independent Variables

Table 3.4: Variables for Receivables Management and Other Variables Linked to Receivables Management

Variable	Definition and Interpretation	Measurement
Average Receivables Collection Period (ARCP)	It presents the average number of days it takes a company to recover its accounts receivables' balances from the date of initial sale on credit	ARCP= $\frac{\text{Average Accounts Receivables}}{\text{Net Sales}} * 365$
Receivables Turnover Ratio (RTR)	It measures the average number of times a company takes to collect its outstanding receivables	RTR= $\frac{\text{Net Sales}}{\text{Average Accounts Receivables}}$
Cash Conversion Cycle (CCC)	It measures by how long a company may be deprived of cash if it increases investment in inventory so as to expand customer sales	CCC= Receivables Days + Inventory Days - Payables Days
Receivables Turnover in Days (RTD)	It measures the total number of days required for the average customer to pay for sales made in credit	RTD= $\frac{\text{Days in Accounting Period}}{\text{Receivables Turnover Ratio}}$

3.7.3 Regression Research Model

In order to establish the relationship between accounts receivables management and financial performance of the organisation, a multiple linear regression model is being utilised. In order to achieve the specific and important results for presentation and analysis, the following equation was established:

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + \epsilon_{it}, \text{ where}$$

Y_{it} denotes the dependent variable representing financial performance (proxied by return on total assets, net profit margin, current ratio and receivables to sales ratio) of firm i at time t

β_0 denotes the regression constant, which is the value of Y when all X_{it} variables are equal to each other and equal to zero

X_{1it} denotes the independent variable Average Receivables Collection Period

X_{2it} denotes the independent variable Receivables Turnover Ratio

X_{3it} denotes the independent variable Cash Conversion Cycle

X_{4it} denotes the independent variable Receivables Turnover in Days

β_1 , β_2 , β_3 , and β_4 denote the proportionate change in the financial performance variables due to the respective trade receivable variables

i denotes one firm

t denotes time period of 2014, 2015 and 2016

ϵ_{it} denotes the error item

3.8 Summary

This chapter looked into the research methodology, consisting of the research design, research approach, research philosophy, population and sampling, research instruments, as well as the data analysis, definition and interpretation of dependent and independent variables and the research model equation. The next chapter will look at the data findings and discussions through data analysis.

CHAPTER FOUR

DATA ANALYSIS, FINDINGS AND DISCUSSIONS

4.0 Introduction

In this chapter, the researcher purports to present the data analysis process, as well as the results of this study basing on the research objectives and discuss the findings of such results. This entails and constitutes the analysing of the dependent and independent variables determined to be suitable in this study, with the overview of such appropriate data computed and analysed so as to investigate the impact of accounts receivables management on the financial performance of ZETDC. This section will cover the process carried out of analysis performed through statistical computations such as descriptive statistics, correlational analysis, ANOVA analysis and regression analysis.

4.1 Descriptive Statistics

For the purpose to compute a descriptive summary of the secondary data utilised to compute results towards the arrival of each significant variable, descriptive analysis was performed on each variable using Microsoft Excel. It serves to test the normality of the gathered data so as to determine the sampled data's normal distribution to deduce accurate and relevant conclusions. It will give an overview of the median, mean, standard deviation, minimum and maximum value, among others for the dependent and independent variables. The summary of the descriptive statistics is presented in Table 4.1 and Table 4.2 below.

Table 4.1.1: Descriptive Statistics for Dependent Variables

Dependent	ROTA	NPM	CR	RSR
Mean	-2.827153338	-4.478285424	0.370750185	45.69324127
Std Error	3.365645581	7.069812624	0.103920058	20.03112191
Median	-4.654163491	-9.155475441	0.382746485	41.66735989
Std Deviation	5.829469147	12.24527466	0.179994821	34.69492088
Sample Variance	33.98271053	149.9467516	0.032398136	1203.737535
Skewness	1.271810641	1.468052315	-0.298583914	0.515134107
Range	11.22127193	23.11187329	0.359389494	69.03859049
Minimum	-7.524284229	-13.69562706	0.185057288	13.18688671
Maximum	3.696987706	9.41624623	0.544446783	82.2254772

Sum	-8.481460015	-13.43485627	1.112250556	137.0797238
Count	3	3	3	3
Confidence Level (95%)	14.48120415	30.41894859	0.447131923	86.18696136

Source: 2014-2016 Author's Computations

Table 4.1.2: Descriptive Statistics for Independent Variables

Independent	ARCP	RTR	CCC	RTD
Mean	166.7803306	0.658432088	-80.67559474	1235.625082
Std Error	73.11359497	0.337108634	21.76135294	773.6069521
Median	152.0858636	0.557056224	-87.9505098	655.2300907
Std Deviation	126.6364612	0.583889282	37.69176894	1339.926546
Sample Variance	16036.79331	0.340926694	1420.669446	1795403.149
Skewness	0.515134107	0.757745931	0.83619205	1.583481413
Range	251.9908553	1.154502307	74.32297502	2484.157314
Minimum	48.13213649	0.131868867	-114.1996247	283.7439204
Maximum	300.1229918	1.286371174	-39.87664971	2767.901234
Sum	500.3409919	1.975296265	-242.0267842	3706.875245
Count	3	3	3	3
Confidence Level (95%)	314.582409	1.450461385	93.63154464	3328.562064

Source: 2014-2016 Authors's Computations

From the tables above, the variables of ROTA, NPM, CR and RSR were analysed along with ACRP, RTR, CCC and RTD. Statistical measures such as standard deviation serve to summarise the differences of each observation from the respective mean; with the mean being an average for all the study variables. It deduces that ROTA of ZETDC for the years 2014 to 2016 has a mean of -2.827153338 with a standard deviation of 5.829469147, NMP has a mean of 4.478285424, CR has 0.370750185 and RSR possesses a 45.69324127 mean and a standard deviation value of 34.69492088. In relation to skewness for dependent variables, return on total assets, net profit margin and receivables to sales ratio were positively skewed, while current ratio was negatively skewed.

Whereas in terms of the dependent variables under Table 4.2, ARCP had a mean of 166.7803306 days revealing the average changes in the use of average receivables collection period for the study periods, as well as a standard deviation of 126.6364612 and RTR had a mean of 0.658432088 times and a standard deviation of 0.583889282; among others.

Receivables Turnover in days, denoted by RTD had the highest deviation from its mean of 1339.926546. As for the skewness of the independent variables,

4.2 Correlational Analysis

This type of analysis serves as a computation of statistical evaluating of data utilised to observe the relationship's strength of the study variables so as to establish a possible linkage. The table below showcases the overview of the correlational analysis carried out in terms of the computed data.

Table 4.2.1: Correlational Analysis

	ROTA	NPM	CR	RSR	ARCP	RTR
ROTA	1					
NPM	0.99806199	1				
CR	0.945190245	0.923039919	1			
RSR	0.98486412	0.97216966	0.987479107	1		
ARCP	0.98486412	0.97216966	0.987479107	1	1	
RTR	0.99232984	0.982714233	0.978304356	0.998736595	0.998736595	1
CCC	0.994288637	0.985720498	0.974639601	0.997737559	0.997737559	0.99985538
RTD	-0.790361381	-0.75070653	-0.94708146	-0.884586513	-0.884586513	-0.860032824

	CCC	RTD
ROTA		
NPM		
CR		
RSR		
ARCP		
RTR		
CCC	1	
RTD	-0.851231101	1

According to the results in Table 4.2.1, the data analysed and computed deduced that a strong positive correlation between return on total assets and average receivables collection period existed with a value of 0.98486412. Danga, Kaudunde and Kadilikansimba (2019) on investigating receivables management against performance computed a contradictory result as they noted a negative correlation between average collection period and return on total assets. Whereas a negative correlation exists between receivables turnover in days and return on total

assets of -0.790361381 and between net profit margin and receivables turnover in days of -0.75070653.

These correlation results reveal that ZETDC’s performance measured in terms of the return on total assets moved in a positive and similar direction with the average receivables collection period, but also moved adversely and opposite between the return, net profit margin and current ratio against receivables turnover in days with correlation results of -0.79036138, -0.75070653 and -0.94708146 respectively. Other pairings reported for the study variables utilised for the measurement purposes against net profit margin include 0.97216966 for ARCP, 0.985720498 for CCC and 0.982714233 for RTR.

4.3 Regression Results

4.3.1 Relationship Between Return on Total assets and Average Receivables Collection Period

Table 4.3.1.1: Regression Statistics of ROTA and ARCP

Regression Statistics	
Multiple R	0.984864
R Square	0.969957
Adjusted R Square	0.939915
Standard Error	1.428938
Observations	3

From the table above, we can deduce the possibility on a basis of the average receivables collection period in explaining 96.99% ($R^2=0.969957$) of the observation trend of profitability. Furthermore, the simple correlation coefficient ($R=0.984864$) reveals that there is a positively strong relationship between return on total assets and average receivables collection period. This was in contrast to the findings of Muturi, Kinyariro and Maina (2016), whom on investigating the relationship between receivables collection period and profitability produced a very strong negative relationship between the variables.

Table 4.3.1.2: ANOVA Analysis for ROTA and ARCP

ANOVA					
	Df	SS	MS	F	Significance F
Regression	1	65.92356	65.92356	32.28599	0.110904
Residual	1	2.041862	2.041862		
Total	2	67.96542			

Table 4.3.1.3: Regression Coefficients for ROTA and ARCP

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-10.3884	1.5657	-6.63496	0.095232	-30.2825	9.505742
Average Receivables Collection Period	0.045336	0.007979	5.682077	0.110904	-0.05604	0.146717

From the ANOVA tables above, the results of the significance test of the model are presented. The significance of $p = 0.110904 > 0.05$ reveals that the average receivables collection period has a positive and existing significance in regards to return on total assets.

4.3.2 Relationship between Net Profit Margin and Accounts Receivables Collection Period

Table 4.3.2.1: Regression Statistics of NPM and ARCP

Regression Statistics	
Multiple R	0.97217
R Square	0.945114
Adjusted R Square	0.890228
Standard Error	4.057093
Observations	3

Table 4.4.2.1 indicates the part of the regression statistics carried out in terms of establishing whether a relationship exists between net profit margin and average receivables collection period. From the results, the independent variable ARCP is observed to have a 94.51%

($R^2=0.945114$) on its trend effects against NPM. Also, there is a strongly positive linkage between the two variables as indicated by $R= 0.97217$.

Table 4.3.2.2: ANOVA Analysis for NPM and ARCP

ANOVA					
	Df	SS	MS	F	Significance F
Regression	1	283.4335	283.4335	17.21953	0.150545
Residual	1	16.46	16.46		
Total	2	299.8935			

Table 4.3.2.3: Regression Coefficients for NPM and ARCP

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	-20.1565	4.445394	-4.53424	0.13819	-76.6406	36.32759
ARCP	0.094005	0.022654	4.149642	0.150545	-0.19384	0.381849

Basing on the results of the ANOVA tables 4.4.2.2 and 4.4.2.3 above, the p-value significance of 0.150545 indicates that average receivables collection period is strongly significant towards its impact on net profit margin. Mbula, Memba and Njeru (2015) made a similar examination and computed a positively significant correlation between the two variables.

4.3.3 Relationship between Cash Conversion Cycle and Current Ratio and Relationship Between Cash Conversion Cycle and Receivables to Sales Ratio

Table 4.3.3.1: Regression Statistics for CCC and CR

Regression Statistics	Results for CR	Results for RSR
Multiple R	0.974639601	0.997738
R Square	0.949922351	0.99548
Adjusted R Square	0.899844702	0.99096
Standard Error	0.05696354	3.298669

Observations	3	3
--------------	---	---

Basing on the results of the table above, the cash conversion cycle was computed to have a 94.99% ($R^2=0.949922351$) and 99.54% ($R^2=0.99548$) in regards to current ratio and receivables to sales ratio respectively. Furthermore, CCC has a stronger linkage with RSR at a value of 0.997738 than with CR at a value of 0.974639601.

Table 4.3.3.2: ANOVA Analysis for CCC and CR and for CCC and RSR

ANOVA FOR CCC and CR					
	Df	SS	MS	F	Significance F
Regression	1	0.061551	0.061551	18.96899	0.14368
Residual	1	0.003245	0.003245		
Total	2	0.064796			
ANOVA For CCC and RSR					
	Df	SS	MS	F	Significance F
Regression	1	2396.594	2396.594	220.2505	0.042832
Residual	1	10.88122	10.88122		
Total	2	2407.475			

Table 4.3.3.3: Regression Coefficients for CCC and CR; and CCC and RSR

CCC and CR						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
Intercept	0.746241346	0.092274	8.087246	0.078321	-0.42621	1.918692
Cash Conversion Cycle	0.004654334	0.001069	4.35534	0.14368	-0.00892	0.018233
CCC and RSR						
	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%

Intercept	119.7863605	5.343433	22.41749	0.02838	51.8916	187.6811
Cash Conversion Cycle	0.918408094	0.061884	14.84084	0.042832	0.132099	1.704717

From the results presented in table 4.11 and 4.12, CCC has a p-value of 0.14368 in regards to the current ratio, indicating a positive and somewhat significant relationship. However, the cash conversion cycle's relationship with receivables to sales ratio is not significant due to the result of 0.042832 as it is below the 5% significance mark of analysis. It can therefore be deduced that cash conversion cycle contributes more towards liquidity in regards to covering short term obligations rather than contributing towards the extent of sales occurring on credit.

4.3.4 Impact of Accounts Receivables on Sales Revenue Generation

Table 4.3.4.1: Regression Statistics of Account Receivables variables and Sales Revenue Generation

Regression Statistics		
	RTR	RTD
Multiple R	0.998736595	0.884586513
R Square	0.997474787	0.7824933
Adjusted R Square	0.994949574	0.564986599
Standard Error	2.465641331	22.8832244
Observations	3	3

Basing on the computed results of the table above, RTR had a greater trend percentage effect on sales revenue growth of 99.74% ($R^2=0.997474787$) than RTD had of 88.45% ($R^2=0.884586513$). In addition, RTR and RTD both have a strongly positive relationship with sales revenue growth, with RTR boasting 0.998736595 and RTS boasting 0.884586513. In regards to the average receivables collection period, there was an insignificant relationship computation found and due to this, ARCP was not included in the regression measurement.

Table 4.3.4.2: ANOVA Statistics of Account Receivables Management Variables and Sales Revenue Generation

ANOVA			
		RTR	RTD
Df	Regression	1	1
	Residual	1	1
	Total	2	2
SS			
SS	Regression	2401.395682	1883.833111
	Residual	6.079387172	523.6419588
	Total	2407.47507	2407.47507
MS			
MS	Regression	2401.395682	1883.833111
	Residual	6.079387172	523.6419588
	Total		
F			
F	Regression	395.0062	3.59756
	Residual		
	Total		
Significance F			
Significance F	Regression	0.032005	0.308881
	Residual		
	Total		

Table 4.3.4.3: Regression Coefficients

	Coefficient	Standard Error	T stat	P-value	Lower 95%	Upper 95%
Intercept	6.618388579	2.42730916	2.726636016	0.223784752	-24.22349857	37.46027573

RTR	59.34530437	2.985962851	19.87476313	0.032004576	21.40504905	97.28555969
Intercept	73.99490322	19.92972226	3.712791491	0.167491962	-179.2362281	327.2260346
RTD	-0.022904732	0.012075948	-1.896723362	0.308881329	-0.176344199	0.130534734

Basing with the data in the respective tables 4.4.4.2 and 4.4.4.3 above, it can be viewed that RTR is not strongly or is not significant in terms of impacting generation of sales revenue. This is because it computed a p-value 0.03, less than the $p > 0.05$ mark of significance. Whereas, RTD had a p-value of 0.308881329 indicating a viable relationship between receivables turnover in days and sales revenue generation.

4.3.5 Relationship between Profitability and Accounts Receivables Management

Table 4.3.5.1: Regression Statistics for Return on Total Assets

REGRESSION STATISTICS				
	ARCP	RTR	CCC	RTD
Multiple R	0.98486412	0.99232984	0.99985538	0.790361381
R Square	0.969957334	0.98471851	0.999710781	0.624671112
Adjusted R Square	0.939914669	0.969437021	0.999421562	0.249342224
Standard Error	1.428937512	1.01912358	0.90651491	5.050681726
Observations	3	3	3	3

Basing on the computations above, it can be noted that cash conversion cycle boasts the most significance in regards to its impact on profitability through the return on total assets by a value 0.99985538. The other variables such as receivables turnover ratio and average collection period fare well in regards to their significant impact to profit. In overall, accounts receivables management is a crucial part in the entity's progression to maximise their profits. and judging by the information computed from data, ZETDC is managing their receivables well towards the attainment of positive returns on profits.

Table 4.3.5.2: ANOVA Analysis for Profitability and Accounts Receivables Management

ANOVA For ARCP					
	Df	SS	MS	F	Significance F
Regression	1	65.92356	65.92356	32.28599	0.110904
Residual	1	2.041862	2.041862		
Total	2	67.96542			
ANOVA For RTD					
	Df	SS	MS	F	Significance F
Regression	1	42.45604	42.45604	1.66433	0.419786
Residual	1	25.50939	25.50939		
Total	2	67.96542			
ANOVA For CCC					
	Df	SS	MS	F	Significance F
Regression	1	2840.517	2840.517	3456.587	0.010827
Residual	1	0.821769	0.821769		
Total	2	2841.339			
ANOVA For RTR					
	Df	SS	MS	F	Significance F
Regression	1	66.92681	66.92681	64.43865	0.0789
Residual	1	1.038613	1.038613		
Total	2	67.96542			

Table 4.3.5.3: Regression Coefficients for Profitability and Financial Performance

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%
ARCP						
Intercept	-10.38836488	1.5657	-6.63496	0.095232	-30.2825	9.505742
Average Receivables Collection Period	0.045336351	0.007979	5.682077	0.110904	-0.05604	0.146717
RTD						
Intercept	1.42158948	4.398798	0.323177	0.801004	-54.4704	57.31362
Receivables Turnover in Days	-0.003438537	0.002665	-1.29009	0.419786	-0.03731	0.030428
CCC						
Intercept	9.579	1.425245	6.720949	0.094032	-8.53046	27.68846
Cash Conversion Cycle	0.153778	0.016506	9.316409	0.068073	-0.05595	0.363509
RTR						
Intercept	-9.35043	1.00328	-9.31986	0.068048	-22.0983	3.397452
Receivables Turnover Ratio	9.907283	1.234188	8.027369	0.0789	-5.77456	25.58913

Utilising the tables for Anova analysis and coefficients above, it depicts that all independent variables respectively have a significant impact on the profitability of ZETDC. That is, all the variables have a p-value greater than 0.05; with receivables turnover ratio, cash conversion, receivables turnover days and average collection period possessing p-values of 0.0789, 0.068073, 0.419786 and 0.110904 respectively. Basing by the information computed, the results indicate that accounts receivable management has a strong viable relationship in regards to the financial performance of ZETDC.

4.4 Summary

This chapter focused mainly on the interpretation and computation presentation of the analysis of data and discussions carried out. The results were interpreted, discussed, and were outlining the key findings of the study. The next chapter will now focus on the summary, conclusions to be made as well as the recommendations of the study.

CHAPTER 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The main purpose of this chapter is to summarise and conclude the study; which was carried out to investigate the impact of accounts receivables management on financial performance at ZETDC. This chapter will summarise the key findings discussed and interpreted in this research, as well as provide suggestions for areas for further research study and recommendations in regards to the study.

5.1 Summary of Findings

The first objective was to determine the effect of average receivables collection period on profitability of ZETDC. The study results computed revealed that ARCP had a very strong relationship with both variables representing profitability; namely return on total assets and net profit margin. As shown by the results, ARCP had a p-value greater than 0.05 showcasing the strength of how average receivables collections positively affect the profit generated. In terms of correlational computations, ARCP was positively correlated to ROTA and NMP respectively. It would be expected that this result is indicative of how having a more average collection period would be more profitable.

The second objective was to assess the effect on liquidity by the cash conversion cycle. The results indicated that CCC was positively correlated to both current ratio and receivables to sales ratio, with indicative values of 97.46% and 99.77% respectively. As anticipated, companies with a high conversion cycle of cash are considered inefficient in their cash management. As such, usual high figures or correlational statistics may not determine favourable considerations given that failure to manage the cash flow facilities may result in abrupt liquidity crunches and possibly result to bankruptcy.

Another objective being assessed was to examine the receivables management's impact on sales revenue generation. ACRP was noted to be insignificant and had neither positive nor negative relationship with sales revenue generation. As for RTR and RTD, RTR has a less than significant linkage with sales revenue generation as it had a 3,2%

correlation less than the 5% significance. Whereas, RTD poised a viable relationship between it and SRG. It has been noted that companies with a low receivables turnover ratio however have the chance to collect from excessive old accounts receivables which unnecessarily are tied up in working capital.

The final objective was to determine the relationship between management of accounts receivables and financial performance. The results computed established that receivables management in relation to profitability was strongly significant and positively correlated to the financial performance indicator. As indicated, the p-values of CCC, ARCP, RTR and RTD were positively significant and correlated to a profitability variable ROTA. Furthermore, despite no computations being presented in regards to the net profit margin, similar variations of results were found in relation to a positive correlation.

5.2 Conclusion

Basing on the research findings computed, it can be stated that accounts receivables management contribute immensely towards the financial performance of ZETDC. Receivables serve as a key financing investment or instrument of short-term assets which can boost sales or extent to the growth of the company.

Utilising the receivables management variables in relation to profitability, it can be established that proper managing the average number of time to collect receivables as well as the average days given to a customer to pay for credit sales contribute positively towards the attainment of significant profit values. As ARCP and RTR both possessed values of 0.110904 and 0.0789, it can be stated that managing the credit terms of arrangement in a proper and systematic manner is decisive enough to contribute towards the attainment of revenue and possibly better generated profits.

Also, in relation to liquidity, it can be said that both ARCP and RTR were not significant in regards to the movement of cash collected from receivables from the period of 2014 to 2016. ARCP in its own provided neither statistical computation to establish its impact on liquidity, and RTR indicated a less than significant but positive relationship with liquidity.

In conclusion, though receivables management is essential in establishing a coherent position towards its contribution towards profits and cash, it did not manage to fully contribute towards the liquidity position of the firm.

5.3 Recommendations

Firstly, the recommendation I would suggest to ZETDC is to maximise implementation of sound credit and write-off policies. This will be useful in the sense that such policies allow for better relations with its customers and account adjustments to be prioritised in a professional and systematic structure. Such policies may allow for interest charges on overdue accounts to be halted in the event that probability of payments is uncertain.

Another recommendation to consider is the availability to account for receivables' impairment before any asset or revenue adjustments are carried out. Receivables impairment is crucial in regards to the ageing of the receivables' as the number of days of an ageing debt may be established to cater for that impairment loss so as to effect the impairment adjustment. Also; policies for the preparation of budget reports should be created to adjust for receivables ageing analysis schedules and their importance to the organisation. Instead of the organisation creating internal ageing reports just for management review, external bulletin reports must be created so as to confer to the external stakeholders the current position of billing adjustments and due dates as a summary for thought.

Another recommendation would be the implementation or upgrade of the database and online billing system. This is crucial as controls and software development must be available to ensure that consumers from each tariff section are being billed accordingly with regards to their energy consumption.

5.4 Areas of Further Study

The researcher will recommend that further study be carried out in regards to receivables impairment and even receivables management audit reviews within not just the power utility company, but every key parastatal organisation in Zimbabwe. This is because such key organisations as well deal with receivables on a daily basis. The study also recommends that a research study in regards to specific account receivables management techniques such as average receivables collection period and cash conversion cycle be carried out by within each service sector entity, thus facilitating a need for such entities to evaluate performance and assessment of management efficiency.

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APPENDICES

APPENDIX ONE: Descriptive Statistics Tables

Dependent	ROTA	NPM	CR	RSR
Mean	-2.827153338	-4.478285424	0.370750185	45.69324127
Std Error	3.365645581	7.069812624	0.103920058	20.03112191
Median	-4.654163491	-9.155475441	0.382746485	41.66735989
Std Deviation	5.829469147	12.24527466	0.179994821	34.69492088
Sample Variance	33.98271053	149.9467516	0.032398136	1203.737535
Skewness	1.271810641	1.468052315	-0.298583914	0.515134107
Range	11.22127193	23.11187329	0.359389494	69.03859049
Minimum	-7.524284229	-13.69562706	0.185057288	13.18688671
Maximum	3.696987706	9.41624623	0.544446783	82.2254772
Sum	-8.481460015	-13.43485627	1.112250556	137.0797238
Count	3	3	3	3
Confidence Level (95%)	14.48120415	30.41894859	0.447131923	86.18696136

Independent	ARCP	RTR	CCC	RTD
Mean	166.7803306	0.658432088	-80.67559474	1235.625082
Std Error	73.11359497	0.337108634	21.76135294	773.6069521
Median	152.0858636	0.557056224	-87.9505098	655.2300907
Std Deviation	126.6364612	0.583889282	37.69176894	1339.926546
Sample Variance	16036.79331	0.340926694	1420.669446	1795403.149
Skewness	0.515134107	0.757745931	0.83619205	1.583481413
Range	251.9908553	1.154502307	74.32297502	2484.157314
Minimum	48.13213649	0.131868867	-114.1996247	283.7439204
Maximum	300.1229918	1.286371174	-39.87664971	2767.901234
Sum	500.3409919	1.975296265	-242.0267842	3706.875245
Count	3	3	3	3
Confidence Level (95%)	314.582409	1.450461385	93.63154464	3328.562064

APPENDIX TWO: ANOVA Analysis Table for Receivables Management

ANOVA For ARCP					
	Df	SS	MS	F	Significance F
Regression	1	65.92356	65.92356	32.28599	0.110904
Residual	1	2.041862	2.041862		
Total	2	67.96542			
ANOVA For RTD					
	Df	SS	MS	F	Significance F
Regression	1	42.45604	42.45604	1.66433	0.419786
Residual	1	25.50939	25.50939		
Total	2	67.96542			
ANOVA For CCC					
	Df	SS	MS	F	Significance F
Regression	1	2840.517	2840.517	3456.587	0.010827
Residual	1	0.821769	0.821769		
Total	2	2841.339			
ANOVA For RTR					
	Df	SS	MS	F	Significance F
Regression	1	66.92681	66.92681	64.43865	0.0789
Residual	1	1.038613	1.038613		
Total	2	67.96542			

APPENDIX THREE: APPROVAL LETTER



Midlands State University

Private Bag 9055

Senga

Gweru

16 February 2021

The General Manager

ZETDC Southern Region

P.O Box 34

Gweru

Dear Sir

REF: APPLICATION FOR AUTHORITY IN CARRYING OUT RESEARCH OF ZETDC

My name is Brandon Nyasha Mandevere, a fourth year student at Midlands State University pursuing and undertaking the Bachelor of Commerce Accounting Honours Degree. The research I am carrying out is entitled, "An investigation of the impact of accounts receivables management on financial performance: A case of ZETDC.

This research is submitted in partial fulfilment of the requirements of the Bachelor of Commerce Accounting Honours Degree at Midlands State University. I am kindly asking and seeking permission to conduct this research.

Your assistance and support is highly appreciated

Yours Faithfully

Brandon Mandevere (Registration Number-R1610199Z)

APPENDIX FOUR: TURNITIN REPORT

R1610199Z DISSERTATION 2021

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