# **GREAT ZIMBABWE UNIVERSITY**



# MUNHUMUTAPA SCHOOL OF COMMERCE

# DEPARTMENT OF ACCOUNTING AND INFORMATION SYSTEMS

Capital budgeting Techniques on firm's profitability. A case of Ariston Management Services T/A Blended Tea Factory.

#### **Dissertation**

BY

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# **GREAT ZIMBABWE UNIVERSITY**

# **RELEASE FORM**

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TITLE OF THE PROJECT : Capital budgeting Techniques on firm's profitability.

Acase of Ariston Management Services T/A Blended Tea

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DEGREE FOR WHICH

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# **APPROVAL FORM**

I,the undersigned certify that I have read and recommend to Great Zimbabwe University for acceptance; a project entitled "Capital budgeting Techniques on firm's profitability. A case of Ariston Management Services T/A Blended Tea Factory" submitted by Joyfree Simbarashe Mupuro in partial fulfilment of the requirements for Masters of commerce Degree in Applied in Accounting.

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# **DECLARATION**

I, Joyfree Simbarashe Mupuro do hereby declare that the project has been the result of my effort and such work was not presented elsewhere for any Higher Diploma or Degree. All additional information was acknowledged by means of references.

Signature:

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# **DEDICATION**

This study is dedicated to my wife, friends and classmates for their unwavering support of my endeavors. This is also ardent to my family, for believing in me and taking care of the undertakings as I embarked on this award and finally my supervisor for giving me the strength during this research.

# **ABSTRACT**

This study sought to examine the extent to which capital budgeting techniques enhances firms' profitability at Blended Tea Factory. The topic was motivated by poor investment decisions by Blended Tea factory that resulted from lack of knowledge about capital budgeting techniques. The objectives of the study were to determine the effectiveness of capital budgeting techniques on firms' profitability. The review of literature revealed that investment appraisal, through the contingency and portfolio theory positively influence firm profitability. To fully address the problem at hand the researcher used positivist research philosophy and deductive research approach which allowed the researcher to generate explanatory associations or causal relationships between the investment appraisal and firm profitability. The research sample was made up of human resources department, purchasing department, accounting department and senior management at Blended Tea Factory. The researcher used stratified sampling technique to get information from the interviewees who had deeper knowledge of the area under study. The data collected was sorted and presented on bar graphs, pie charts and tables. From the analysis, most respondents agreed that Capital budgeting techniques are effective in determining profitability because they maximize returns and reduce the risk of funding failed initiatives is essential for long-term growth and success. The study concluded that capital budgeting techniques are effective in determining Blended Tea Factory profitability because they maximize returns and reduce the risk of funding failed initiatives is essential for long-term growth and success. From these findings, it was recommended that it is important for the owners of manufacturing industries to get involved in training and skill development. Low levels of financial literacy can impact the degree to which entrepreneurs use sophisticated investment appraisal techniques

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# **TABLE OF CONTENTS**

RELEASE FORM	ii
APPROVAL FORM	iii
DECLARATION	iv
DEDICATION	v
ABSTRACT	vi
ACKNOWLEDGEMENTS	vii
Table of Contents	viii
LIST OF TABLES	xii
LIST OF FIGURES	xiii
CHAPTER I	1
INTRODUCTION	1
1.0 Introduction	1
1.1 Background of the study	2
1.2 Statement of the problem	13
1.3 Aim of the study	14
1.4 Objectives of the study	14
1.5 Research questions	15
1.6 Assumptions of the study	15
1.7 Significance of the study	16
1.8 Limitations of the study	17
1.9 Delimitations of the study	17
1.10 Definition of terms	17
1.11 Organization of the study	18
1.12 Chapter summary	19
CHAPTER II	20
LITERATURE REVIEW	20
2.0 Introduction	20
2.1 Conceptual Framework	20
2.1.1 Capital budgeting	20

2.1.2 Techniques of Investment Appraisal	22
2.1.2.1 Payback Period (PBP)	23
2.1.2.2 Accounting Rate of Return (ARR)	23
2.1.2.3 Net Present Value (NPV)	24
2.1.2.4 Internal Rate of Return (IRR)	25
2.1.3 Factors influencing the selection of capital budgeting method	25
2.1.4 Importance of Capital Budgeting	26
2.1.4 Risk analysis in capital budgeting.	27
2.1.4.1 Sensitivity analysis	27
2.1.4.2 Scenario analysis	28
2.1.4.3 Simulation analysis	28
2.1.5 How replacement of long-term assets affects profitability	29
2.1.6 How outsourcing capital expenditure decision affect the profitability	30
2.1.7 How working capital decision affect the profitability	31
2.1.6 The effectiveness of capital budgeting techniques on firms' profitability	32
2.1.7 The impact of payback period on firms' profitability	34
2.1.8 The impact of accounting rate of return and profitability	35
2.1.9 The effects of internal rate of return on firms' profitability	36
2.1.10 The relationship between Net present value and firms' profitability	37
2.2 Theoretical Framework	38
2.2.1 Contingency theory	38
2.2.2 Portfolio theory	39
2.2.3 Tobin's Q Theory of Investment	40
2.2.4 Conventional capital budgeting theory	41
2.3 Empirical evidence	41
2.4 Chapter summary	47
CHAPTER 111	47
RESEARCH METHODOLOGY	47
3.0 Introduction	47
3.1 Research Philosophy	48
3.2 Research approach	49
3.3 Research Design	49

3.3.1 Research strategy	49
3.3.2 Research choices	50
3.3.3 Time horizon	50
3.4 Data collection techniques	51
3.4.1 Target population	51
3.4.2 Sample size determination	51
3.4.4 Research instruments and procedures	53
3.5 Data collection instruments	54
3.6 Reliability and validity	54
3.7 Data analysis and presentation	55
3.8 Ethical Consideration	55
3.9 Chapter summary	56
CHAPTER IV	56
DATA PRESENTATION, ANALYISIS AND DISC	USSION56
4.0 Introduction	57
4.1 Data presentation	57
4.1.1 Questionnaire's response rate	57
4.1.2 The sample composition	58
4.1.3 Gender analysis of respondents	58
4.1.4 Age range	59
4.1.5 Educational / professional qualifications of the	e respondents60
4.1.6 Work experience	60
4.1.7 Reliability statistics	61
4.1.8 Tests for normality	62
4.1.9 Tests for collinearity	63
4.2 Research findings	64
4.2.1 The effectiveness of capital budgeting techni	ques on firms' profitability64
4.2.2 The impact of payback period on firms' profi	tability 65
4.2.3 The effects of accounting rate of return on pr	ofitability67
4.2.4 The effects of internal rate of return on firms	profitability68
4.2.5 The relationship between Net present value a	nd firms' profitability69
4.2.5.1 Relationship test of Net present value	and firm's profitability70

4.2.6 Regression analysis	71
4.3 Discussion of findings	72
4.3.1 The effectiveness of capital budgeting techniques on firms' profitability	72
4.3.2 The impact of payback period on firms' profitability	73
4.3.3 The effects of accounting rate of return on profitability	73
4.3.4 The effects of internal rate of return on firms' profitability	74
4.3.5 The relationship between Net present value and firms' profitability	74
4.3.6 Discussion of the regression results	75
4.3 Chapter summary	75
CHAPTER V SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	76
5.0 Introduction	76
5.1 Summary of the study	76
5.2 Summary of major findings	77
5.2.1 The effectiveness of capital budgeting techniques on firms' profitability	77
5.2.2 The impact of payback period on firms' profitability	77
5.2.3 The effects of accounting rate of return on profitability.	77
5.2.4 The effects of internal rate of return on firms' profitability	78
5.2.5 The relationship between Net present value and firms' profitability	78
5.3 Conclusion	79
5.4 Recommendations.	80
5.4.1 General recommendations	80
5.4.2 Recommendations to policy makers	81
5.4.3 Recommendations for further research	81
References	82
APPENDICES	86
APPENDIX A: RESEARCH PERMISSION LETTER	86
APENDIX B: QUESTIONNAIRE	87
LIST OF TABLES	PAGE 91
LIST OF FIGURES PAGE	92

# LIST OF TABLES

Table: 3.1: sample size	52
Table 4.2: response rate	57
Table 4.3 key respondents sample composition	58
Table 4.4: Age Analysis of Respondents	59
Table 4.5: Tests for Reliability	61
Table 4.6 normality tests	62
Table 4.7: multi-collinearity tests	63
Table 4.8 Factors affecting the adoption of bitcoin in Zimbabwe	67
Table 4.9: Net Present value and firm's profitability	69
Table 4.10: Net present value and firm's profitability	70
Table 4.11 results of the regression analysis	71

# LIST OF FIGURES

Figure 2.1: Conceptual framework	22
Figure 4.2 Gender Analysis of the respondents	58
Figure 4.3 Level of qualification of the Respondents	60
Figure 4.4 Work Experience of the Respondents	60
Figure 4.5 capital budgeting techniques and firms' profitability	64
Figure 4.6 payback period and firms' profitability.	66
Figure 4:7 internal rate of return and firm's profitability	

### **CHAPTER I**

# INTRODUCTION

#### 1.0 Introduction

Economic activity is focused on satiating human needs that is encouraging people to consume commodities and services, (Vita, 2023). Investments are a middle step in this process because they allow for some consumption to be deferred in the hope that greater consumption would be feasible down the road due to the higher returns they produce, (Puzzolo *et al.*, 2019). Investment decisions typically involve balancing consumption and investment options over time, so rational investment decision-making must take into account the time preferences of the capital's owners, such as whether they prefer to consume now or invest in the hope that more will be available to do so in the future. (Roychowdhury, Shroff and Verdi, 2019), claim that investment decisions are related to the corporate choice to allocate resources to business activity in the most effective way with the expectation that the activity will produce a stream of ongoing returns over time. It poses the query, "How do we use the business's available funds so that we improve in the future?" Financial specialists must conduct an analysis and choose the type of asset to invest a firm's cash in expectation of future returns in cooperation with accountants.

In contrast to wise hiring of Lorries for daily operations and delivery transport of finished goods like Swift, this report will present information obtained through payback period, Net present value, Internal rate of return, payback method, and accounting rate of return regarding the purchasing of fixed assets like a new truck or machinery that will increase profitability, accountability, and measurability and thereby enhance shareholders' wealth at Blended Tea Factory. The earning power, liquidity, and significant advantages and disadvantages of capital budgeting will be highlighted in this report, along with an explanation of any observed changes.

The study will comment on the prospects of the company and make recommendations that would improve Blended Tea Factory current performance. These observations do have limitations which will be noted. This study will explain how capital budgeting enhance profitability.

#### 1.1 Background of the study

The non-discounted approach, which disregards the value of money over time, and the discounted approaches, which account for the value of money over time, are two capital budgeting methodologies that management uses in their decision-making (Megginson and Smart, 2019). Payback Period (PBP) and Accounting Rate of Return (ARR) are two non-discounted techniques. The Net Present Value (NPV), Internal Rate of Return (IRR), Discounted Payback

Period (DPBP), and Profitability Index (PI) are all components of the discounted method, (Duman and Güler, 2020). Other things being equal, managers typically choose the capital budgeting strategy, which increases stock price by taking into consideration cash flow, time value of money, estimated risk, and return, (Sukenti, 2023). The future cash flows of the company and the risks attached to those cash flows are significantly impacted by investment decisions, (Chadee *et al.*, 2023). Decisions regarding the capital budget often have a long-term effect on the business' operations and are crucial to whether it succeeds or fails (Dayananda et al., 2022). Economics is concerned with dividing up scarce resources among many users in order to maximize happiness and obtain the greatest outcomes, (Maiti, Castellacci and Melchior, 2020). On the other hand, capital budgeting is concerned with how these resources are allocated over time; decisions involving early expenditures in exchange for anticipations of future benefits, i.e. a return on a projected supply of future benefits (Jones, T. (2022). The management of

companies today seeks to broaden their areas of operation by taking on additional investment projects, expanding existing markets, and purchasing new equipment in an effort to succeed, among other things (Baker and English, 2021). Companies today face different competition from other local and international businesses (Jelonek *et al.*, 2022). All of these are regarded as management investment decisions. Capital budgeting decisions are those made about investments that management takes into consideration while evaluating the viability of all recognized opportunities and the long-term advantages of the project, (Olaniyi and Prause, 2020).

The accountant's responsibility is to offer a thorough analysis of the project's financial ramifications to the decision makers, (Andreassen, 2020). The accountant combines the projections, information, and conclusions of the various functional experts (sales, engineering, production, etc.), adds his own knowledge of financial and tax issues, and then appropriately analyses the resulting data using appropriate appraisal techniques before presenting the analysis to the decision-makers, (Xie, Tian and Wei, 2023). The accountant neither makes the investment decision nor provides all the necessary details by himself. He plays a crucial part in compiling, evaluating, and presenting the evaluation of the data obtained (Welkazi and Sharpiro, 2020). Meigs, et al. (2021) claim that a company may profit from wise capital budgeting choices or endure years of suffering from bad ones. Making judgments about capital budgeting also takes into account a variety of non-financial factors. For instance, many businesses place a high focus on preventing layoffs and creating new jobs. The corporation won't be able to raise enough money for subsequent investment projects if investments in plant assets do not yield a reasonable

return on the funds used to finance the project. The two categories of capital budgeting approaches are non-discounted cash flow and discounted cash flow strategies.

Andor et al. (2018) conducted a comprehensive phone survey of 400 CEOs of small, medium and large firms in ten countries of Central and Eastern Europe (CEE). They came to the conclusion that the country's code of ethics, business aims, and company size had the biggest effects on CEE's capital budgeting processes. Targeted leverage, management ownership, and the quantity of projects to be examined all have a moderate impact. This also applies to using CAPM and figuring out the cost of capital. Big businesses employed the DCF approach at a rate of 56%, compared to 45% for small and medium-sized businesses. Surprisingly, study revealed that even though advanced capital budgeting practices including DCF, sensitivity analysis and real options are available, still top management can reject a handsome project that was once chosen based on DCF methods owing to several other factors such as ethical and moral considerations, financial resources scarcity, strategic fit, trust in the analysts or reliable sources of data.

De Souza and Lunkes (2019) looked into how big publicly traded Brazilian companies used capital budgeting techniques. According to their findings, managers in Brazilian enterprises mostly employed the PB (71%) and were closely followed by NPV (65%) and IRR (61%). According to the survey, WACC is the most commonly utilized method (63%), when determining the minimal rate of return. The findings indicate that the most popular methods for evaluating risk are scenario analysis (68%) and sensitivity analysis (55%).

The impact of capital budgeting decisions on a firm's profitability was examined by Nagesha, Krupa, Chandrakala, and Sowmya (2023) for a subset of listed automobile businesses in India. According to the report, profitability is a key factor in business operations and establishes a company's market worth. The study looked into how capital budgeting choices affected auto companies' bottom lines. The study specifically focused on five areas where capital budgeting decisions—the purchase of long-term assets, their replacement, investment appraisal methods, outsourcing expenses, and working capital decisions—had the greatest and most notable impact on the profitability of the organizations. The study primarily consisted of a survey of Indian automobile companies listed on the NSE. Any business that seeks to invest its resources in a project without. The study basically involved survey of the Automobile Companies listed in NSE in India. The findings set up that there was relationship between the independent variables of capital budgeting decisions and profitability. The study was examined the outcome of capital budgeting Impact on profitability of listed firms in India. The independent variables for the study were Capital Budgeting and Profitability. Research implications showed that it is evident that Maruti and Tata Motors produced positive and statistically significant values for this study (high t-values (12.37 and 11.26), p =0.00) respectively. Eicher Motor resulted a Lowest but insignificant value (t = 2.11, p = 0.07). The study found that positive impact of capital budgeting on profitability of the firms under the study.

Also, Responses from 77 Indian companies that are listed on the Bombay Stock Exchange were analyzed by Batra and Verma (2017). Their data shows that business managers generally adhere to the capital budgeting guidelines set forth by scholarly theory. The most widely used DCF methodologies are risk-adjusted sensitivity analysis and NPV and IRR. WACC is also preferred by managers as the cost of capital. However, there is a theory-practice divide when it comes to

using specific techniques like simulation by Nurullah and Kengatharan (2015), real options, and modified internal rate of return (MIRR). When choosing projects, managers also take non-financial factors into account.

Jinqiao, Jianwen, Peini, and Xilin, (2022) examined the application and Comparison of NPV and IRR Methods in the Company Investment decision in China. Based on prior research, the paper summarized the benefits and drawbacks of the two approaches and investigated the particular application circumstances in corporate finance to determine the application conditions of Net Present Value (NPV) and Internal Rate of Return (IRR) in practice. The outcomes demonstrated that the NPV technique can provide clear expectations, reflect the liquidity and overall profitability of an investment, and be more thorough in risk measurement. However, the issue of uncertain cash flows could not be solved by the NPV method. Furthermore, the project and company openness have a limit on the potential cost. It was also discovered that the IRR approach, which has been widely utilized by practitioners, can simply compute the rate of return on investment and compare it with the industry benchmark return on investment. When the cash flow is not a set annuity, the IRR approach, which is a ratio that cannot reflect the actual profit, may nevertheless produce various results.

Green Technology Strategies for the Sustainable Development of Solar Power Projects: Evidence from Pakistan was examined by Ali et al., (2021). Energy is the primary component of a modern lifestyle that must be taken into account in discussions about economically sound and sustainable growth. Particularly in developing nations like Pakistan, where it has attracted the special attention of governing and regulatory bodies, the financial performance of solar power

plants has emerged as the key concern. The study assessed green technology approaches for the long-term growth of solar energy projects in Pakistan. It investigates the moderating effects of cost and method riskiness on the relationship between capital budgeting strategies and the success of solar power projects financially. The outcomes also show that the relationship between capital budgeting strategies and the financial success of solar power projects is highly influenced by the methods' cost and risk. These findings offer a useful guide for regulators, government agencies, and policymakers in choosing the best green technology approach to boost solar power project sustainability and cleaner production. Also, Mubashar and Tariq (2019) carried out a study on 200 nonfinancial firms listed on Pakistan Stock Exchange, with a response rate of 35%. It was found that Pakistani listed firms frequently used NPV, IRR and PI for capital budgeting. Out of these DCF methods, NPV is the most used method (61.4% of respondent firms always use NPV) of capital budgeting. Again, 27% firms always used IRR, but interestingly all the respondents firms use IRR with NPV as a secondary method. Similarly, WACC is estimated using target value weights, and capital asset pricing model (with extra risk factors) is used to determine the cost of equity capital. For risk assessment, sensitivity analysis and scenario analysis are the dominant approaches; however, despite the theoretical superiority, the use of real options is very low. Overall, investment decision responses significantly differ across firms' demographics and executive characteristics.

Anhar, Abdur, and Sohel (2021) conducted research on the capital budgeting procedures used by a few chosen Bangladeshi businesses. A structured questionnaire survey was utilized to gather data from chief financial officers (CFOs) of companies that are listed on the Dhaka Stock Exchange in Bangladesh. Following data collection, descriptive and inferential statistical

methods were applied to the data analysis. The most popular capital budgeting technique, according to the findings, was net present value, which was closely followed by internal rate of return and payback period. Similarly, it was discovered that the most popular technique for determining cost of capital was the weighted average cost of capital. Additionally, the data showed that CFOs use the discount rate to modify their risk factor. The study's conclusions may aid businesses, decision-makers in government policy, and practitioners in making informed choices when assessing investment initiatives. The results of this study further contribute to the body of knowledge already available in the area of capital budgeting techniques by offering a more thorough and dependable analysis using data from developing economies.

According to Baker et al. (2017), who conducted a survey of 75 Moroccan listed companies, 64% of the firms used IRR, 63% used ARR, and 53% used PBM. The least prevalent approach in Morocco, however, was NPV. Real choices are not used by many of the responding firms when deciding how to allocate capital. When assessing investment prospects and figuring out the cost of capital, they typically employ less advanced methods than their counterparts in wealthy nations. Companies registered on the Chittagong Stock Exchange most commonly utilize the accounting return on equity and the CD plus equity risk premium to calculate the cost of equity capital.

Alleyne et al. (2018) studied forty-one Barbados-based businesses. According to the report, Barbados-based businesses are unlikely to select projects using capital budgeting techniques. Because of its simplicity, ease of computation, potential for less effort, and adaptability, the PBM is ranked by the majority of respondents as the best capital budgeting approach. The

majority of firms employ "crude methods and non-traditional methods of capital budgeting to aid in decision-making," according to the results. Although there are no statistically significant differences between the capital budgeting techniques employed in the various sectors, professional accountants are more likely than non-professional accountants to use NPV and sensitivity analysis.

The study on the function of capital budgeting and investment assessment approaches in assessing the profitability of projects in Nigeria was conducted by Maimuna and Danladi (2019). According to their definition, capital budgeting is a methodical approach used by companies to assess the potential benefits of an investment project. It offers methods that are essential for selecting initiatives that are worthy of funding. Owners or shareholders would view as reckless any company that attempts to commit its resources to a project without fully appreciating the risks and rewards involved. The study also hypothesized that a company will likely have little chance of surviving in the cutthroat industry if it is unable to assess the success of its investment selections. Examining how capital budgeting or investment appraisal methods affect proposed projects' profitability is the paper's main goal. The reviews and conclusions in the study are primarily based on information found in textbooks, journals, and other pertinent sources. It was discovered from the body of existing research that the pay-back period, accounting rate of return, net present value, internal rate of return, and profitability index are the capital budgeting methodologies most frequently employed to assess a project's profitability. It was also shown that the majority of businesses, particularly small manufacturing enterprises, do not employ advanced methods for evaluating investments. They largely rely on the non-discounting

techniques, which ignores the time value of money. Large firms are more inclined towards using sophisticated techniques rather than their small counterparts. The research adds to the body of knowledge on capital budgeting in general. It is expected to assist management in choosing the best capital budgeting technique in the evaluation of its future investment projects.

The results of Otekunrin et al.'s (2018) study, "Investment Decision and Profitability in Brewery Industry (A Case Study of Nigeria Brewery Plc.)," showed that a company can make a variety of investment decisions and that projects are executed according to budgetary constraints. Additionally, there are numerous methods for calculating the benefits of these initiatives. Similar to this, Imegi & Nwokoye (2015) investigated The Effectiveness of Capital Budgeting Techniques in Evaluating Projects' Profitability in Rivers State and discovered that pay-back, accounting rate of return, net present value, internal rate of return, profitability index, and net terminal value are among the capital budgeting techniques used in assessing a project's profitability. It also found out that the most effective capital budgeting technique for evaluating the profitability of risk-free projects is the net present value

Pearce (2019) investigated The Impact of Capital Budget Decision on Financial Performance of Commercial Banks in Sierra Leone and was able to find out that the implementation of the payback period technique in capital budgeting decision is highly correlated with commercial banks performance followed by three other techniques except for the internal rate of return technique that was negative and insignificant in both the correlation and regression results.

According to Ndanyenbah & Zakaria's (2019) study, "The Application of Investment Appraisal Techniques (IAT) by Small and Medium Enterprises (SMEs) Operators in the Tamale Metropolis Ghana," a significant amount of knowledge about the various basic IATs was possessed by SME operators in the Tamale Metropolis. Additionally, the SME operators applied the IATs at a large level. It was found that the SME operators did not evaluate their investments using the theoretical mathematical equations of the IATs, despite the fact that they showed a considerable level of understanding and application in the various IATs. It was also discovered that operator's knowledge in an IAT had insignificant influence on its' application by the operator. The choice of the IATs by the SME operators was found to be significantly influenced by the SME Operator's gender, educational level and risk behaviour and the investment size and the business or industry type.

Capital Investment Appraisal Practices in Sri Lanka's Emerging Market Economy were studied by Kengatharan & Nurullah (2018). Based on the study, it was determined that Net Present Value (NPV), Internal Rate of Return (IRR), Payback (PB), Accounting Rate of Return (ARR), and Discounted Payback (DPB) are the most often used capital investment appraisal approaches in Sri Lanka. Sri Lankan businesses choose uncertainty absorption in cash flows when it comes to risk-adjusted capital investment assessment methods. This is followed by sensitivity analysis, probability analysis, scenario analysis, and modifying the needed returns.

Al Breiki and Nobanee, (2019) examined how financial management might support the growth and adoption of sustainable business practices in South Africa. A growing number of businesses are incorporating societal expectations into their business strategy. A company's increasing

reliance on sustainable issues is essential to its future worth and rising interconnection, (Al Breiki and Nobanee, 2019). It demonstrates that proper financial management models are required to increase productivity while reducing difficulties with financial risks based on thematic analysis of materials from numerous researchers. The results also showed that using both western and Islamic finance systems is an effective way to address sustainability challenges while improving the business's competitive edge. The study concludes that financial management plays a vital role in promoting sustainable business practices and development.

(Heinz and Japi 2019) discuss the capital budgeting methods and banking performance of a major bank in Zimbabwe. Due to resource scarcity, the banking industry in Zimbabwe has become extremely competitive, and the majority of institutions are pushing for cost-cutting initiatives. Long-term capital investments are required in such a challenging corporate climate. As a result, capital budgeting has emerged as a crucial strategic business tool for banks to thrive and maintain their position as market leaders.

At Clearwater Estate in Chipinge, the Blended Tea Factory—previously known as the Capital Tea Company—value-adds more than 1000t of bulk tea into packaged tea. The two most well-known brands are Three Leaves and Crest Value. The company buys raw materials (loose teas) from the other sub units of Ariston management services that includes Roscomon Estates, Southdown Estates and Clearwater Estates. Loose teas are then blended to produce finished goods such as Three Leaves, Crest Value and Mountain Dew. Due to major activities the company, it is responsible in taking into account the financial management, cost management and other activities in order to maximize shareholder's wealth and creating a sustainable environment for the society. The company's primary asset investment activities include buying

new plants and machinery, such as a Tea bag machine for tea bag packaging, Better Pack Machinery for loose tea packaging, and capital rationing on the purchase of a truck for transporting loose tea from estates and distributing finished goods to Brands Africa. The company establishes a spending limitation for capital projects before the beginning of every new year, and the proposal is then evaluated by the management and the shareholders. Capital planning has a greater impact on an organization when it considers the venture option that would yield the best return and gives the organization the chance to understand the various risks associated with a set of speculations and how these risks affect return. The company now uses capital budgeting approaches such as the payback period for the packing machines, for example, on the length of time for an investment to repay its initial outlay, thus it is vulnerable to the main challenge of ignoring the time value of money, and as a result, faces financial difficulties. The financial flows received early on in a project are given more weight than the cash flows collected later on. Even if two projects may have the same payback period, one may produce greater cash flow in the early years than the other does in the later years. The repayment technique in this situation makes it unclear which project should be chosen, and as the largest cash flows may not happen until after the payback period has ended, it ignores the cash flows that will occur beyond the payback period. Use of additional methods, such as net present value, is therefore crucial. In this study, capital budgeting strategies including payback, net present value, accounting rate of return, and internal rate of return will be assessed to determine whether the ideas will more significantly help the organization.

# 1.2 Statement of the problem

Blended Tea Factory's management claimed that because the company uses the payback period technique and does not adjust cash inflows accordingly, it is not accounting for time value of money (TVM). This is also a result of the business's lack of knowledgeable and competent workers, who aid in the execution of prudent capital decisions that increase profitability and productivity.

Owing to significant business operations, the management of the Blended Tea factory considered cost management, financial management, and other activities to maximize shareholder wealth and create a sustainable environment for society. By using capital budgeting techniques and discounting techniques, the management acknowledged the desirability of investment proposals and made investment decisions accordingly. In order to anticipate daily operations and participate in investment decisions, the corporation also hired recent accounting graduates.

Since the problem is clearly defined the researcher intends to determine the effectiveness of capital budgeting techniques on firm's profitability. A case of Ariston Management Services t/a Blended Tea Factory, outlining the capital budgeting techniques in determining investment decisions

#### 1.3 Aim of the study

The study sought to determine the effectiveness of capital budgeting techniques on firm's profitability. A case of Ariston Management Services t/a Blended Tea Factory

# 1.4 Objectives of the study

The main objective was:

1 To determine the effectiveness of capital budgeting techniques on firms' profitability.

Sub-objectives were:

- 2 To determine the impact of payback period on firms' profitability.
- 3 To find out the effects of accounting rate of return on profitability.
- 4 To ascertain the effects of internal rate of return on firms' profitability.
- 5To determine the relationship between Net present value and firms' profitability.

# 1.5 Research questions

The main research question was:

1 What is the effectiveness of capital budgeting techniques on firms' profitability?

Sub-research questions were:

- 2 What is the impact of payback period on firms' profitability?
- 3 what is the effects of accounting rate of return on profitability?
- 3 What is the effects of internal rate of return on firms' profitability?
- 4 What is the relationship between Net present value and firms' profitability?

# 1.6 Assumptions of the study

To effectively carry out this research study the researcher assumes that;

 Respondents are free to give truthful answers as required by the researcher by the questionnaires

- Blended Tea Factory will allow the researcher to have access to customer related information in their data base.
- Prevailing conceptual as well as theoretical and practical issues without whose treatment or address the research could fall problematical.

# 1.7 Significance of the study

#### To the researcher

It allowed the researcher to have in-depth knowledge and understanding of capital budgeting techniques and its benefits to firms' profitability. The research sharpened the personal skills of the researcher in preparation for more challenging research work in the future.

#### The Government

The study helped in the formulation of strategies that helps to improve the economic performance of the companies. And also, to make policies that yield economic growth.

# The University

The University library benefited from the study, as other students will be able to use the final research in their studies as the research can act as a reference to other research to be undertaken and the research added to the existing knowledge within the institution of higher learning.

#### Blended Tea Factory.

The studypointed out the capital budgeting techniques at BTF from 2019 to 2023 outlining the strengths and weaknesses of each technique in promoting firm performance and profitability. The Organization was aware of what to consider when making an investment decision. Also, the company was able to present important information for investors to make analysis.

#### To other students.

The study also helped the current and future students who will want to endeavour researches in the same field as well as other researchers will use the report as literature review in order to improve on their research studies in future

### 1.8 Limitations of the study

#### Time constraints

The study demanded a lot of a limiting factor called time to be set aside for data collection and movements to and from the company. To curb this, the researcher scheduled enough time for the study around the class schedules.

#### **Financial constraints**

Scarcity of financial and economic resources had effect on the number of participants involved in the study. The researcher used better and improved methods of data collection to cut on the travelling costs. The researcher used own savings to fund the research.

# 1.9 Delimitations of the study

For the purposes of this study, Blended Tea Factory was used and the financial reporting periodcovered 2019 to 2023. Due to time and financial constraints involved, the research focused on Blended Tea Factory employees in Chipinge to enable collection and evaluation of qualitative and quantitative data.

#### 1.10 Definition of terms

**Capital budgeting -** Pamela and Peterson (2023) delineates capital budgeting as the process of recognizing and choosing investments in long-lived assets or assets expected to generate benefits over more than one year

**Internal rate of Return -** The internal rate of return is the discount rate at which the present value of expected cash inflows from a project equals the present value of expected cash discharges of the project. IRR is sometimes called the time adjusted rate of return, (Jackson, 20220

**Budget -** "A legally authorized annual monetized plan that establishes spending limits for the various programs that come out of legislation, policy and organizational intent" (**Graham**, 2021).

Capital Expenditure - According to **Doss** (2019), "capital expenditure is the acquisition of any piece of tangible property which meets the minimum established dollar amount". Capital expenditures have future value compared to operational expenditure which presents benefits of limited durations.

**Efficiency -** Optimal allocation of resources for the benefit of meeting the set mandates of the public sector with minimal waste or loss, (Jackson, 2022).

**Stakeholders** - Parliament, a person, organization, community, political party, funder and/or department that can influence the project and or benefit or be affected by the outcome of the project, (barleti, 2021).

# 1.11 Organization of the study

In chapter one an introduction to the study was presented. Back ground of the study, the main problem and the study was also demarcated. Key concepts were defined and the significance of the study was explained.

Chapter 2 presents literature review and a theoretical overview of the impact of capital budgeting techniques on firms' profitability at Blended Tea Factory. Attention focused on the elements of capital budgeting techniques on firms' profitability, theoretical framework, conceptual framework, and empirical literature.

In chapter 3, it focused on the research methodology which defines the approaches and strategies used in data collection and analysis. Data collection procedures was stated as well as the limitations encountered and the validity and reliability of the research. Research ethics was also noted on how the research would consider the participants.

Chapter 4 presents, interprets and analyse the data collected using Statistical package for social scientists (SPSS) to analyse data using tables, reliability tests and descriptive.

Chapter 5 Outlined a brief summary of the research process. It also indicated the conclusions and recommendations based on the findings and objectives of the study.

#### **1.12 Summary**

This chapter's background material inspired the researcher to assess how well capital budgeting procedures affected a firm's profitability. It examined the background of the study, problem statement, research objectives, research questions, justification for the investigation, study

limitations, study delimitations, and chapter organization. The following chapter focused on the conclusions reached by several authors regarding the impact of capital budgeting procedures on a company's profitability.

# **CHAPTER II**

# LITERATURE REVIEW

# 2.0 Introduction

The study's background, statement of the problem, research objectives, research questions, justification for the investigation, and limitations and delimitations were all covered in the preceding chapter. This chapter discusses data that shows how capital budgeting strategies affect a company's profitability. In this approach, the evaluation of the literature aided in the researcher's comprehension of the issue and identification of the discrepancy between earlier and more recent studies.

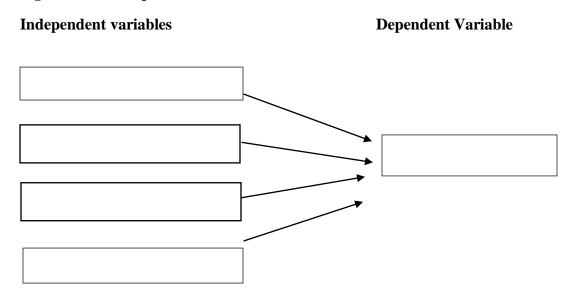
# 2.1 Conceptual Framework.

# 2.1.1 Capital budgeting

Capital budgeting, according to Al-Mutairi et al. (2018), is the financial assessment of a company's proposed capital investment plans. To put it another way, capital budgeting requires assessing whether projected cash flows from an investment are sufficient to warrant making it, while also taking risks and unknowns into consideration (Leon et al., 2019). Making a budget is one of the most important decisions a financial management must make (Ryan & Ryan, 2022). The efficiency of a company's capital budgeting procedure and the associated financial analysis methods ultimately rely on the impact they have on managers' choices on how to allocate scarce resources among competing investment options (Pike, 2018; Pike & Ooi, 2020). When making investments, the managers take a number of arbitrary decisions (Pike, 2019). Additionally, according to Andrés et al. (2019), the profiles of the managers may affect how the businesses use capital planning. Many businesses use a variety of decision-makers to adopt decisions related to the referenced budgeting (Brijlal & Quesada, 2019). First, how quickly a company expands is greatly influenced by the choice of capital inputs; a poor option could result in the failure of the enterprise. Second, such decisions are very expensive. They are also among the most complicated decisions in terms of the unknowns surrounding future cash flow projections as well as the effects of social, technological, economic, and political factors on the projections (Egbide et al., 2019). The choice to make investments includes evaluating the capital budgeting recommendations (Arnold & Hatzopoulos, 2020). Accordingly, making decisions on financial management and capital investments is crucial for the long-term survival and performance of the business (Bennouna et al., 2021). Capital budgeting also covers the most fundamental financial decision, regardless of the size of the business, as it determines an organization's profitability and success (Egbide et al., 2018). Such relevance explains the wide range of capital budgeting approaches and methodologies that many businesses use, as well as how they handle the complex webs of relationships among the budgeting variables (Pike, 2019). There are many ways to boost the efficiency of decisions (such as qualification, recruitment incentives, etc.), therefore the capital budgeting techniques and procedures are seen as key components in that regard (Pike, 2019).

The conceptual framework is represented on figure 2.1 below:

Figure 2.1: Conceptual framework



Source: Primary data (2023)

# 2.1.2 Techniques of Investment Appraisal

Discounted cash flow and non-discounted cash flow approaches are basically the two divisions of capital budgeting strategies. The method that does not take time value of money into account is known as non-discounted cash flow. The two primary categories of non-discounted approaches are the Payback Period (PBP) and the Accounting Rate of Return (ARR). The opposite of non-DCF is discounted cash flow (Ishtiaq et al. 2019) are the Net Present Value method (NPV), Internal Rate of Return method (IRR), and Profitability Index (PI) are other DCF

methodologies. The idea behind a DCF analysis is to estimate pertinent future cash flows and discount them back to their present value in order to account for the passage of time.

# 2.1.2.1 Payback Period (PBP)

The payback time technique predicts how long it will take for the principal investment to be recovered from the net cash flows of a project or investment (Vukasovi, Martinov, & ebeljan, 2022). According to Hallegatte, Rentschler, and Rozenberg (2020), the payback period emphasizes the management's concern for liquidity and the desire to lower risk by accelerating the return of the initial investment. Repayment seems to be used as the main or major method more frequently by small and medium-sized firms. The repayment method has two major flaws: it evaluates time value of money inaccurately and ignores financial flows that take place after the payback period. This approach is frequently used in evaluations of pure profit as a single criterion and is also occasionally employed when focusing on elements like liquidity and project schedule risk, (Dong et al., 2022). When the payback method is used as the initial screening tool, the obvious cases of profitable and unprofitable investments are sorted out, leaving only the investments that have made it through the screening process in the middle group to be examined using more sophisticated and time-consuming calculation methods based on discounted cash flows (DCF), such as the Internal Rate of Return (IRR) and Net Present Value (NPV) methods. However, it should be emphasized that a significant number of large corporations base their investment judgments only on the payback period, (Blatt 2019; Awomewe & Ogundele, 2018).

#### 2.1.2.2 Accounting Rate of Return (ARR)

It is also known as the average rate of return and relies project appraisal on average income rather than the project's cash flows. The alternative investments are then ranked using the percentage rate of return generated by this strategy rather than the payback period (Kitili & Nganda, 2021). One of the main advantages of this strategy is how simple it is to comprehend and apply because the calculations are performed utilizing information from accounting reports. But there are some serious problems with this strategy. To begin with, the time worth of money is not taken into account. It is impossible to establish the lowest acceptable rate of return in an objective way. (Akalu, 2021) (Afonso & Cunha, 2019).

## 2.1.2.3 Net Present Value (NPV)

Net present value, or NPV, is the present value of the project's cash flows at the required rate of return relative to the initial investment (Dai et al., 2022). For instance, the cash flows that occur at different points in time are adjusted for the time value of money using a discount rate that is the absolute minimum rate of return required for the project to be viable, according to Weber. To ascertain the project's net present value, this is done. Positive net present values, or values at least equal to zero, are acceptable whereas negative net present values are not. If the project is rejected, it will be rejected because the cash flows will also be subpar. The NPV compares the value of a dollar today to the value of that same dollar in the future while taking inflation and returns into account, according to Awomewe and Ogundele (2019). The net present value method is consistent with the idea of wealth maximization since it takes into consideration the time value of money and uses all project cash flows over the period of the project's existence (John & Nwokoye, 2020). The difficulties in estimating the necessary cash flows are one of the

downsides. The main disadvantage of the NPV technique is that it requires making an informed decision on the firm's cost of capital.

## 2.1.2.4 Internal Rate of Return (IRR)

The net present value of all anticipated cash flows from a certain project is reduced to zero by the discount rate known as the internal rate of return (IRR), which is often used in capital planning (Zhang, 2022). IRR is essentially the rate of return that, when added to the end market value of a project (or investment), leads it to be equal to its current market value. The internal rate of return, which asserts that any project should be avoided if the cost of capital exceeds this rate, provides a simple barrier (Indrawan et al., 2020). The internal rate of return is the discounted rate at which the presented value of projected future cash flows calculated for each project is equal to the initial investment's present value and results in a net present value of zero, according to Maher et al. (2019), McWatters et al. (2021), and Umair (2022). IRR and NPV are the best results for evaluating projects that are mutually exclusive. When project timetables and cash flow differ, conflicts arise. If the IRR is below the required rate of return, the project must be abandoned because a negative NPV will ensue (Umair, 2023).

## 2.1.3 Factors influencing the selection of capital budgeting method

The selection of capital budgeting techniques can be influenced by both financial and non-financial factors. Financial factors include the size of the company, revenues, profitability, leverage level, expenditure, availability of cash, and the level of education of decision-makers.

Non-financial factors include familiarity with the project and the level of education of decisionmakers.

According to Alles et al. (2020), selection of capital budgeting techniques can be influenced by both the financial and nonfinancial factors. The nonfinancial factors includedemographic variables of the decision-maker. But Katabi and Dimoso (2016) conducted astudy in Tanzania and found that business-related factors like industry of the business, sales growth, business establishment, number of employees and form of business play avital role for selecting capital budgeting methods.

Leon et al. (2018) found eight factors that motivate them to choose a capital budgeting method in Indonesian's firm. Factors are chief financial officers'(CFOs) education, size of the firm, total annual investment, industry type, ownership structure, multinational culture and financial leverage.

In addition, Brunzell et al. (2018) found one more factor which is political risk for selecting methods. Daunfeldt and Hartwig (2019) conducted a study on Swedish listed companies and found few new factors such as dividend payout ratio, potentiality of firm growth and foreign sales amount.

#### 2.1.4 Importance of Capital Budgeting

Capital budgeting has a big impact on how resources are allocated in firms (Dabor & Modugu, 2023). Through a well-organized capital budgeting process carried out by individual divisions, an organization can evaluate the viability of new business proposals, choose which projects to expand, and build a corporate portfolio to maximize returns, such as return on asset (ROA), return on equity (ROE), and risk adjusted return of capital (RAROC), while minimizing risk

(Wong, 2019; Dabor & Modugu, 2023). Capital budgeting decisions are among the most important ones that organizations must make in order to survive and flourish in the long run, in addition to being among the hardest ones for managers to make (Carmona et al., 2021; Lunkes et al., 2019). First, capital investments often require a sizable quantity of money. The second step is for the firms to decide on the best method for obtaining and repaying these resources. Last but not least, the decision's timing is crucial (Lunkes et al., 2019). Thirdly, the majority of decisions made while creating a capital budget include long-term commitments. The choices made during capital budgeting have the greatest impact on the organization's potential for future growth (Awomewe & Ogundele, 2018). Decisions about capital budgeting are essential for a business' survival because profitability depends on capital expenditures, especially the major ones. Except for non-profit organizations, businesses exist to make a profit. Profitable capital investment promotes an economy's expansion and prosperity. Low profitability will result in less investment. To forecast the profitability of suggested investments, the investor requires instruments. Therefore, capital planning is crucial for any business because it affects the organization's long-term growth and success. It fosters measurement and accountability (Balarabe, 2020).

#### 2.1.4 Risk analysis in capital budgeting.

# 2.1.4.1 Sensitivity analysis

Sensitivity analysis uses several possible values for a given variable, such as cash inflows, to assess that variable"s impact on the company"s return, measured here by the NPV. This technique is often used by financial analysts to get a feel for the variability of return in response to changes in a key variable. The manager will estimate the NPV in relation to a number of

different estimates of cash inflow, which vary from the optimistic case (best) estimates for cash flow, to the base case (expected) estimate of cash inflow, to the pessimistic case (worst) estimate of cash inflow. The NPV range can then be determined by subtracting the pessimistic outcome NPV from the optimistic outcome NPV. Often, by putting forward an NPV range, it helps in allowing business executives to make calculated decisions based on their risk appetite

#### 2.1.4.2 Scenario analysis

This considers both the sensitivity of NPV to changes in key variables as well as the range of likely variable value. Scenario analysis evaluates the impact of simultaneous changes in a number of variables, such as cash inflows, cash outflows, the cost of capital, or cost growth rates. The combined effects of changes in these variables are then applied to evaluate the impact on the company's return. For instance, a company could evaluate the impact of a high or low risk-free interest rate environment on a company's NPV. Each scenario will affect the company's cash inflow, cash outflows, and cost of capital, thereby resulting in different levels of NPV. A manager can then use these NPV estimates to assess the risk involved with respect to the interest rate environment

# 2.1.4.3 Simulation analysis

In actuality, it might be necessary to create distinct possibilities for each alternative element affecting the project, such as various sales income outcomes, various cost items, etc. Additionally, the cash flow may correlate throughout time, for example, if a new product succeeds in its initial years, it is also likely to succeed later on. When using a simple decision tree analysis, the situation becomes complicated. This issue can be solved by using simulation

analysis using a computer. Three actions must be taken by a corporation to do this analysis. Calculate the range of values for each factor and the likelihood of each value occurring within that range. Choose one value at random from the range of values for every factor. The rate of return from that combination is then calculated by adding the values for all the components. Repeat this process numerous times to define and assess the likelihood that each potential rate of return will occur.

## 2.1.5 How replacement of long-term assets affects profitability

According to Louderback and Hirsch (2020), replacement decisions entail contrasting new production techniques with already-in-use equipment and technology. Firm managers have two options: they either buy new equipment or stick with the status quo, which is their current equipment. According to Chasteen, Flaherty, and O'Connor (2021), replacement decisions are made when a company buys new equipment that essentially performs the same functions as its old equipment. The results of Langemeier's (2018) study on the replacement of capital assets show that a variety of factors, including machine efficiency and technological improvements aimed at achieving firm value considerations, have an impact on depreciation allowances. Even Delmar (2017) concedes that modern high-tech equipment, including computers and other devices, is crucial to enhancing the efficiency of organizational processes. According to Galisky, Guzman, and Insulan (2018), the international conference on the mining sector aimed to achieve innovations that assess the value of equipment replacement standards that deviate from the standard usage of the systems mix and change the organization's development mix. Three techniques are employed to document decisions about replacement and improvement (Chastain, Flaherty, and O'Connor, 2023). The substitution approach comes first. This approach

acknowledges that a business is replacing outdated equipment with new ones. The capitalization of new costs approach is the second. The asset account is debited for costs under this system. The corporation does not eliminate the book value of an old asset from accounting under this technique, which is the only distinction between it and the first. According to Meigs (1987), managers should calculate the present value of the additional cash flows that come with replacing outdated machinery before opting to replace it. To determine if the investment will yield the necessary rate of return, the present value must be compared to the price of new equipment.

# 2.1.6 How outsourcing capital expenditure decision affect the profitability

Outsourcing, according to Quelin and Duhamel (2022), is assigning a company's responsibility or tasks to a knowledgeable outside provider. To accomplish the tasks assigned to it, the vendor organization needs to have a capable and competent hand or hands. Furthermore, outsourcing can only begin when the task to be leased out is not one of the core and strategic tasks of the organization. According to Gartner (2023), up to 80% of outsourcing contracts are ineffective, and poorly managed outsourcing agreements cost European businesses billions of dollars. This claim emphasizes the fact that, despite outsourcing's many advantages, decisions about outsourcing carry some risk. According to Earl (2021), in order for a company to benefit from outsourcing, it must outsource and carefully consider how it should be avoided. The outsourcing firm has potential even before it is given a job. Quelin and Duhamel (2023) stated that until the decision is made, the outsourcing decision-making process necessitates a significant amount of work and careful consideration. The following "success foundation steps" were recommended to be followed prior to making the outsourcing decision.

# 2.1.7 How working capital decision affect the profitability

Making decisions on working capital entails managing current assets and liabilities. Its main goal is to maximize the amount of cash, receivables, inventory, and near-cash assets that a company can hold at any given time. Choices are mostly impacted by the trade-off between profitability and liquidity. According to Bierman, Harold, and Seymour Smidt (2021), profitability will decrease as the ratio of liquid assets increases. Conversely, a lower volume of investments in liquid assets will result in a higher rate of insolvency risk. Profit in the latter scenario is substantial, though. As a result, current assets must be managed carefully because they shouldn't be insufficient or needlessly tied up. David (2020) looked at how working capital management affected the company's profitability and overall performance. The results show that a company will be more profitable the longer it takes to make payments. Asoke (2019) conducted an empirical study in Ghana that focused on the profitability of banks and their working management. Based on the findings, the study comes to the conclusion that an organization's profitability is impacted by its operating cycle. According to the study, credit risk also considerably boosts profitability in a manner that is equivalent to or similar to bank operations. In their research, Hayajneh and Yassine (2021) looked at the variables influencing the banking industry's need for working capital. The study uses correlation and a non-experimental research approach with a sample of 166 Canadian companies listed on the Toronto Stock Exchange. Overall, the findings show that the need for working capital is adversely connected with company size and favorably correlated with industry, operating cycle, return on assets, and Tobin's q (Q ratio).

# 2.1.6 The effectiveness of capital budgeting techniques on firms' profitability.

Capital budgeting is a crucial process for businesses to allocate their financial resources effectively and prioritize investments. It helps to reduce the risk of investing in unprofitable projects and maximize returns, which is essential for long-term growth and success. Effective and successful capital budgeting practices are of paramount importance because they have a long-term impact on a firm's survival and performance (Batra and Verma, 2017). According to the International Federation of Accountants (IFAC), a systematic, logical, and comprehensive investment appraisal approach, along with prudent and objective decision-making, must be implemented to maintain and ensure a sustainable economy and growth. Therefore, capital budgeting has become a topic of theoretical and empirical interest in the financial literature and is increasingly gaining significance (AlMutairi et al., 2018). In the capital budgeting process, several critical factors that play a significant role in evaluating an investment project include the amount of investment required, working capital requirements, projected cash flows from the investment, the economic life of the investment, salvage value, and the expected rate of return, all of which should be carefully determined (Düzakın, 2023).

A study conducted in Kenya aimed to determine the effect of capital budgeting decisions on the profitability of listed companies. The study found that firms should make appropriate capital budgeting decisions that will lead to an increase in profitability because this translates to improved shareholder wealth, which is the main goal of a firm. Another study conducted in Nigeria found that traditional capital budgeting techniques are not effective in evaluating the profitability of a project in an environment of risk and uncertainty. Therefore, the study recommended adopting risk-adjusted discount rate and certainty equivalent techniques

Afonso, Jose, Fatima and Ney (2017) on a Brazilian cotton ginning firms and it was interviewed 10 managers from these companies. The study was to analyse capital budgeting practice in a group of small cotton ginning firms in Brazil, the results showed that a practical managerial approach was needed when ensuring satisfactory net operating results in short period of time. Capital budgeting is not seen as sophisticated and considered as essential, as businesses and strategic environment directly affects and impose high risks. Managerial experiences are highly influenced investment decision-making process. Mooi and Mustapha (2021) conducted a study on the degree of complexity of the capital budgeting aspects of the firms. The findings indicated that capital budgeting sophistication didn't have an effect on the organization's performance. Gilbert (2020) established to determine the usage of capital budgeting methods and how they are related to the performance of South African organizations in the manufacturing sector. The study used of 318 manufacturing organizations as a sample. Their feedback indicated that the used mostly approximation and shortcuts, but they have admitted that discounted cash flows methods are very significant and needs to be considering when making investment decisions.

Farah & Altinkaya (2018) studied Capital Budgeting Decisions and Profitability in Manufacturing Firms in Uganda and the findings also revealed that there is significant and positive correlation between five dimensions of capital budgeting decisions and profitability of the organizations. The findings set up that there was relationship between the independent variables of capital budgeting decisions and profitability and were positive relationships between capital budgeting and profitability of the firms under the study.

Olawale, Olumuyiwa & George (2020) assessed the Impact of Investment Appraisal Techniques on the Profitability of Small Manufacturing Firms in the Nelson Mandela Bay Metropolitan

Area, South Africa. The results from the study indicated that small firms mostly do not make use of sophisticated investment appraisal techniques. In addition, the results indicated that the use of investment appraisal techniques has a positive impact on profitability.

Farah & Altinkaya (2018) studied Capital Budgeting Decisions and Profitability in Manufacturing Firms in Uganda and the findings also revealed that there is significant and positive correlation between five dimensions of capital budgeting decisions and profitability of the organizations. The findings set up that there was relationship between the independent variables of capital budgeting decisions and profitability and were positive relationships between capital budgeting and profitability of the firms under the study

# 2.1.7 The impact of payback period on firms' profitability

The payback period is a financial metric that measures the time it takes for an investment to recover its initial cost. Payback period indicates efficiency and improves the liquidity position of a company, bears less risk, which is significant for small enterprises with restricted resources, curtails the risk of losses caused due to changes within the economic situation, helps limit the negative financial impact of adverse events.

The Payback Period is one of the most popular project evaluation criteria. As much as it is liked by practitioners as a measure of liquidity and risk exposure, it is criticized by academicians who seriously question its validity as a profitability criterion. Payback period analysis is a capital budgeting technique that determines how profitable an investment is, by calculating how much it takes to earn back its cost. It shows how long it takes for a business to recoup an investment, allowing firms to compare alternative investment opportunities and decide on a project that returns its investment in the shortest time if that criterion is important to them. However,

payback period is a measure for liquidity, not profitability. Payback analysis is a mathematical method finance professionals and investors can use to determine how long it may take to start, complete and pay for a capital project.

Obi & Adeyemo (2017) in their study on Evaluation of Capital Budgeting and Investment Decisions in Nigeria disclosed that though the sampled firms understand the obvious advantages of the net present value and the other sophisticated investment appraisal techniques over the payback method, they still adopt the later because of the nature of their economic environment, their size, lack of sufficiently qualified personnel, paucity of funds and their weak organizational structure.

Performance of Commercial Banks in Sierra Leone and was able to find out that the implementation of the payback period technique in capital budgeting decision is highly correlated with commercial banks performance followed by three other techniques except for the internal rate of return technique that was negative and insignificant in both the correlation and regression results

Awomewe & Ogundele (2018) studied The Importance of the Payback Method in Capital Budgeting Decision and from their findings, it became evident that the payback method is still often used in organizations all over the world despite its criticism by the academicians, making inference from the analysis of companies in Europe, America and Africa. The importance of the payback method, which includes but not limited to its simplicity, liquidity and risk assessment have made the method to be gaining more awareness in appraising investment opportunity by practicing manager

# 2.1.8 The impact of accounting rate of return and profitability

Like payback period, it is relatively simple to calculate and comprehend. The total gains or savings over the course of the project's economic life are taken into account by the accounting rate of return. The concept of net earnings—that is, earnings after taxes and depreciation—is recognized by this method. An important consideration when evaluating an investment proposal is the accounting rate of return. Comparing a new product project with a cost-reduction project or other competitive initiatives is made easier with the help of accounting rate of return. A project's profitability is clearly shown by the accounting rate of return. When determining rate of return, accounting rate of return takes profit into account. Moreover, the accounting profit can be readily calculated from the accounting records. Accounting rate of return satisfies the interest of the owners since they are much interested in return on investment.

# 2.1.9 The effects of internal rate of return on firms' profitability

IRR, or **Internal Rate of Return**, is a financial metric used to estimate the profitability of an investment. It represents the average annual rate of return an investor would earn if all cash flows from the investment were averaged out over its holding period.

Internal rate of return (IRR) is a calculation used to estimate the profitability of potential investments. It helps you determine whether the return you're getting is greater than its associated costs or an established minimum acceptable rate of return. If the ratio calculation projects a positive return, the investment supports profitability goals. Mathematically, IRR is the rate that would result in the net present value of future cash flows equaling exactly zero. The higher the projected IRR on a project, the more net cash the project generates for the company

According to Baker et al. (2017), who conducted a survey of 75 Moroccan listed companies, 64% of the firms used IRR, 63% used ARR, and 53% used PBM. The least prevalent approach in Morocco, however, was NPV. Real choices are not used by many of the responding firms when deciding how to allocate capital. When assessing investment prospects and figuring out the cost of capital, they typically employ less advanced methods than their counterparts in wealthy nations. Companies registered on the Chittagong Stock Exchange most commonly utilize the accounting return on equity and the CD plus equity risk premium to calculate the cost of equity capital

## 2.1.10 The relationship between Net present value and firms' profitability

NPV is one of the basic finance tools that help investors to clarify whether they should invest in the project. How does it work? Due to the fact that the money in the future is not worth as the money in the present, it uses factors for instance discount rates and cash flows to calculate the money that you will gain in the future. The advantage of NPV is very obvious, it includes the majority of the risks and costs inside and directly gives the investors some basic idea of how much money they can gain in total. As it used in the first question, the managers in the company can using the method of NPV to see which year they should execute in order to make the highest profit, and the answer is pretty clear, the third year has the highest. In this case, we can tell that NPV is a simple way to determine if a project delivers value because cash flows and discount rates were labeled, and the simplest way to determine the payback would be NPV Imegi & Nwokoye (2018) studied The Effectiveness of Capital Budgeting Techniques in Evaluating Projects' Profitability in Rivers State and was able to find out that the various capital budgeting techniques used in evaluating the profitability of a project arepay-back, accounting

rate of return, net present value, internal rare of returns, profitability index, and net terminal value. It also found out that the most effective capital budgeting technique for evaluating the profitability of risk-free projects is the net present value.

Kengatharan & Nurullah (2018) examined Capital Investment Appraisal Practices in the Emerging Market Economy of Sri Lanka. From the study, it was deduced that the most popular capital investment appraisal techniques used in Sri Lanka encompass Net Present Value (NPV), followed by Internal Rate of Return (IRR), Payback (PB), Accounting Rate of Return (ARR) and Discounted Payback (DPB). As for the capital investment appraisal tools incorporating risks, Sri Lankan firms prefer uncertainty absorption in cash flows, followed by sensitivity analysis, probability analysis, scenario analysis, and adjusting the required returns

#### 2.2 Theoretical Framework

## **2.2.1** Contingency theory

This idea holds that an organization's particular capital budgeting approach has no bearing on the success of its capital budgeting (Brown, 2021; Sharma & Frost, 2020). made a contribution to the development of the contingency theory by emphasizing that mastery of the asset allocation process requires a focus on the compatibility of the organizational context, operational outline, and capital budgeting framework, rather than just adopting cutting-edge, theoretically predominate assumption strategies and methods. The theory especially focuses on three components of business: institutional and behavioral restrictions, the formation of decentralized regulatory frameworks, and the hierarchical nature of firms. The size of a company is irrelevant when choosing an investment assessment approach, claim Sharma and Frost (2020); (Ermasova

et al., 2021). nevertheless, that the investment appraisal method depends on the organization's size. Graham & Sathye, 2020; Kim et al., 2021) used a longitudinal survey to assess capital budgeting. He observes a rise in the application of discounted cash flow techniques. He claims that this is the result of IT making processes like data collection and processing simpler. In spite of its critics, the theory is still relevant for academic research since it emphasizes how investors and businesses can influence financial outcomes through strategic corporate investment (Jha & Arora, 2019). The theory doesn't offer any advice on how managers should respond to a wide range of complex capital budgeting decisions.

#### 2.2.2 Portfolio theory

Harry Markowitz pioneered it with his article "Portfolio Selection," which was published in the Journal of Finance in 1952. Investors tended to concentrate on evaluating the risks and rewards of certain securities while building their portfolios before Markowitz's work. A portfolio should be built from the securities that offer the best potential for profit with the least amount of risk, according to conventional investment advice. If the investor took this advice to heart, he or she might decide that railroad stocks in general had favorable risk-reward ratios and build an entire portfolio out of them. This would seem ridiculous at first. This instinct was formalized by Markowitz.

He advocated that investors concentrate on choosing portfolios based on their overall risk-reward characteristics rather than just putting together portfolios from assets that each individually have attractive risk reward characteristics. He went into detail about the mathematics of diversification. In short, inventors should choose portfolios rather than specific securities. Single-period returns for different securities can be given expected values, standard deviations, and

expected return of any portfolio made up of those securities. We can use projected return and expected return of any portfolio made up of those securities. We can use projected return and volatility as stand-ins for risk and reward. Certain portfolios will have the best conceivable balance of risk and reward out of all those that could exist. What Markowitz referred to as an efficient frontier of portfolios includes these. A portfolio should be chosen by an investor that is on the efficient frontier. Markowitz's concept was elaborated upon by James Tobin (1958), who included a risk-free asset in the analysis. On the efficient frontier, this made it possible to leverage or deleverage portfolios. This gave rise to the concepts of a capital market line and a super-efficient portfolio. Portfolios on the capital market line are able to outperform portfolios on the efficient frontier through the use of leverage. A comprehensive context for comprehending the interactions of systematic risk and return is provided by portfolio theory. It has had a significant impact on institutional portfolio management and encouraged the usage of passive investment management strategies. The mathematics of portfolio theory is used extensively in financial risk management and was a theoretical precursor for today's value at-risk measures.

# 2.2.3 Tobin's Q Theory of Investment

Q theory, also known as Tobin's Q theory, relates to the rate of investment as a function of Q, where Q is the ratio of the market value of new additional investment goods to their replacement cost (Tobin, 1969). Tobin argued that investments by the firms depend on whether 'q' is greater or less than one. When q-ratio is greater than one, it implies that the stock market places a higher value on firms installed capital than its replacement cost. This provides incentive to the firms to add to its installed capital stock. However, if 'q' is smaller than one, the company should sell its assets rather than attempting to put them to use. In practice, companies usually delay their

expansion or contraction plans for some time- people do not respond as soon as they see q > 1 or q < 1, and tend to wait until q remains considerably below or above unity (one)

## 2.2.4 Conventional capital budgeting theory

Most people give Woods and Randall the credit for developing the conventional capital budgeting framework. The fundamental indicator of whether financial managers are successful in maximizing shareholder value, according to the theory, is the net present value (NPV) criteria. The weighted average capital cost (WACC) of the business is used to calculate net present value (NPV), and the riskiness of the project's cash flows is compared to the riskiness of the cash flows from the business's other assets (Graham & Sathye, 2017). There are certain exceptions to the general rule that the market undervalues FIOs with high levels of uncertainty and perceived risk. Traditional methods of capital planning sometimes include hidden assumptions that favor FIOs over investors over the long run (Vecchi & Casalini, 2018). Discounting should be done using the required return on equity (Ke) rather than the WACC (Ka) to determine the portion of shareholders' wealth that is attributable to FIOs. The ability to borrow on a FIOs basis would cause a measurable increase in shareholder value if management had a strong incentive to enhance the company's image in the financial markets. When a corporation is unable to give information or is unable to persuade markets of potential cash flows, a deviation will be constrained by the market value of shares and real investor holdings (de Souza Michelon et al., 2020). Because it considers the primary elements that shareholders use to determine how to allocate their capital, this theory is pertinent to our study.

## 2.3 Empirical evidence

Ali Mohamed and ZelhaAltinkaya (2018) Capital Budgeting Decisions And Profitability In Manufacturing Firms in turkey. The study set to investigate the relationship between capital budgeting decisions and profitability in manufacturing firms. Capital budgeting particularly addressed five areas of the study that included capital budgeting decisions (acquisition of longterm assets, replacement of long-term assets, investment appraisal techniques, outsourcing expenditure and working capital decisions) had a biggest and significant effect on profitability of the organizations. This study basically involved survey of the manufacturing company known as Mukwano group of companies, in Uganda. Total of 240 questionnaires were disturbed into the respondent and 152 questionnaires were returned so the data was analysed through "Statistical Package for Social Science" SPSS Version 19. Multiple regression analysis and correlation were used to analyses the data. The findings show evidence of that there is significant and positive correlation between five dimensions of capital budgeting decisions and profitability of the organizations. The findings set up that there was relationship between the independent variables of capital budgeting decisions and profitability and were positive relationships between capital budgeting and profitability of the firms under the study. Finally, the researcher has developed a conceptual framework based on the literature reviews, and from there the researcher constructed the research's hypothesis. Foundation on the result, theoretical implications, limitations, conclusion and suggestions for future research are also highlighted.

The evolution of the application of capital budgeting techniques in enterprises by Simiso and John (2020). This study examines the evolution of the application of capital budgeting techniques. Previous studies mostly used cross-sectional inquiries to understand the capital budgeting practices of firms. Only a few researchers have undertaken longitudinal studies to

generalise the findings of the individual cross-sectional studies to the wider population and to identify the emerging trends in the use of capital budgeting techniques (CBTs). This longitudinal study surveys 83 studies of capital budgeting practices across firms in India, South Africa, the United Kingdom (UK) and the United States of America (USA) for the period from 1966 to 2016. The findings show that six capital budgeting techniques, namely, the net present value (NPV), the internal rate of return (IRR), the payback period (PBP), the accounting rate of return (ARR), the return on investment (ROI) and the real option valuation (ROV), are the most popular methods for evaluating capital investments. Of these techniques, the ROV is the least used, and a general lack of familiarity with this technique and its complexity are the most commonly cited reasons for not using it. Another method that is used less than the first four techniques is the ROI. However, this technique is of growing significance and is mainly used in the UK, followed by the USA, South Africa, and India. Firms in the USA and UK have increased their use of the IRR as a primary method for evaluating capital projects and have retained the PBP as an ancillary technique to strengthen the available information when evaluating capital projects. Firms in India and South Africa are increasingly excluding both the PBP and ARR methods and are increasingly using the NPV when evaluating capital investments. Although this development is in line with the theory, it limits the scope of the available information when evaluating capital projects.

Otekunrin et al.'s (2018) study on investment decision and profitability in the brewery industry (a case study of Nigeria Brewery Plc.) found that a company has access to a variety of investment decisions, and that investment projects are carried out based on the cost and funds that are available to the company. Additionally, there are numerous methods for determining how well

these projects have paid off. Similar to Imegi & Nwokoye (2015), who investigated The Effectiveness of Capital Budgeting Techniques in Evaluating Projects' Profitability in Rivers State, they discovered that the various capital budgeting techniques used in assessing a project's profitability are pay-back, accounting rate of return, net present value, internal rate of returns, profitability index, and net terminal value. It also discovered that the net present value method of capital planning is the best method for assessing the profitability of risk-free projects.

Similar to Imegi & Nwokoye (2015), who investigated The Effectiveness of Capital Budgeting Techniques in Evaluating Projects' Profitability in Rivers State, they discovered that the various capital budgeting techniques used in assessing a project's profitability are pay-back, accounting rate of return, net present value, internal rate of returns, profitability index, and net terminal value. It also discovered that the net present value method of capital planning is the best method for assessing the profitability of risk-free projects. Pearce (2019) investigated The Impact of Capital Budget Decision on Financial Performance of Commercial Banks in Sierra Leone and was able to find out that the implementation of the payback period technique in capital budgeting decision is highly correlated with commercial banks performance followed by three other techniques except for the internal rate of return technique that was negative and insignificant in both the correlation and regression results.

According to Ndanyenbah and Zakaria's study from 2019, "Application of Investment Appraisal Techniques by Small and Medium Enterprises (SMEs) Operators in the Tamale Metropolis, Ghana," SME operators in the Tamale Metropolis had a good understanding of the different fundamental IATs. The IATs were also applied at a large level by SME operators. It was found that despite the SME operators' strong understanding and application level in the different IATs, they did not appraise their investments using the theoretical mathematical equations of the IATs.

It was also discovered that operator's knowledge in an IAT had insignificant influence on its' application by the operator. The choice of the IATs by the SME operators was found to be significantly influenced by the SME Operator's gender, educational level and risk behaviour and the investment size and the business or industry type.

The impact of capital budgeting procedures on an organization's performance was examined by (Anwar, 2020). For long-term decisions on investment activities, based on the choice of suitable funding sources, adequate capital budgeting is crucial. The performance of a corporation still depends on a variety of variables including capital budgeting assumptions. First and foremost, planning a budget for capital expenditures is important. Second, firms must determine the amount that will be collected and reimbursed for such contributions. Thirdly, the majority of long-term capital responsibilities must be budgeted. Making decisions on capital expenditures is vital, to sum up. The inquiry used an overview plan with 107 high level managers, departmental managers, and bosses of selected Organizations determined as the focused-on population. It utilized defined inspecting method to test a sample extent of 90 that is 84% of the focused-on populace. A poll besides meeting plan was utilized to gather information as of the defendants. A preliminary examination tested legitimacy in addition to dependability. Information was examined using a unique insight. Net present value (NPV), emolument pack time (EPT), and interior rate of return (IRR) were found to be the common capital budgeting strategies used by selected firms to create capital procedures. The principles of profit budgeting in capital budgeting systems include: increasing net present value (NPV), quick recovery times, and lower risks of disappointment due to high normal wage. The effects of NPV, compensation period, as well as internal pace of profit and gainfulness file for benefit levels include lowering capital expenditure, increasing measure of profits as of the extent and lowering stage of task danger the fundamental phases of productivity.

The study "Capital Budgeting Practices in Financial Institutions (FIs): An Empirical Study in the Case of Ethiopia" was conducted by Dakito and Jaladi (2018). This study sought to determine whether financial institutions (FIs) had standards for capital budgeting approaches and to investigate the capital budgeting strategies used by FIs. The results demonstrate that, despite the sector's enterprises having made large investments in long-term assets, only 42.9% of the enterprises had appropriately implemented contemporary investment appraisal methodologies. Furthermore, PBP, NPV, and IRR were the three long-term investment appraisal methods that were most frequently utilized. However, with the exception of one company that performs a partial examination of the viability, practically all other companies in the industry did not carry out a thorough assessment of the viability of investment when they opened new branches, which is comparable to the research done by Eyob Dagne (2010). While most firms were found to finance their projects using both debt and equity, the survey also discovered laxity in the application of cost of capital, with the majority of enterprises applying the cost of debt while discounting their cash flows. Similarly, less than thirty percent of the sector's businesses who utilize capital budgeting procedures also use risk evaluation methodologies when assessing longterm assets. Furthermore, businesses have not given much thought to inflation when making capital budgeting decisions. The study's conclusion left up the possibility of more investigation into the ways in which capital budgeting might be applied in developing nations' budgeting processes to allocate resources effectively.

# 2.4 Summary

Despite having many capital budgeting strategies studies undertaken as indicated above, none of the studies have drawn much emphasis on how manufacturing companies should embrace capital budgeting to improve investment decisions on Blended tea Factory. Hence this poses a knowledge gap amongst management, investors and bankers. This study attempted to establish the effectiveness of capital budgeting techniques on firm's profitability. The next chapter concentrated on research design and methodological framework of the study to achieve the research objective

# **CHAPTER III**

## RESEARCH METHODOLOGY

## 3.0 Introduction

This chapter consists of the methodological framework and the research design of the study to achieve the research objective. It starts by clarifying the approach and methodologies used, followed by the target population, sample method, data collection presentation and analyses, the research instruments, and finally the research validity and reliability. Ethical considerations pertaining to the research are also discussed.

#### 3.1 Research Philosophy

The researcher used the positivist research philosophy. The researcher used positivist research philosophy because it is based on the idea that science is the only way to learn about the truth, (Garrett & Cua 2019:45). It adheres to the view that only "factual" knowledge gained through observation (the senses), including measurement, is trustworthy. In positivism studies, the role of the researcher is limited to data collection and interpretation in an objective way, (Klakegg, 2018:54). The researcher is an objective analyst and distances himself from personal values in conducting the study. Positivism depends on quantifiable observations that lead to statistical analyses. It has been a dominant form of research in business and management disciplines for decades, (Johnson 2020:34). A primary goal of positivist inquiry is to generate explanatory associations or causal relationships that ultimately lead to prediction and control of the phenomena in question, (Henry & Foley 2018:67).

A positivist paradigm, according to Bendassolli (2018:78), asserts that without theories, it is impossible to make meaningful observations and that for research to be considered scientific knowledge, it must be used to compare theoretical constructs to the truth of empirical facts. The positivist school of thought, to which the researcher adhered, holds that only knowledge that is "factual" and derived via observation (the senses), including measurement, is reliable. The researcher's responsibilities in positivist studies are confined to gathering information and impartial evaluation. In other words, the researcher examines the subject objectively and without

regard for personal ideals. The results of this type of inquiry are typically measurable and tangible

## 3.2 Research approach

The study used deductive research approach, as stated by Alturki, (2021;9), in the study because it involves reading the existing theories of the topic being studied and then testing any hypotheses that result from those ideas. The research opted for this research instead of inductive approach because it allows for the description of causal relationships among ideas and elements, the capacity to measure ideas numerically, and the capability to extrapolate research findings considerably. People often identify a logical method of study with scientific inquiry as stated by Park, Konge & Artino, (2020;690).

## 3.3 Research Design

Tunarosa, and Glynn, (2019;2018), describe research design as the overall strategy that choose to integrate the different components of the study in a coherent and logical way. The research on this study used explanatory research design. Explanatory research design was used because it helps to find the problem in-depth that will result in increasing, understanding, the flexibility of Sources, better Conclusions, (Dawadi, Shrestha and Giri, 2021;36). Also, explanatory research design aids in directing subsequent research approaches and can greatly increase the usefulness of a study's conclusion. Explanatory helps in directing subsequent research approaches and can greatly increase the usefulness of a study's conclusion, (Benitez et al, 2020;103).

#### 3.3.1 Research strategy

The research used experimental strategy involving manipulating the independent variable to observe a change in dependent variable. The research used experimental strategy because he purposes of experimental research is to support, refute or validate a research hypothesis. This research strategy follows the principles of the scientific method. Experimental strategy aims to test existing theories rather than create new ones, and as such, it is deductive in nature. Experimental research strategy aligns with the positivist research philosophy, as it assumes that knowledge can only be studied objectively and in isolation from external factors such as context or culture

#### 3.3.2 Research choices

The research used quantitative research methodology because it is suitable for the study since it is based on objective data and facts, which makes it more reliable and less prone to bias, improved the results' generalizability and allowed for the research to produce greater evidence for the conclusion through the convergence and corroboration of results, (Mohajan, 2020;63). Quantitative research can be conducted on a large scale, making it an efficient way to collect data.

#### 3.3.3 Time horizon

The research adopted Longitudinal time horizon because highly it is beneficial when studying changes and progressions over time. A longitudinal study provides unique insight that might not be possible any other way, (Vaghefi and Tulu, 2019:89). This method allowed the researcher to look at changes over time and longitudinal methods are particularly useful when studying

development and lifespan issues. The researcher looked at how inventory management control affects organizational performance at different points and explore some of the reasons why these developmental shifts take place.

## 3.4 Data collection techniques

# 3.4.1 Target population

Saesieo, (2019:67) refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. To complete this study, the research participants are defined as selected employees of Blended Tea Factory. The population is selected because it plays a critical role in the experimental design and the choice of right respondents has a noteworthy influence on the quality of research. The research targets those in decision making and stakeholders with knowledge of Capital budgeting at Blended Tea Factory for questionnaires. For the purpose of making the research effective the target population constituted 500 participants from Blended Tea Factory.

# 3.4.2 Sample size determination

A sample frame is a list of all eligible sampling units for a given study (Hair et al, 2019:35). A sample is that unit from which information is obtained which thereafter provided the basis of analysis and subsequent generalization, (Creswell, 2020:76). The sample size was determined using the survey monkey calculator provided online by Creative Research Systems where;

Z=critical value of the normal distribution at the required confidence level (1.96)

e= Margin 0f err0r (4.4%)

Confidence level of 95%

N=targeted population size 500

The sample size that the researcher calculated based on the estimated targeted population of 500

is 250 personnel, which is 55%. According to Trochim (2019:56), a reasonable sample size is

anything above 50%, and the sample size in this study was 50%, which is good since it can show

the actual representation of the population targeted. With an 50% sample size, a reasonable

representation of the organization was shown.

3.4.3 Sampling technique

The researcher used stratified sampling technique because it increased the precision of the

estimates by reducing the variability within each stratum and ensuring that each subgroup is

represented in the sample, (Meinck, 2020:46). Stratified sampling is a sampling technique that

involves dividing the population into subgroups or strata based on shared characteristics and then

selecting a sample from each stratum, (Howell et al, 2020:54). Stratified sampling was used as it

ensured that each subgroup of interest is represented in the sample, making it more

representative of the population under study.

The researcher grouped the sample into strata groups such as the finance department (100),

Human resources department (100), Purchasing Department (100) and accounting department

(100) and senior management (100) at Blended Tea Factory. This sample population was chosen

because it was highly knowledgeable, well experienced, easily accessible and representative of

the whole population.

Table: 3.1: sample size

52

Elements	Population	Sample
finance department	100	(250/500*100)50
Human resources department	100	(250/500*100)50
Purchasing Department	100	(250/500*100)50
accounting department	100	(250/500*100)50
senior management	100	(250/500*100)50
Total	500	250

Source: primary data (2023)

# **3.4.4** Research instruments and procedures

The researcher used questionnaires to collect primary data from the respondents and designed the questionnaire to gather information from people in a manner which allow for generalization about the topic. The researcher opted to use self-administered questionnaires because they are more appropriate to use for data collection from the respondents and also enable information to be gathered in a standardized way, accurate and relevant enough to achieve the researcher's resolution. It also used close ended questions to pre-specify what the answer will be like.

A questionnaire was used because its uniformity and standardization eliminate the lack of internal consistency and enable a scientifically objective analysis of the results. Questionnaires also enhances the generalizability and external validity of the findings, they are also cost-effective, as they can be administered to a large number of participants at once, saving time and resources compared to conducting individual interviews. Questionnaires can be used to collect both quantitative and qualitative data, depending on the research question. They are also easy to administer and can be completed by participants at their own pace. Tharenou, Donohue, and

Cooper (2019;64) claim that a questionnaire can evaluate abstract ideas like attitude, efficacy, and behaviour. It was easy and quick for the researcher to quantify the questionnaire's responses. Furthermore, questionnaire was relatively cheap and time effective. They are also associated with low response rate at times. Self-administered questionnaires were used to counteract this problem. Questionnaires are affected by the literacy level. Self-administered questionnaires were used to counteract this problem.

#### 3.5 Data collection instruments

Primary data was collected in the form of questionnaires from the finance department, Human resources department, Purchasing Department and accounting department and senior management at Blended Tea Factory.

## 3.6 Reliability and validity

Rahi, (2020) argued that validity is the most important requirement on a measurement instrument. Internal or face validity was used to ensure a reduced amount of interference by non-relevant or non-valid aspects, such as language to be used. Validity was ensured by avoiding complex and arcane language on questionnaires to improve understanding and answering (responses). The research was also validated by ensuring pre- sent texts, e-mails and phone calls foretelling issue to be discussed this avoid the possibility of misunderstanding, thus increasing the strengthening the research validity.

Reliability refers to the extent to which research would be stable or consistent in case the same technique is to be used repeatedly, reliability is to minimize the errors and biases in a study, (Kotler & Keller, 2022). An initial investigation (a pilot study) was carried using intended data

collecting instrument (questionnaires) to check authenticity and relevance of the data produced. The research adopted a pilot study at Blended Tea Factory and use open ended questions. Snags such as questioning non-skilled workers in English were addressed before time and resources were used on the major study. The major remedy on this dearth was to put some of the questions in vernacular language, for easy understanding of the issues of the study

#### 3.7 Data analysis and presentation

SPSS was used in data analysis. This is a process used to make sense out of the data. Statistical package for social sciences (SPSS) data analysis software was used to analyze the data by use of descriptive and inferential statistics. Descriptive statistics such as mean, frequencies, standard deviation and percentages were used to profile sample characteristics. The study used correlation analysis to establish the relationship between the dependent variable and the independent variables. The results from the analysis were presented using tables, graphs and pie charts.

#### 3.8 Ethical Consideration

The study also responded to ethical issues. The respondents were informed of the research and what it intended to achieve before the interviews were conducted through distributing letters of consent, together with the researcher, sign in agreement. The letter of consent stipulated how the participants were protected, how information obtained was treated and clearly indicated participants' rights. All information was kept confidential, and respondents were kept anonymous. The information obtained through project participation was only for the purpose of this study. The researcher was adhering to an ethical code that forbids him from publishing or using knowledge in any other way. As a result, responders looked to be sincere in their

responses, assuring the success of the initiative. The researcher evaluated the danger of losing one's dignity, friendship, or job, as well as feelings of fear, remorse, mortification, or shame.

## 3.9 Summary

This chapter details on activities and procedure undertaken by the researcher during the research process. It helps to understand on the research design employed for the research; included aspects are the target population and the sampling issues. It goes on to the data collection procedure then ended with the data procedures. The obtained results were coded edited and lastly analysed to clearly depict on the extent to which environmental management accounting is important on improving the operational performance during the whole process. The next chapter covers an in-depth presentation, analysis and interpretation of data which was obtained in the form of questionnaires from the finance department, Human resources department, purchasing department, accounting department and senior management at Blended Tea Factory.

# **CHAPTER IV**

# DATA PRESENTATION, ANALYISIS AND DISCUSSION

#### 4.0 Introduction

The previous chapter focused on the activities and procedure undertaken by the researcher during the research process. This current chapter presents the analysis of data which was obtained in the form of questionnaires from finance department, Human resources department, purchasing department, accounting department and senior management at Blended Tea Factory. On this Chapter, data is presented graphically by means of histograms, graphs and charts.

## 4.1 Data presentation

# 4.1.1 Questionnaire's response rate

Table 4.2: response rate

	Number of	Percentage
	questionnaires	
Distributed	250	
Returned	200	80%
Spoiled	50	20%

Source: Primary data (2023)

The researcher sent 250 questionnaires to finance department, Human resources department, purchasing department, accounting department and senior management at Blended Tea Factory. Out of the research sample 200 questionnaires were returned to give a response rate of 80%. After examination for the missing data, questionnaires that had more than one missing value were not included and 50 questionnaires were drooped that is 200% less leading to 80% response rate. This was an acceptable rate as supported by Aaker (2019), who suggested that a response rate of above 50% is adequate to draw conclusions about the research topic after the examination

for missing data before the analysis. In order to achieve such a response rate, the researcher directly interacts with respondents so as to build confidence and trust within them.

# **4.1.2** The sample composition

The sampled were from employees at Blended Tea Factory. Thus, the sample elements constituted (40) finance department, (40) Human resources department, (40) Purchasing department, (40) accounting department and (40) senior management at Blended Tea Factory. This resulted to a total sample size of 200, which is 40% drawn from the study population of approximately 500 as shown below;

Table 4.3 key respondents sample composition

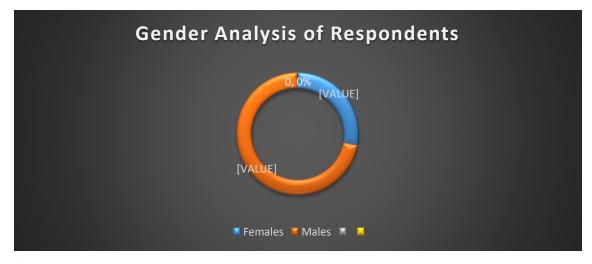
Elements	Population	Sample	Percentage
		Responded	
finance department	100	40	40 %
Human resources department	100	40	40 %
Purchasing Department	100	40	40 %
accounting department	100	40	40 %
senior management	100	40	40 %
Total	500	200	40%

Source: Primary Data (2023)

# 4.1.3 Gender analysis of respondents

This is presented in figure 4.2 below:

Figure 4.2 Gender Analysis of the respondents



**Source: Primary Data (2023)** 

The researcher had to take into consideration the gender of the respondents. This assisted in understanding how different genders perceive the role that capital budgeting plays in enhancing liquidity and profitability. Women respondents were 28% and 72% of the respondents were males.

## 4.1.4 Age range

The age ranges are presented in Table 4.4 below:

**Table 4.4: Age Analysis of Respondents** 

Years	Below 23	23-29 Years	29-34 Years	Above 40 Years
Outcome	56	64	46	34
Outcome %	28%	32%	23%	17%

**Source: Primary Data (2023)** 

The researcher considered age groups of the respondents and this assisted in getting different understandings based on age. 28% of the respondents were below 23years, 32% were within the age range of 23-29years, 23% were within the age range 29-34 years and 17% were above 40

years age range. Having representation from all age groups assisted in getting different opinions and explanations and seeing how different generations are embracing capital budgeting and how they value it at their different age groups.

#### 4.1.5 Educational / professional qualifications of the respondents



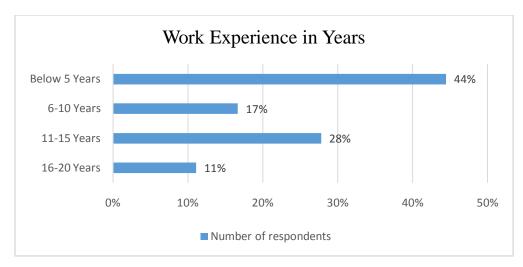
Figure 4.3 Level of qualification of the Respondents

**Source: Primary Data (2023)** 

As indicated in figure 4.3 above 25% of the respondents' held diplomas, 38% of the respondents' held degrees and 37% held other professional qualifications. These qualifications indicate the level of literacy of the people who responded to the in-depth questionnaires. This enhanced validity and reliability of the data collected. Generally, all the people who participated had the minimum ordinary level expected qualification.

#### 4.1.6 Work experience

Figure 4.4 Work Experience of the Respondents



**Source: Primary Data (2023)** 

Figure 4.4 above analyzed work experience of the respondents. Work experience ranges from zero to 20 years. 44% of the respondents had less than 5 years' work experience, 17% of the respondents had 6 to 10 years work experience, 28% respondents had 11to 15 years' work experience and 11% respondents had 16 to 20 years work with experience in their respective organizations. Most respondents were below 5 years work experience years range. Having averagely experienced staff made the researcher gathers detailed information on the area under study because the respondents were highly experienced and knowledgeable. Experience is very important because with much experience, one will be able to understand the impact of capital budgeting in determining firms' profitability. Without much experience, it will be difficult to contribute to the subject matter under research as the results of some programs take years to show results

# **4.1.7 Reliability statistics**

The Cronbach Alpha method was used to test the internal consistency of the independent and dependent variables on the questionnaire.

**Table 4.5: Tests for Reliability** 

Variable	Items tested	Cronbach Alpha	
Net present value	4	.802	
Internal rate of return	4	.603	
Accounting rate of return	4	.592	
Payback period	4	.503	
All variables	16	.794	

# **Source: Primary Data (2023)**

Reliability statistics show a fairly high level of internal consistency across all 16 that were tested at .794. The highest level of internal consistency of (.802) was registered for net present value followed by internal rate of return (.603), Accounting rate of return (.592), payback period (.503).

# **4.1.8 Tests for normality**

Test for normality is another pre-condition for running a regression model. The Kolmogorov-Smirnov and the Shapiro Wilk test were used as the basis for testing the normality of distribution. The test condition for normality is that the sig value must be greater than 0.05 for a data set to be considered as being normally distributed. Data on normality tests is shown in Table 4.5 below.

Table 4.6 normality tests

	Kolmogorov-Smirnov			Shapiro W			
	Statist	i c Df	Sig.	Statistic	Df	Sig.	
Net present value	.170	98	.200	.873	98	.826	

Internal rate of return	.114	98	.201	.923	98	.836	
Accounting rate of return	.514	98	.200	.089	98	.882	
Payback period	.197	98	.200	.881	98	.845	

a. Lilliefors Significance Correction

Source: primary data (2023)

The precondition for normality was met given that the computed significance values for all the four predictor variables were greater than 0.05 from both the Kolmogorov-Smirnov and the Shapiro Wilk tests. Data set is considered to be normally distributed

# **4.1.9 Tests for collinearity**

Testing for multi collinearity was done to ensure that there was a low degree of collinearity amongst predictor variables that has an effect on the goodness of fit of the regression model. The decision rule for the test if multi collinearity is that the Variation inflation factor (VIF) has to be less than 10 and the Tolerance must be above 0.2. Research output is shown in Table 4.7.

**Table 4.7: multi-collinearity tests** 

Model	Collinearity statistics			
	Tolerance	VIF		
Net present value	.807	1.324		
Internal rate of return	.904	1.1071		
Accounting rate of return	.996	1.1004		
Payback period	.891	1.1221		

Source: Primary Data (2023)

Data shown in Table 4.6 indicate that the conditions for multi- collinearity were met given that the VIF for all four predictor variables was less than 10 and the Tolerance was above 0.2. Therefore, it can be stated that there was minimal collinearity amongst independent research variables that could not distort the findings of the research.

# **4.2 Research findings**

# 4.2.1 The effectiveness of capital budgeting techniques on firms' profitability

The first objective of this study was to find out the effectiveness of capital budgeting techniques on firms' profitability. This was achieved through seeking opinions from finance department, Human resources department, Purchasing department, accounting department and senior management at Blended Tea Factory.

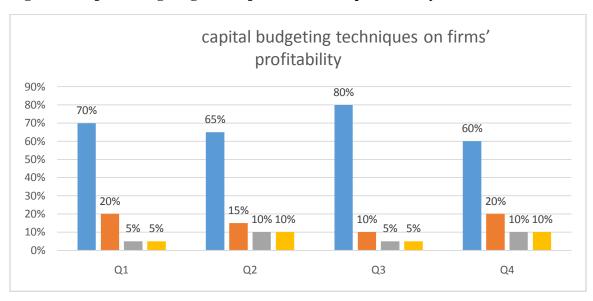


Figure 4.5capital budgeting techniques and firms' profitability.

Source: primary data (2023)

As can be seen in Figure 4.5 above, 70% of respondents were entirely in agreement that prioritizing investments and efficiently allocating financial resources are made easier with the aid of capital budgeting, while 20% agreed with the statement, 5% were not sure and 5% of respondents or disagreed with the assertion. The aforementioned study results also suggest that long-term growth and success depend on capital budgeting's ability to maximize returns and lower the risk of funding unsuccessful initiatives. About 15% of respondents agreed with the statement's veracity, while 65% of respondents were in full agreement with it, 10% were not sure and 10% disagreed with the statement.

According to the study's findings, 80% of participants strongly favored that profitability and shareholder value are enhanced by efficient capital planning, which is a company's primary objective. 20% of the respondents agreed with the statement, 10% were not sure and 10% disagreed with the conclusion. According to the survey results depicted in the above figure, 60% of respondents agreed completely that an efficient capital budgeting procedure assesses the potential of new business ideas, projects for expansion, and the creation of a corporate portfolio to optimize returns. 20% of respondents agreed with the statement, 10% were not sure and 10% disagreed with the conclusion. The majority of respondents fully concurred with the finding based on the study's findings.

# 4.2.2 The impact of payback period on firms' profitability.

The study sought to examine the extent to which payback period affect profitability at Blended Tea Factory. This question was meant to address objective 2. The results of findings are in Figure 4.6 below:

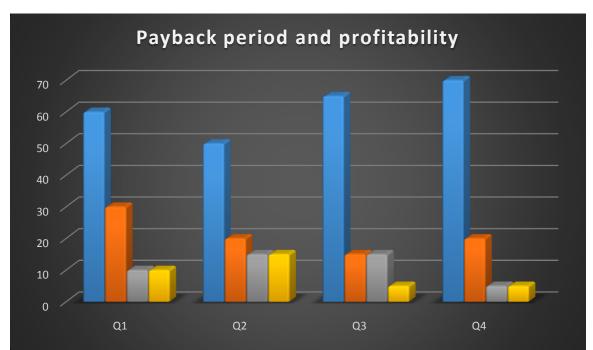


Figure 4.6payback period and firms' profitability.

Source: primary data (2023)

According to figure 4.6 above, 60% of respondents was in concurrence with the statement that payback period indicates efficiency and improves the liquidity position of a company, 20% of the respondents agreed while 10% of the respondents were not sure and 10% did not agree with the statement. Basing on the responses from the target. The study results from table indicate that payback period improves liquidity and lower the risk by accelerating the return of the initial investment and 50% of respondents stronglyagreed with the statement, whilst 20% agreed with the statement, 15% were not sure and 15% disagreed with the statement. The study results indicate that 65% of respondents strongly affirmed that payback period helps the business to allows recoup investment and firm compare alternative opportunities whilst 15% respondents agreed, 15% were not sure and 5% disagreed. The study results indicate that 70% of respondents strongly endorsed that payback period act as a screening

tool of unprofitable investment leading to a better performance while 20% respondents agreed, 5% were not sure and 5% disagreed with the statement.

#### 4.2.3 The effects of accounting rate of return on profitability.

The other objective of this study sought to ascertain the effects of accounting rate of return on firm's profitability. The result findings are presented below in table 4.8.

Table 4.8 Factors affecting the adoption of bitcoin in Zimbabwe

Statement	Responses	percentage
The total gains or savings over the course of the project's economic life are	86	43%
taken into account by the accounting rate of return  Accounting rate of return recognizes net earningsthat is, earnings after taxes	76	38%
and depreciation  When determining rate of return, accounting rate of return takes profit into	38	19%
Totals	200	100%

Source: primary data (2023)

According to table 4.5above, 43% of respondents agreed that the total gains or savings over the course of the project's economic life are taken into account by the accounting rate of return, while 38% of the respondents indicated that accounting rate of return recognizes net earningsthat is, earnings after taxes and depreciation and 19% stated that when determining rate of return, accounting rate of return takes profit into account.

# 4.2.4 The effects of internal rate of return on firms' profitability

The researcher asked the above question with the aim of addressing objective 4 and thereby establishing the effects of internal rate of return on firm's profitability.

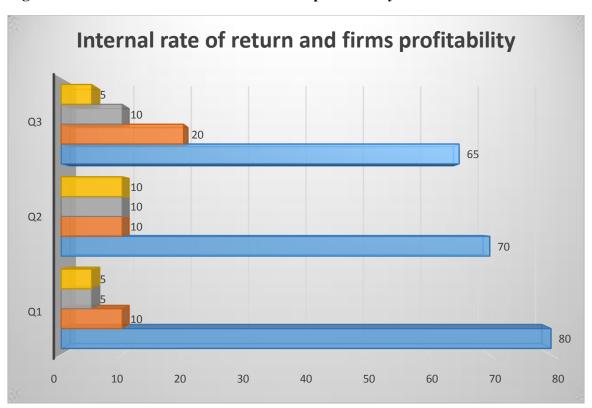


Figure 4:7 internal rate of return and firm's profitability

Source primary data (2023)

According to figure 4.7 above, 80% of respondents was fully in concurrence with the statement that the internal rate of return maximizes the net present values to create an accurate picture of the performance of the company or business entity, 10% of the respondents agreed while 5% of the respondents were not sure and 5% did not agree with the statement. Basing on the responses from the target. The study results from table indicate that internal rate of return incorporates the time value of money into the calculation, giving equal weight to each cash flow and 70% of

respondents strongly agreed with the statement, whilst 10% agreed with the statement, 10% were not sure and 10% disagreed with the statement. The study results indicate that 65% of respondents strongly affirmed that internal rate of return discloses the maximum rate of return the project can give and the objective of maximizing shareholder's wealth whilst 20% respondents agreed, 10% were not sure and 5% disagreed.

# 4.2.5 The relationship between Net present value and firms' profitability

The researcher asked the above question with the aim of addressing objective 4 and thereby establishing the relationship between Net present value and firm's profitability.

Table 4.9: Net Present value and firm's profitability

Statement	Agree %	Not sure %
managers in the company can use the method of NPV to see which	80 %	20 %
year they should execute in order to make the highest profit		
NPV compares the value of a dollar today to the value of that	70 %	30 %
same dollar in the future while taking inflation and returns into		
account		
net present value method is consistent with the idea of wealth	90 %	10 %
maximization since it takes into consideration the time value of		
money		

#### Source primary data (2023)

Table 4.9 above shows that 80% of respondents agreed and 20% disagreed that managers in the company can use the method of NPV to see which year they should execute in order to make the highest profit. The study's table results showed that NPV compares the value of a dollar today to the value of that same dollar in the future while taking inflation and returns into account. Of the respondents, 70% agreed with this statement, while 40% were unsure of its veracity. According to the study's findings, 70% of respondents believed that using bitcoin in the banking industry ensures that users would receive their money instantly and just 30% of respondents were unsure. According to the study's findings, 90% of participants indicated thatnet present value method is consistent with the idea of wealth maximization since it takes into consideration the time value of money, while 10% were unsure.

# 4.2.5.1 Relationship test of Net present value and firm's profitability

Most respondents strongly agreed that there is positive impact between Net present value and firm's profitability indicated by the results below:

Table 4.10: Net present value and firm's profitability

		Firm's profitability	Firm's profitability
	Pearson Correlation	1	.902***
Net present value	Sig. (2-tailed)		.000
	N	200	200
	Pearson Correlation	.902**	1
Net present value	Sig. (2-tailed)	.000	
	N	200	200
**. Correlation is signific	cant at the 0.01 level (2-tai	led).	

**Source: Primary Data (2023)** 

The results from Pearson's correlation above shows relationship between two variables with the value of r=0.902. This means that there is a corresponding relationship between Net present value and firm's profitability.

# **4.2.6 Regression analysis**

**Regression Statistics** 

Table 4.11 results of the regression analysis

**SUMMARY OUTPUT** 

Multiple R	0.999597							
R Square	0.999195							
Adjusted R	0.006779							
Square	0.996778							
Standard	0.001035							
Error	0.001925							
Observations	5							
ANOVA								
					Significan			
	df	SS	MS	F	ce F			
		0.00459	0.00153	413.539				
Regression	3	6	2	9	0.036129			
Residual	1	3.7E-06	3.7E-06					
Total	4	0.0046						
	Coefficien	Standar			Lower	Upper	Lower	Upper
	ts	d Error	t Stat	P-value	95%	95%	95.0%	95.0%
			5.45902	0.11533		0.10990	-	0.10990
Intercept	0.033028	0.00605	7	9	-0.04385	3	0.04385	3
Payback		0.09406		0.87721		1.17682	-	1.17682
period	0.01837	4	0.1953	1	-1.21357	6	1.21357	6
Accounting		0.13882	2.60471	0.23336		2.12556	-	2.12556
rate of return	0.361604	7	7	4	-1.40236	6	1.40236	6
							-	
Internal rate		0.23882	3.60471	0.33336		2.08556	1.01023	2.10556
of return	0.461604	7	7	4	-1.50236	6	6	6
Net Present	0.537661	0.12602	4.26646	0.14656	-1.06358	2.13890	-	2.13890

Value 1 9 1 1.06358 1

This analysis was made to estimate the nature and strength of causal (linear) relationship between dependent variable (firm's profitability) and the others independent variable (capital budgeting techniques of Blended tea factory that is the payback period, accounting rate of return, internal rate of return and net present value. The analysis shows the R2 of 99.96% that is 99.96% of the proportion of variance in net profit margin attributes to payback period, accounting rate of return, internal rate of return and net present value. A higher value indicates a better fit since it is close to 1. The more the variance that is accounted for by the regression model the closer the data points will fall to the fitted regression line. The relationship between the dependent and the independent variable is significant as shown by the p-value 0.036 that is less than 0.5.

#### 4.3 Discussion of findings

# 4.3.1 The effectiveness of capital budgeting techniques on firms' profitability

Effective and successful capital budgeting techniques are crucial since they have a long-term effect on a firm's performance and survival, according to Batra and Verma (2017) in Chapter 2. The International Federation of Accountants (IFAC) states that in order to preserve and guarantee a sustainable economy and growth, it is necessary to apply a methodical, rational, and thorough approach to investment assessment in conjunction with cautious and impartial decision-making. According to (Düzakın, 2023) businesses should choose capital budgeting strategies that would boost profitability since this increase's shareholder wealth, which is a company's primary objective. According to Olawale, Olumuyiwa, and George (2020), using investment appraisal procedures increases profitability. The literature is related to findings in Chapter 4, where respondents overwhelmingly agreed that capital budgeting makes it easier to allocate financial

resources efficiently and prioritize projects. The study also showed that capital budgeting's capacity to maximize returns and reduce the risk of funding failed initiatives is essential for long-term growth and success. The study also reveals that a company's main goal, effective capital planning, increases profitability and shareholder value. A successful capital budgeting process evaluates the viability of new ventures, growth initiatives, and corporate portfolio development to maximize profits.

#### 4.3.2 The impact of payback period on firms' profitability.

According to Frebowitz (2018), a payback period shows a company's efficiency and strengthens its liquidity position. It also bears less risk, which is important for small businesses with limited funding, reduces the risk of losses from changes in the economy, and lessens the negative financial effects of unfavorable events. According to Awomewe & Ogundele (2018), there is a strong correlation between commercial banks' profitability and their use of the payback period technique when making capital budgeting decisions. This was consistent with the research findings presented in Chapter 4, which show that payback periods show a company's efficiency and enhance its liquidity position; also, lower risk by speeding up the return on the initial investment; they aid in the recovery of investments and enable a company to evaluate alternative investment opportunities; and they serve as a screening tool for unprofitable investments that lead to improved performance.

#### 4.3.3 The effects of accounting rate of return on profitability

The study's findings about the impact of accounting rate of return on profitability indicate that the accounting rate of return accounts for all gains or savings made during the project's economic life. The net earnings—that is, earnings after taxes and depreciation—are recognized by the accounting rate of return. Accounting rate of return also accounts for profit. This was in line with chapter 2, where Landge (2021) pointed out that the accounting rate of return makes it simpler to compare a new product project with a cost-reduction project or other competitive activities. The accounting rate of return provides a clear indication of the profitability of a project.

#### 4.3.4 The effects of internal rate of return on firms' profitability

Regarding the impact of internal rate of return on the profitability of businesses, the study finds out that internal rate of return maximizes net present values to produce a precise depiction of the business entity's performance. The internal rate of return gives each cash flow equal weight by factoring in the time worth of money. The goal of optimizing shareholder wealth is also revealed by the internal rate of return, which also reveals the maximum rate of return the project can provide. This was in line with the research presented in Chapter 2, as Baker et al. (2017) pointed out, internal rate of return ranks projects profitably and gives the precise rate of return for each project relative to the investment cost.

## 4.3.5 The relationship between Net present value and firms' profitability

Imegi & Nwokoye (2018) discovered a favorable correlation between net present value and business profitability in their investigation of the relationship between the two variables. The Pearson correlation coefficient of 0.902 indicated a strong positive association between the two variables, which was consistent with the findings presented in Chapter 4. The results also showed that the company's managers could determine which year to execute in order to maximize profit by using the NPV approach. A dollar's present value and its future value are compared using net

present value (NPV), which accounts for returns and inflation. Because the net present value method accounts for the temporal value of money, it is consistent with the concept of wealth maximization.

#### 4.3.6 Discussion of the regression results

The p-value for the variables is less than the significance level, thus the sample data provide enough evidence to reject the null hypothesis for the entire population. The data favor that there is correlation between capital budgeting and profitability. The predictor variables are statistically significant and probably a worthwhile for the regression model and the relationship is significant and therefore capital budgeting is effective in determining profitability at Blended Tea Factory. Therefore, net-present value is the best in predicting the changes in profitability as denoted by 53.77% followed by internal rate of return of 46.16%, accounting rate of return 36.16% and payback period 1,8%. The p-value of less than 5% level of significance shows that the relationship is significant and the null hypotheses is accepted.

## 4.3 Summary

This chapter includes findings on the effects of capital budgeting techniques on Blended Tea Factory profitability. The chapter covered the response rate, level of education and analysis of questionnaire questions. The analysis was presented using, bar graphs, pie charts and tables. The next chapter cover summary of findings, conclusions and recommendations.

#### **CHAPTER V**

## SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

#### 5.0 Introduction

The previous chapter covered the findings on the effects of capital budgeting techniques on Blended Tea Factory profitability. This current chapter covers a comprehensive review of the major findings that were drawn from chapter four. The chapter was structured as follows: Summary of the study, summary of major findings, conclusion of the study, recommendations from the study, limitations and suggestions for further research.

#### **5.1 Summary of the study**

Due to a dearth of scholarly literature on capital budgeting on manufacturing industries in Chipinge Zimbabwe, the researcher decided to assess the effects of capital budgeting techniques on Blended Tea Factory profitability by examining the study's background, problem statement, goals, research questions, and study scope. The conceptual framework was examined, with special attention on techniques of investment appraisal, how working capital decision affect the profitability, the prospects presented by cryptocurrencies, and factors influencing the selection of capital budgeting method. Contingency theory, portfolio theory, Tobin's Q theory of investment and conventional capital budgeting theory facilitated the theoretical framework of the study. Ali Mohamed and ZelhaAltinkaya (2018), Simiso and John (2020), Otekunrin et al.'s (2018), Imegi & Nwokoye (2015) and (Anwar, 2020) facilitated the empirical literature review.Garrett and Cua (2019:45) facilitated the research methodology. The positivist approach was used where questionnaires were collected and done. Chapter 4 presented, interpreted and analyzed the data

collected using Statistical package for social scientists (SPSS) to analyses data using tables, reliability tests and descriptive. Finally, chapter 5 presented a brief summary of the research process. It also indicated the conclusions and recommendations based on the findings and objectives of the study.

## **5.2 Summary of major findings**

#### 5.2.1 The effectiveness of capital budgeting techniques on firms' profitability

Capital budgeting techniques are effective in determining profitability because they maximize returns and reduce the risk of funding failed initiatives is essential for long-term growth and success. Capital budgeting techniques also reveals a company's main goal, effective capital planning, increases profitability and shareholder value. A successful capital budgeting process evaluates the viability of new ventures, growth initiatives, and corporate portfolio development to maximize profits.

#### 5.2.2 The impact of payback period on firms' profitability

Payback period is effective in determining profitability as it demonstrate a business's effectiveness and strengthen its liquidity position. The study also revealed that payback period also reduce risk by accelerating the return on the initial investment, support investment recovery, provide the ability to assess alternative investment opportunities, and act as a filter for underperforming ventures that ultimately result in higher performance.

## 5.2.3 The effects of accounting rate of return on profitability.

The study's revealed that accounting rate of returns used primarily to compare multiple projects to determine the expected rate of return of each project, to decide on an investment or an acquisition. ARR enables investors to decide on the viability and profitability of capital projects to be undertaken, and to analyze the risk involved in the investments thereby improving profitability of the organization.

#### 5.2.4 The effects of internal rate of return on firms' profitability

According to the study, internal rate of return produces an accurate picture of the performance of the business entity by maximizing net present values. The internal rate of return accounts for the time value of money, giving each cash flow equal weight. The internal rate of return, which also indicates the highest rate of return the project may achieve, makes clear the objective of maximizing shareholder wealth.

#### 5.2.5 The relationship between Net present value and firms' profitability

The study also showed that, as evidenced by the 0.902 Pearson correlation coefficient, there is a positive association between profitability and net present value. The results also demonstrated that the managers of the company might use the NPV technique to decide which year to execute in order to maximize profit. Net present value (NPV), which takes inflation and returns into account, is a tool used to compare the current and future values of a dollar. The net present value approach is in line with the idea of wealth maximization since it takes into consideration the temporal value of money.

#### 5.3 Conclusion

## 5.3.1 The effectiveness of capital budgeting techniques on firms' profitability

The study concluded that capital budgeting techniques was effective in determining profitability.

#### 5.3.2The impact of payback period on firms' profitability

The study concluded that payback periodreduces risk by accelerating the return on the initial investment, support investment recovery, provide the ability to assess alternative investment opportunities, and acted as a filter for underperforming ventures that ultimately result in higher performance.

# 5.3.3 The effects of accounting rate of return on profitability.

It has been concluded that the accounting rate of return enables investors to decide on the viability and profitability of capital projects to be undertaken, and to analyze the risk involved in the investments thereby improving profitability of the organization.

# 5.3.4 The effects of internal rate of return on firms' profitability

It was concluded that the internal rate of return produces an accurate results of the performance of the business entities by maximizing net present values. The internal rate of return accounts for the time value of money, giving each cash flow equal weight.

#### 5.3.5 The relationship between Net present value and firms' profitability

The study concluded there was a positive association between profitability and net present value. Net present value (NPV), which takes inflation and returns into account, is a tool used to compare the current and future values of a dollar. The net present value approach is in line with the idea of wealth maximization since it takes into consideration the temporal value of money.

#### **5.3.6** General conclusion

It is in the conclusion of this research that capital budgeting techniques are effective in determining Blended Tea Factory profitability because they maximize returns and reduce the risk of funding failed initiatives is essential for long-term growth and success. The study also concluded that Payback period is effective in determining profitability as it demonstrate a business's effectiveness and strengthen its liquidity position by accelerating the return on the initial investment, support investment recovery, provide the ability to assess alternative investment opportunities. The study also concluded that ARR enables investors to decide on the viability and profitability of capital projects to be undertaken, and to analyze the risk involved in the investments thereby improving profitability of the organization. The study also concluded that internal rate of return produces an accurate picture of the performance of the business entity by maximizing net present values. The study also concluded that there is a positive relationship between net present value and profitability.

#### 5.4 Recommendations.

#### **5.4.1** General recommendations

- I recommend that The Net Present Value (NPV) should be adopted as the capital budgeting technique in evaluating the profitability of risk-free projects
- There should be adequate deliberation when making investment decision to ensure that objective and realistic decisions are taken since the future performance of the firm is largely dependent upon it. Companies should also ensure that investment decision on capital projects

are reviewed from time to time to avoid over or under investment, in order to make maximum use of the scarce resources of the organization.

• It is important for the owners of manufacturing industries to get involved in training and skill development. Low levels of financial literacy can impact the degree to which entrepreneurs use sophisticated investment appraisal techniques.

#### **5.4.2** Recommendations to policy makers

- As these decisions affect the long-term future survival and growth of the organization, it
  would also be interesting to study whether the capital budgeting decision makers are getting
  any special incentives or otherwise for taking such decision which generate desired results
- Though the business environment in Zimbabwe is significantly affected by the economic performance, there is a need to study the impact of taxation and government policies on capital budgeting decisions of firms in Zimbabwe

#### 5.4.3 Recommendations for further research

- One of the unexplored areas still is the relationship between the capital budgeting techniques and the strategic and corporate planning procedures used. Future research will also be needed to understand why organizations have selected capital budgeting practices and the extent to which selection and use of capital budgeting practices matters in the efficiency and viability of a particular investment proposal and their business as a whole.
- There is a need to investigate how firms deal with some typical problems of the capital budgeting decision process in specialized areas such as high technology and social

expenditures because there is a great uncertainty about the cash flows associated with high technology projects and the benefits from a social project may only be indirectly associated with identifiable cash flows.

• The results of this study revealed a number of subjective factors used by managers to evaluate proposed investments. So, the human side of Capital budgeting would be an interesting focus for further research.

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#### **APPENDICES**

# APPENDIX A: RESEARCH PERMISSION LETTER GREAT ZIMBABWE UNIVERSITY



# MUNHUMUTAPA SCHOOL OF COMMERCE DEPARTMENT OF ACCOUNTING AND INFORMATION SYSTEM

November 4 2023

#### Dear Valued Respondent

I am Joyfree Simbarashe Mupuro, a final year student, studying towards completion of a Master of Commerce Degree in Applied Accounting at Great Zimbabwe University. The objective of this Questionnaire is to solicit your views and perceptions on the 'Capital budgeting Techniques on firm's profitability. A case of Ariston Management Services T/A Blended Tea Factory'. The aim of the study is to enrich my research project which I am supposed to submit in partial fulfilment of my degree. The success of this study therefore depends on your kind of co-operation. I kindly request you to participate in the study to provide me with the

necessary information needed. The questionnaire is deigned purely for academic purpose and all the information provided will be kept confidential. Although your response is of utmost importance to me your participation in this Questionnaire is entirely voluntary.

Your assistance in responding to the Questionnaire questions will be greatly appreciated

Yours Sincerely
Joyfree Simbarashe Mupuro
0772588520
Email address; M215207@elearning.gzu.ac.zw
APENDIX B: QUESTIONNAIRE
<u>Instructions to respondents</u>
Tick in the box or write down the answer if necessary.
a. You are kindly asked to answer all questions.
SECTION A: 1 - DEMOGRAPHIC DATA
1. Name of your organisation
2. Position Held
3. Indicate your gender
□ Male
□ Female
3. Indicate your age range.
□ Below 23
□ 2329
□ <b>2934</b>
□ <b>Above 40.</b>
4. Indicate your educational / professional qualification
□ Diploma
□ Degree
□ Others

5. Indicate your work experience

	Below 5 years
	6–10 years
	11–15 years
П	10–20 years

# **SECTION B: 2**

Pleasetick ( $\sqrt{}$ ) the appropriate box that shows the extent to which you agree with the following statements, which have been drafted from the objectives of the study where (SD), strongly disagree, (D), Disagree, (NS), NotSure, (A) Agree, (SA) Strongly Agree.

KEY: SA= Strongly Disagree; D= Disagree; NS=Not Sure A= Agree and SA= Strongly Agree

# 6. What is the effectiveness of capital budgeting techniques on firms' profitability?

# Responses

		SD	D	N	A	SA
	Statement			S		
1	Prioritizing investments and efficiently allocating financial resources are made easier with the aid of capital budgeting.					
2	Long-term growth and success depend on capital budgeting's ability to maximize returns and lower the risk of funding unsuccessful initiatives.					
3	Profitability and shareholder value are enhanced by efficient capital planning, which is a company's primary objective.					
4	An efficient capital budgeting procedure assesses the potential of new business ideas, projects for expansion, and the creation of a corporate portfolio to optimize returns.					

Other (specify	r)	•••
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# 7.To determine the impact of payback period on firms' profitability?

# Responses

	Statement	SD	D	NS	A	SA
5	Payback period indicates efficiency and improves the liquidity position of a company					
6	payback period improves liquidity and lower the risk by accelerating the return of the initial investment.					
7	Payback period helps the business to recoup an investment and allows a firm to compare alternative investment opportunities					
8	Payback period act as a screening tool of unprofitable investment leading to a better performance					

# 8. what is the effects of accounting rate of return on profitability?

# Responses

	Statement	SD	D	NS	A	SA
8	The total gains or savings over the course of the project's economic life are taken into account by the accounting rate of return					
10	Accounting rate of return recognizes net earningsthat is, earnings after taxes and depreciation					
11	When determining rate of return, accounting rate of return takes profit into account					

# 9. What is the effects of internal rate of return on firms' profitability?

# Responses

	Statement	SD	D	NS	A	SA
12	The internal rate of return maximizes the net present values to create an accurate picture of the performance of the company or business entity.					
13.	It incorporates the time value of money into the calculation, giving equal weight to each cash flow					
14.	It discloses the maximum rate of return the project can give and the objective of maximizing shareholder's wealth					

# 10. What is the relationship between Net present value and firms' profitability?

# Responses

managers in the company can use the method					
NPV to see which year they should execute in					
ler to make the highest profit					
PV compares the value of a dollar today to the					
ue of that same dollar in the future while					
ing inflation and returns into account					
present value method is consistent with the					
a of wealth maximization since it takes into					
nsideration the time value of money					
N de lu i	NPV to see which year they should execute in er to make the highest profit  V compares the value of a dollar today to the me of that same dollar in the future while might inflation and returns into account  present value method is consistent with the me of wealth maximization since it takes into	NPV to see which year they should execute in er to make the highest profit  V compares the value of a dollar today to the me of that same dollar in the future while might inflation and returns into account  present value method is consistent with the me of wealth maximization since it takes into	NPV to see which year they should execute in er to make the highest profit  V compares the value of a dollar today to the me of that same dollar in the future while mig inflation and returns into account  present value method is consistent with the me of wealth maximization since it takes into	NPV to see which year they should execute in er to make the highest profit  V compares the value of a dollar today to the me of that same dollar in the future while mig inflation and returns into account  present value method is consistent with the me of wealth maximization since it takes into	NPV to see which year they should execute in er to make the highest profit  V compares the value of a dollar today to the me of that same dollar in the future while tang inflation and returns into account  present value method is consistent with the me of wealth maximization since it takes into

# Thank you very much for your cooperation and time

LIST OF TABLES	PAGE
Table: 3.1: sample size	52
Table 4.2: response rate	57
Table 4.3 key respondents sample composition	58
Table 4.4: Age Analysis of Respondents	59
Table 4.5: Tests for Reliability	61
Table 4.6 normality tests	62
Table 4.7: multi-collinearity tests	63
Table 4.8 Factors affecting the adoption of bitcoin in Zimbabwe	67
Table 4.9: Net Present value and firm's profitability	69
Table 4.10: Net present value and firm's profitability	70
Table 4.11 results of the regression analysis	71

LIST OF FIGURES	PAGE
Figure 2.1: Conceptual framework	22
Figure 4.2 Gender Analysis of the respondents	58
Figure 4.3 Level of qualification of the Respondents	60
Figure 4.4 Work Experience of the Respondents	60
Figure 4.5 capital budgeting techniques and firms' profitability	64
Figure 4.6 payback period and firms' profitability.	66
Figure 4:7 internal rate of return and firm's profitability	68