

The Impact of Working Capital Management on Profitability: Evidence from Medium-Sized Enterprises in Lusaka, Zambia

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Abstract

This study examined working capital management and its effects on profitability: Evidence from Medium-Sized Enterprises in Lusaka, Zambia. The aim of this study was to examine the effect of working capital management on the profitability of medium businesses in order to efficiently implement best practices. Its' objectives were to investigate working capital management practices among medium-sized businesses and to evaluate the relationship between working capital management practices and profitability among medium-sized businesses. The findings of this study contribute to knowledge and understanding of the relationship between WCM and profitability in fast-growing companies in developing countries. This study used casual/explanatory research; data were collected from 40 randomly selected employees using interviews and semi-structured questionnaires. The research methodology was based on the collection of both primary and secondary data which was both processed and analysed by the researcher. Linear regression was used to determine the relationships between working capital management and its components and the profitability of a medium-sized business. The key findings from the study indicate the following. About 97.5% of the medium-sized businesses had a working capital management practice in place; the most common working capital management practice in place in the medium-sized businesses was inventory management (37.5%) followed by cash conversion efficiency (22.5%); close to half (78.1%) of the medium-sized business reported that their working capital management practice in place has led to profit. It was discovered that there is a significant relationship between inventory management, operating cycle and profit when in place. The results indicate that the most prevalent working capital management practices used by companies are the accounts receivables, cash conversion cycle, accounts payables and inventory turnover days and the study found a negative relationship between working capital management and profitability of the company. Though, it was discovered that there is a significant relationship between inventory management, operating cycle and profit when in place. The study recommends that: There is need for the medium-sized business to expand their knowledge and understanding of the various types of working capital management practices they know so that the chances of profit maximization are increased.

Keywords: Working Capital Management, Profitability, Medium Enterprises, Working Capital, Financial Performance, Zambia.

Introduction

Working capital management (WCM) is a critical component of financial management that directly influences a firm's profitability and liquidity. For medium-sized enterprises (MSEs),

efficient management of current assets and liabilities ensures smooth operations, minimizes financial distress, and enhances overall business sustainability, (Ifoastri, et al, 2020). Working Capital is the difference between current assets and current liabilities, (Aldubhani, et al, 2022). Ahmed, (2018) points out there is a relationship between working capital management and profitability by referring one of most important indicators of a firm's profitability which is the assets turnover. "The link between the firm cash cycle and its profitability can be easily seen by recalling that one of the basic determinants of profitability and growth for a firm is its total assets turnover" (Ahmed, 2018).

The focus of this study is the empirical investigation of the effects of working capital management and its constituent impact on the profitability of a Company. Working capital management presents a familiar front for the company's profitability and liquidity and has ramifications for both. Firm managers must precisely manage the trade-off between maximizing profitability and ensuring liquidity in order to achieve effective working capital management, (Kawina, 2018). Any company's ultimate goal is to increase profit. Maintaining the company's liquidity is also a key goal at the same time. The issue is that the company may have severe issues if earnings that are increased at the expense of liquidity, (Baños-Caballero, 2014). As a result, these two clear objectives need to be traded off. Since both goals are significant, neither should be achieved at the expense of the other. A business cannot endure for an extended length of time if it has no regard for profit. However, if it disregards cash, business can run into issues with insolvency or bankruptcy, (Mathuva, 2015). Working capital management should be carefully considered because of these factors, which will eventually impact the company's profitability.

Medium-sized enterprises play a vital role in Zambia's economy, particularly in Lusaka, where they contribute significantly to employment, innovation, and economic growth. However, these enterprises often struggle with financial constraints, which makes effective working capital management essential for their survival and profitability, (Pais, 2015).

The profitability of MSEs depends on their ability to balance short-term assets and liabilities effectively. Key working capital components include cash management, accounts receivable, accounts payable, and inventory management, (Baños-Caballero, 2014). Poor WCM can lead to cash flow shortages, excessive borrowing costs, and ultimately business failure, while efficient WCM can improve profitability by ensuring optimal resource utilization and cost efficiency, (Wang, 2019).

In Lusaka, MSEs face several challenges related to WCM, including limited access to credit, high interest rates, inflationary pressures, and inconsistent cash flows. Furthermore, the impact of WCM strategies on profitability remains underexplored in the Zambian context, particularly for MSEs operating in urban centers like Lusaka, (Kawina, 2018). This study seeks to analyze how different WCM practices affect profitability and whether optimizing working capital can enhance financial performance for these enterprises.

Statement of the Problem

Working capital management is one of the most potent factors in the running of the company. Due to its significant impact on both social and economic development, the medium-sized business precinct is well recognized across the globe. As earlier pointed out, medium businesses play a central role in the Zambian economy, accounting for 97% of businesses, 88% of employment, and 70% of GDP, (Mwamba, S, et al, 2022). According to MSMED, (2023), in 2019, Zambia had 110,508 tax paying micro, small and medium enterprises indicating a growth in the number of formal enterprises of about 27 percent from the 2012 estimate.

The medium scale enterprise sectors all over the world, Zambia inclusive are often prone to failure due to the poor working capital practices by the business owners and managers, the reasons for these is because they do not possess the knowledge of working capital management, (Ayeni-Abbaje and Osho, 2015). The Zambian medium businesses have a problem that arises from the poor working capital management practices such as the inventory management, accounts receivable management, cash conversion management and accounts payable management have impended on profitability of these medium businesses. These challenges have impacted on liquidity, operational efficiency, and profitability. This has led to an increase in debt in order to sustain their operations. Because of that, these challenges limit their growth and contributions to the economy of the country. ZDA, (2022), recorded a decline in net income for the period between 2019-2022 with declining growth of ROA of 5% in 2019 to below 2% in 2020.

Hence, for medium businesses to thrive, it is vital to ensure a conducive working capital management. If this is not looked into, it can lead to more medium businesses companies closing, hence impeding on the economic growth of the country and the contribution to the Growth Domestic Product (GDP), which can lead to increase in unemployment and poverty in the country. It is for this purpose that an analysis of the impact of working capital management on medium businesses on profitability was essential in developing the solutions that enables the company to ensure their long-term sustainability.

Theoretical Review

This study adopts the working capital management theory to analyse the Working Capital Management and Its Effects on Profitability of a Company: A Case of Medium Enterprises. According to Zelealem, (2016), if working capital is managed in accordance with prescriptive theory, then businesses should be expected to finance working capital, invest in working capital, monitor factors that influence working capital, manage cash, accounts receivable, inventory, accounts payable, and the cash conversion cycle (aggregative approach). They should also be expected to measure and analyse performance to make sure that long-term (fixed) assets are used effectively and efficiently, (Gul, 2013). Making sure the investment in fixed assets is used effectively and efficiently in the goal of working

capital. Further investment in present assets will be needed if both sales and capacity utilization are rising.

In the context of working capital management, the theory analyses that poor working capital management has grave impact on the profitability of the company. It then gives a feedback that this can lead to companies becoming insolvency leading to liquidation.

The application of working capital management underscores the importance of addressing the cause and not merely treating the symptoms. The solutions to this is by reducing the cash conversion days practice as it helps in the profitability of a company, increasing capital, reduce on inventory days as it enables them receive inventory in time and thereby enabling the company to make profit, (Gul, 2013).

Conceptual Framework

This study utilized the Cash Conversion Cycle (CCC) framework, which provides a measure of the length of time required for a company to convert its investments in inventories, accounts receivable, and other short-term assets into cash, (Khalid, 2016). A shorter CCC indicates a more efficient WCM, which can lead to increased profitability. The framework also considered the relevant indicators for measuring WCM efficiency, including inventory turnover, accounts receivable turnover, and accounts payable turnover.

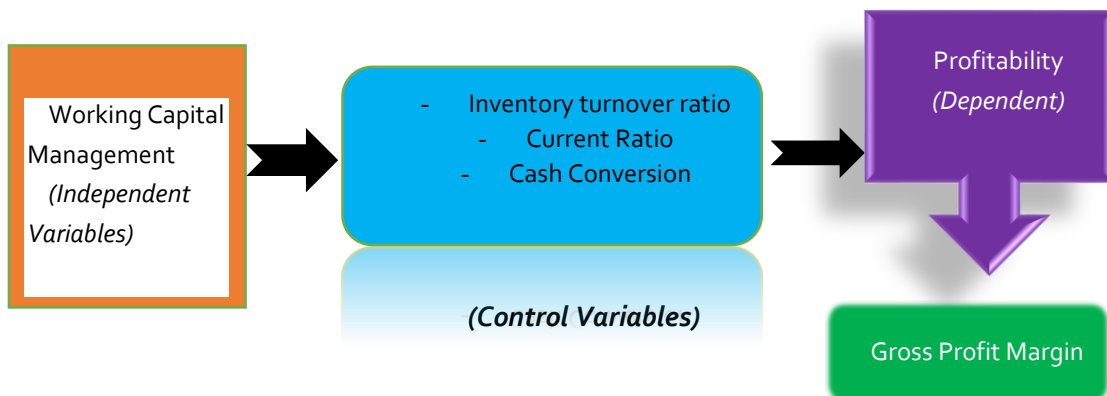


Figure 1. The conceptual framework for effects of working capital management on the profitability of the medium sized businesses. (Source: Author's compilation)

Literature Review

Working Capital Management

Working capital management refers to the process of managing a firm's current assets and liabilities to ensure that there is a continuous balance between the two, (Afrifa, 2016). The primary objective is to maintain an optimal working capital position that is sufficient to operate the business and generate profits. Current assets include cash, inventory, accounts receivable, and other short-term assets that can be converted into cash within a year. According to Pais, (2015), current liabilities include accounts payable, short-term loans, and other debts that need to be paid within a year. The management of these assets and liabilities involves making decisions about the level of inventory to hold, the credit terms

offered to customers, the timing of payments to suppliers, and the financing of short-term needs, (Kung'u, 2015).

Impact of Working Capital Management on Profitability

Working capital management has a significant impact on a firm's profitability. The basic idea is that by managing working capital effectively, a company can generate more profits from its operations, (Maris, R & Dorner, Z, 2022). For example, if a company can reduce the time it takes to collect payment from customers, it can accelerate cash flow and reduce the need for external financing. The effect of debt reduction on profitability is that the firm tends to have more profit for the company. The company also tends to win more offers from borrowers as it is seen to be profitable. Not only that, the company presents a good face as it shows that it has a strong working capital management. On the other hand, business need to grow and expand, hence, reduced debt can limit the expansion of the business, (Kebewar, 2013). Similarly, if a company can improve its inventory management by reducing stock levels and ordering costs, it can reduce working capital requirements and increase profitability.

Performance Ratios

Performance ratios are derived from the revenue and aggregate expenses line items on the income statement, and measure the ability of a business to generate a profit, (Khalid, 2016). In other words, performance ratios are the ratios indicating how the firm is fairing or how its operating in order to remain sustainable. Hence, there are ratios that are used to measure its performance. Below are some of the ratios used:

- i. **Inventory turnover ratio:** Inventory turnover ratio is measure that is used to determine the profitability of a company. The ratio measures how the number of times a company's inventory is sold and replaced within a specific period. To calculate inventory turnover ratio, you divide the cost of goods sold by the average inventory. The higher the ratio of the inventory turnover, is a proof that there is efficient inventory management, (Lee and Hsu, 2015).
- ii. **Accounts receivable turnover ratio:** Amanda, (2019), reveals that, the ratio measures how many times a company collects its accounts receivable within a specific period. The ratio is calculated by dividing sales by the average accounts receivable. A higher ratio indicates efficient credit management.
- iii. **Current ratio:** In order to meet the company's short-term obligations, current ratio is used. The ratio can be calculated by dividing current assets by current liabilities. A ratio with a ratio of 2 and above indicates a stronger position, (Nuryani, et al, 2020).
- iv. **Cash conversion cycle (CCC):** Cash conversion cycle ratio is a ratio that tries to measures the time it takes for a company to convert its inventory and accounts receivable into cash and pay its suppliers. Hence, to effectively determine how long

/or the number of times, it is best to add the average days of inventory, accounts receivable, and accounts payable, (Wang, 2019). Therefore, the shorter cycle, it is a proof of a better working capital management.

- v. **Operating profit margin:** Finance managers or other accounts users would like to know the percentage of sales after subtracting the operating expenses, hence, to find calculate it, operating profit ratio is used, (Ahmed, 2018). If the company records a higher ratio, this indicates greater profitability of a firm.
- vi. **Gross profit margin:** Measuring the profitability of sales in percentage can be used by using gross profit margin. The higher the percentage, is the representation that there's higher revenue than the coast of goods sold. If the ratio indicates greater profitability, it reflects that the company has a good working capital management, (Mulwanda, 2022). Gross profit margin is calculated by gross profit over revenue or revenue minus cost of goods sold divided by revenue.
- vii. **Return on equity (ROE):** In order to measure the return on shareholder's wealth, finance managers use return on equity as a ratio. The ratio measures the return the returns a company generates on its equity capital. The ratio is calculated by dividing net income by shareholders' equity. A higher ratio indicates that there is greater profitability generated from the shareholder's funds, (Amanda, 2019).
- viii. **Return on assets (ROA):** According to Zelealem, (2016), this ratio measures the return that a company generates on its assets. Measuring this ratio is calculated by dividing net income by total assets. If the firm records higher ratio, it is an indication that there is a greater profitability.

Overall, the literature suggests that there is a significant relationship between working capital management and profitability, but the direction and strength of the relationship may vary depending on the industry, country, and other contextual factors.

Working Capital Management Practices

Working capital is a term that is frequently used in corporate finance theory. It is also described as a crucial component of a corporation in Smith's Wealth of Nations (1776). Since it is anticipated to be turned into cash within the year, the inventory is regarded as a current asset. Because inventory investments typically result in a sizable capital expenditure, the corporation may have a good stock management system. According to Eya, (2016), Knight, (1972) extended the current theory of inventory by arguing that purchase and storage costs should be maximized to reduce inventory costs. This led to a great deal of additional study on the inventory model.

Kawina, (2018), researched on the relevance of working capital management in a company a case study of lusaka water and sewerage company. This study examined the impact of working capital management and its components on the profitability of Zambian firms; specifically, Lusaka Water and Sewerage Company (LWSC). Cash conversion cycle was used as a comprehensive measure for working capital management and gross profit ratio as a measure for profitability. In addition, the study investigated the working capital

management practices under each of the WCM components which include; receivables, payables and inventory for LWSC. This study was an explanatory research. Explanatory research seeks to establish and test relationship between variables. The research methodology was based on the collection of both primary and secondary data which was both processed and analysed by the researcher. The primary data were collected through questionnaire survey with an object to know the real practices of working capital management. The questionnaire had questions which were both open and close ended in nature. Secondary data was obtained from annual financial reports of years ending December: 2012, 2013, 2014, and 2015. The study adopted an ex-post facto research design. Regression and correlation analyses were carried out on the data to determine the relationships between working capital management and its components and the gross profit ratio of the firm.

The key findings from the study indicate that there exists a negative relationship between the net time interval between actual cash expenditures on a firm's purchase of productive resources and the ultimate recovery of cash receipts from product sales (cash conversion cycle) and profitability. This negative relationship suggests that managers can create value for the shareholders of the firm by reducing the cash conversion cycle. Apart from that, that there exists a positive relationship between accounts receivable days and profitability. This indicates that slow collection of accounts receivables is associated with high profitability, and suggests that managers can improve profitability by increasing credit period granted to their customers. There exists also a negative relationship between accounts payable days, inventory conversion period and profitability. This negative relationship indicates that when accounts payable days and inventory conversion period are reduced, a firm's profitability increases, (Kawina, 2018).

Relationship between Working Capital Management Practices and Profit

In light of that, several studies have examined the relationship between working capital management and profitability. In their study, (Deloof, and Jegers (1996) found a positive relationship between working capital management and profitability for a sample of Belgian firms. They found that firms with better working capital management had higher profitability ratios such as return on assets (ROA) and return on equity (ROE). Similarly, Marques, (2015), found a positive relationship between working capital management and profitability for a sample of Pakistani firms. They found that firms with better working capital management had higher operating profits and net profits. They also found that inventory turnover and accounts receivable turnover were the most significant factors affecting profitability.

In contrast, some studies have found a negative relationship between working capital management and profitability. For example, Bhandari, and Gupta (2013) found a negative relationship between working capital management and profitability for Indian firms. They found that firms with higher levels of accounts receivable and inventory had lower

profitability ratios. Similarly, Raheman and Nasr (2007) found a negative relationship between working capital management and profitability for a sample of Pakistani firms. They found that firms with longer cash conversion cycles (CCC) had lower profitability ratios.

Another study carried by Marques, (2015), investigated on the relationship between working capital management and profitability of firms in the Middle East and Europe. This study used a sample of 54 firms listed in the Middle East and West Europe for the period of 2012-2013. The aim of this research is to test the effect of working capital management in the form of cash conversion cycle measurements on the profitability of firms in the Middle East and Europe. The results of this study revealed that there is no statistically significant relationship between cash conversion cycle measurements and profitability of firms measured as Return on Asset. Moreover, managers should use other tools and strategies to improve their firm's profitability rather than managing the working capital efficiently.

Furthermore, a study done by Aldubhani, et al, (2022), on impact of working capital management on profitability: evidence from listed companies in Qatar. This study aimed to find out whether working capital management policies affect the profitability of manufacturing companies listed on the Qatar Stock Exchange. To assess the working capital management and profitability relationship, the authors applied a multiple regression analysis methodology in all manufacturing companies listed on the Qatar Stock Exchange (ten firms) between 2015 and 2019. Average collection period, inventory turnover, average payment period and cash conversion cycle were adopted as proxies for working capital management, and profitability was measured by operating profit margin (OPM), return on assets (ROA), return on capital employed (ROCE) and return on equity (ROE). The study found that companies with shorter receivables collection periods and cash conversion cycles are more profitable. Longer inventory turnover periods and accounts payable payment periods are related to higher profitability of the firms.

A Critique of the Validity of Literature

The study of working capital management and its impact on firm profitability has received significant attention in the financial literature. Researchers have used different measures of working capital management, including working capital turnover, cash conversion cycle, and current ratio, to analyse the relationship between WCM practices and profitability. Some studies have examined the effect of individual components of working capital on profitability, such as accounts receivable and inventory management, while others have investigated the impact of trade credit policies and cash reserves on firm profitability, (Maris, R & Dorner, Z, 2022).

Even while working capital management is a frequently studied topic in accounting and finance, relatively little research has been done on Agribusinesses. The majority of conducted researches fail to provide an explanation of how their findings relate to relevant theories and models. Furthermore, research on working capital management is primarily done in the east. Gill et al. (2010), however, focused their investigation on American

manufacturing firms. They contended that only manufacturing companies that resembled those they included in their research might benefit from the conclusions of their study, (Amanda, 2019). They said that more study should be done to see if the results can be applied to industries other than American manufacturing enterprises.

However, there is a lack of consistency in the findings of previous studies, with some scholars reporting a positive relationship between WCM practices and firm profitability, while others found a negative relationship or insignificant effect. There is no consensus on the optimal WCM policies for maximizing firm profitability, and the results are often dependent on the industry, firm size, and economic conditions, (Kargar, & Marofi, 2015).

Moreover, the existing literature on WCM practices in the energy industry in Zambia is very limited. Most studies in this sector have focused on agricultural productivity, food security, and rural development, with little attention given to financial management practices (Chengula, et al., 2015). Thus, there is a need for an in-depth analysis of WCM practices and their impact on the profitability of medium-sized companies in Zambia.

Statement on How the Proposed Study Will Contribute to the Knowledge Base of the Area of Study

The proposed study aims to contribute to the existing knowledge base on the effects of working capital management on profitability. The study focused on a case study of medium-sized businesses. By examining medium-sized companies' working capital management practices, the study sort to determine how the company's management of working capital affects its profitability. The study also attempts to identify areas of weakness in medium sized companies' working capital management and provide recommendations for improvement. The study contributes to the literature by providing insights into the relationship between working capital management and profitability in the context of a developing country. It also provides practical recommendations for companies in Zambia and other developing countries on how to optimize their working capital management practices to improve profitability.

Measurement of Profitability

The capacity of an organization to generate revenue from its operations is known as profitability. According to Agha (2014), profitability is a company's capacity to turn a profit. The amount of profit is calculated by subtracting costs from the income generated. Thus, earnings and costs are used to calculate profitability. The money received by a firm from its operations is known as income. The bigger the profit margin appears to be, the more money the company is making on its invested capital. Sales of manufactured goods provide a manufacturing company with income, (Bhandari, 2013). Expenses include various selling and administrative expenditures as well as the costs of the materials used up and consumed throughout the production process.

According to (Nuwagaba, 2015), a firm must make a profit in order to stay in operation. Even yet, a company cannot close its doors only because it has lost money in one fiscal year; rather, if the company experiences losses year after year, its continued existence is called into question (Dunn, 2009).

One useful indicator of a company's performance is its profit margin. Thus, profit serves as both a gauge of a business' financial performance and a guarantee that it will continue to operate in the marketplace (Agha, 2014). Return on assets (ROA) can be used to assess the enterprises' profitability condition. Return on assets measures a company's profitability in relation to its assets and shows how well it uses those assets to produce computed earnings. According to Nyabwanga, Ojera, Otieno, and Nyakundi (2013), return on assets should be positive, with a normal range of 10% to 12%.

Managing working capital is crucial to increasing a company's profitability. By balancing profitability and liquidity, businesses may manage working capital as efficiently as possible (Makori and Jagongo, 2013). The trade-off between profitability and liquidity is constant. Usually, when one succeeds, the other must give up part of the other (Saleem and Rehman, 2011). Effective working capital management makes sure that the business becomes more profitable. Because it has a major impact on a company's profitability and, consequently, its capacity to remain in the market, effective working capital management is crucial (Agha, 2014).

Identifying Gaps in Knowledge

Despite the wealth of literature that exists on working capital management, there are still some gaps in knowledge that need to be addressed. One of the gaps is the need for more studies that look at the long-term effects of working capital management on profitability. Another gap is the need for more cross-sectoral or cross-regional studies to enable a more generalized understanding of the relationship between working capital management and firm profitability. Additional research is also needed on the impact of the individual elements of working capital management, such as inventory management, accounts receivable management, and accounts payable management, on profitability.

Methodology

Research Design

This study employed a causal research design to examine the effects of working capital management on profitability of medium-sized companies, (Creswell, 2014). In this case, the study seeks to examine the relationship between working capital management and profitability within the context of medium-sized companies. The causal design allowed for an in-depth and comprehensive analysis of the research problem, with a focus on developing the solutions that contribute to working capital management and profitability.

Study Area or Site

The study focused on medium-sized companies. Medium sized companies are a core factor in the running of the economy of the country. The businesses' operations span from production to distribution to retail and industrial across Zambia and other African regions.

Study Population

Medium-sized businesses has about 50 to 500 workers employees in Zambia. There are over 50,000 medium businesses in Lusaka District from which the sample was drawn. But the population of this study was which comprised of the key stakeholders involved in the implementation of working capital management practices.

Study Sample

The study employed a random and purposive sampling strategy to select participants who are most knowledgeable and experienced in working capital management practices at medium sized companies. Simple random sampling ensures that all elements in the population are considered and each element has an equal chance of being chosen as the subject, (Wang, 2019). In purposive, the sampling here is limited to specific people. The study aimed to interview 92 participants, but only 40 were captured based on their experience and expertise in working capital management processes. This was mainly due to the fact that some of the participants did not have knowledge about the subject matter. The sample comprised of managers, finance and accounting personnel who are engaged with medium companies in working capital management processes.

Sampling Techniques

The study employed a snowball sampling technique to identify potential participants who are involved in the working capital management processes in medium sized businesses. This technique involves identifying an initial set of participants and then asking them to suggest other potential participants, (Etikan, 2016). The process continued until the sample size was achieved. Snowball sampling technique was used in order to reach the difficult participants. Hence, this method helped as the participants identified the other reachable participants.

Sample Size

The study covered medium sized companies' employees. It sort to capture 92 participants, but only 40 were captured due to not enough time and others could not hand fill in the questionnaires nor be interviewed as they stated that they were busy. In order to get accuracy of results, 2 representatives were selected from each company to make a total sample size of 40 respondents. The 2 respondents from each company were randomly selected from the core departments and preferably accounts department. The 40 respondents were people who have knowledge of working capital management and field of

specialization so as to ensure good understanding of the questionnaire. The sample size for this study was calculated using a simplified formula for Proportion that Yamane (1967) used to calculate sample sizes. A 95% confidence level and a margin of error (confidence interval) of +/-10% medium businesses.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{1,200}{1 + 1,200(0.1)^2}$$

n = 92 participants

Instruments for Data Collection

The study used both primary and secondary data. The study also used semi-structured interviews and a questionnaire to collect data from participants. Semi-structured interviews allow for flexibility in the interview process, enabling the researcher to ask follow-up questions and probe deeper into specific issues, (Denscombe, 2014). The interviews were conducted in English and was audio-recorded with the consent of the participants. The secondary data was used as it had been gotten from the secondary sources such as financial reports, articles, annual reports and other relevant data that was useful to the study.

Procedure for Data collection

The study begun with an introductory meeting with the management of each company to discuss the purpose and objectives of the study. After securing permission to conduct the study, potential participants were contacted to secure their participation in the study. Semi-structured interviews were conducted. The interviews were recorded and then transcribed verbatim for analysis. The researcher also used a questionnaire.

Data Analysis

Quantitative data analysis was done using a computer called SPSS. It was done at three levels, namely: univariate, bivariate and multivariate levels. At the univariate level, various percent and frequency distributions for the various background characteristics were produced. At the bivariate level, cross-tabulations were performed to investigate the influence of the various independent (or predictor) variables on the dependent (or outcome) variable. To test the significance of the association or relationship, a p-value of 0.05 (or 5%) was used – where any p-value less than 0.05 denoted a statistically significant association, while a p-value greater than 0.05 denoted an association that was not statistically significant. At multivariate level, linear regression was used to investigate the influence of the various independent variables on the dependent variable. The dependent variable was profitability, which was measured on a continuous scale.

Microsoft Excel was later used for the presentation of the study findings. It was mainly used to create tables and graphs such as pie charts, and bar charts. This software was used because it has the capacity of producing high quality tables and graphs.

The study also employed a thematic analysis approach to analyze qualitative data captured using interviews. Thematic analysis involves identifying patterns within the data, grouping them into themes and sub-themes, and interpreting the meaning of these themes in relation to the research problem (Braun, & Clarke, 2014). The data analysis process was iterative, with codes being refined and developed according to the emerging themes and sub-themes.

Results and Discussion

This section consists of various types of findings based on the data that was collected. It starts by tackling the background characteristics, which are followed by findings according to the objectives. Other supplementary findings are also presented, after which a summary of the chapter is done.

Background Information of Respondents

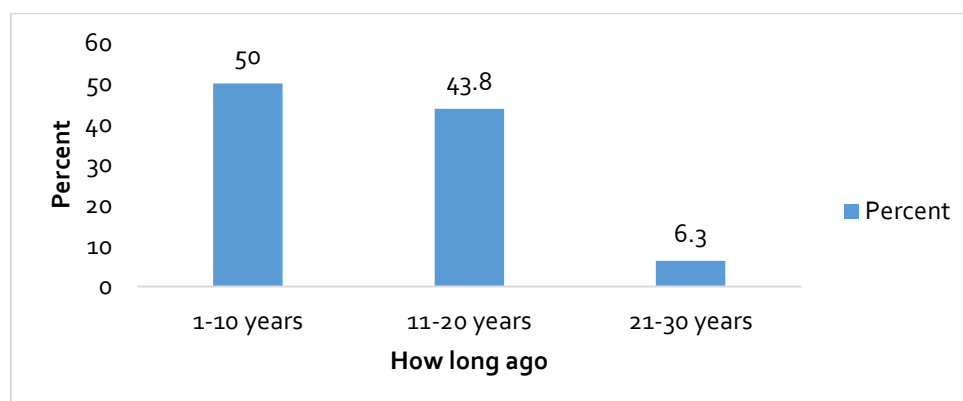


Figure 1. When a company commenced its operations

Source: Fieldwork, 2024

The results above show that most of the companies had been in existence or operational for 1-10 years (50%; n=16), while the least number of companies had been in existence or operational for 21-30 years (6.3%; n=2).

The figure below shows the percent distributions of the number of years a company has been a member of the Zambia Association of Manufacturers (ZAM).

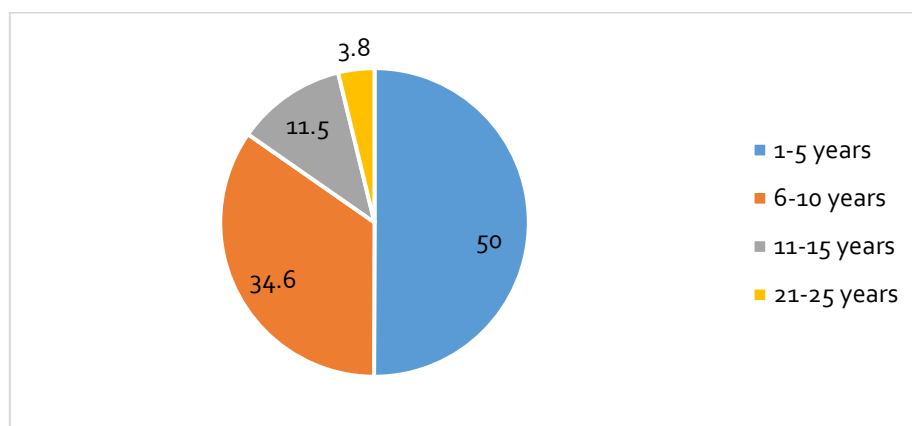


Figure 2. Length of time a company has been a member of the Zambia Association of Manufacturers

Source: Fieldwork, 2024

The results in Figure 3 above show that most of the companies had been members of the Zambia Association of Manufacturers for 1-5 years (50%; $n=13$), followed by those which had members of the Zambia Association of Manufacturers for 6-10 years (34.6%; $n=9$). The lowest number of companies had been members of the Zambia Association of Manufacturers for 21-25 years (3.8%; $n=1$).

In addition to the above results, Table 1 below show the percent and frequency distributions of how the various companies were classified by the Zambia Association of Manufacturers.

Table 1. Classification of a company

Classification	Percent	Frequency
Building, mining and construction	68.8	22
Energy, electrical and electronics	28.1	9
Motor vehicles, assemblers and accessories	3.1	1
Total	100	32

Source: Fieldwork, 2024

The results in the table above show that most companies were classified as building, mining and construction (68%; $n=22$), with the lowest number of companies were classified as motor vehicles, assemblers and accessories (3.1%; $n=1$).

Other results showed the percent and frequency distributions of organizational form, as presented in Table 2 below.

Table 2. Organizational form

Classification	Percent	Frequency
Partnership	31.3	10
Sole proprietor	68.8	22
Total	100	32

Source: Fieldwork, 2024

The results above show that 68.8% (n=22) of the companies were sole proprietors, while 31.3% (n=10) were partnership companies.

Figure 4 below shows the percent distributions of the number of employees who are currently employed by a certain company.

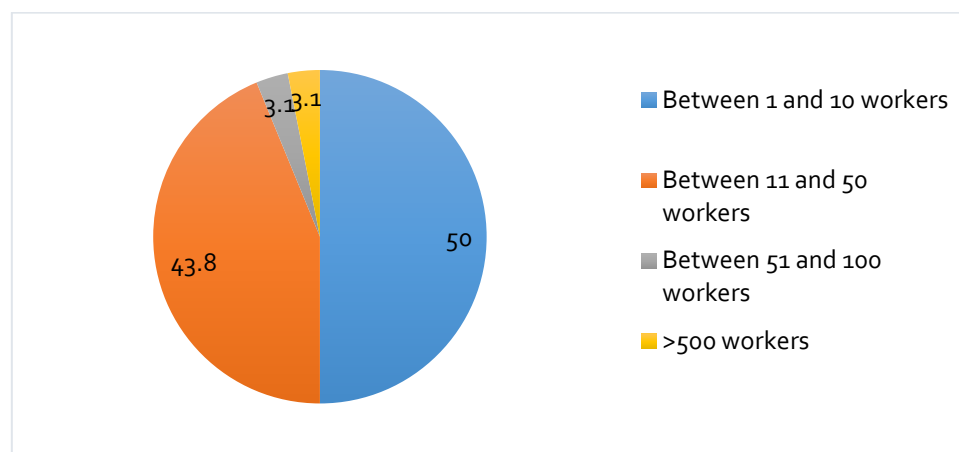


Figure 3. Number of workers currently employed

Source: Fieldwork, 2024

As show in the figure above, most of companies had between 1 and 10 workers (50%; n=16), followed by the companies with between 11 and 50 workers (43.8%; n=14). The lowest number of companies had between 51 and 100 workers and >500 respectively (3.1%; n=1). In terms of the types of products a particular company deals with, the results showed that most of them dealt with finished good (97.5%, n=31), while the lowest number of them dealt with raw materials (2.5%, n=1) – as shown in Figure 5 below.

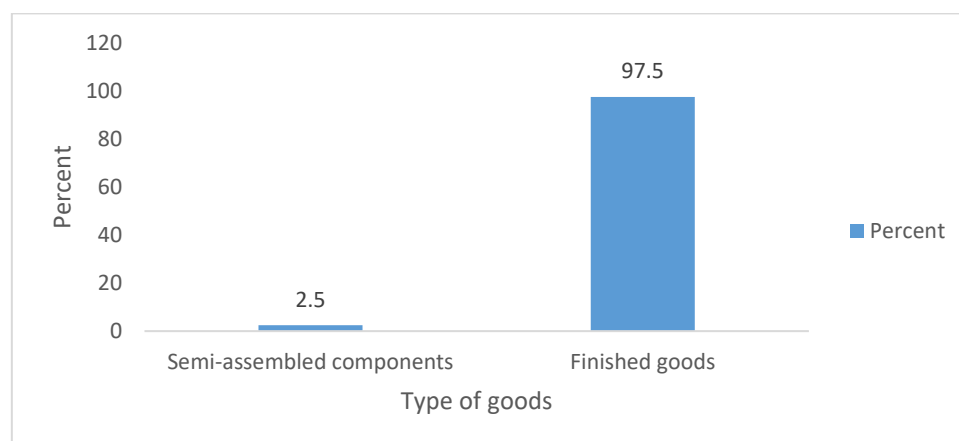


Figure 4. Product a company deals with

Source: Fieldwork, 2024.

Lastly, Figure 6 below shows the percent distributions of the formal structure a particular company has.

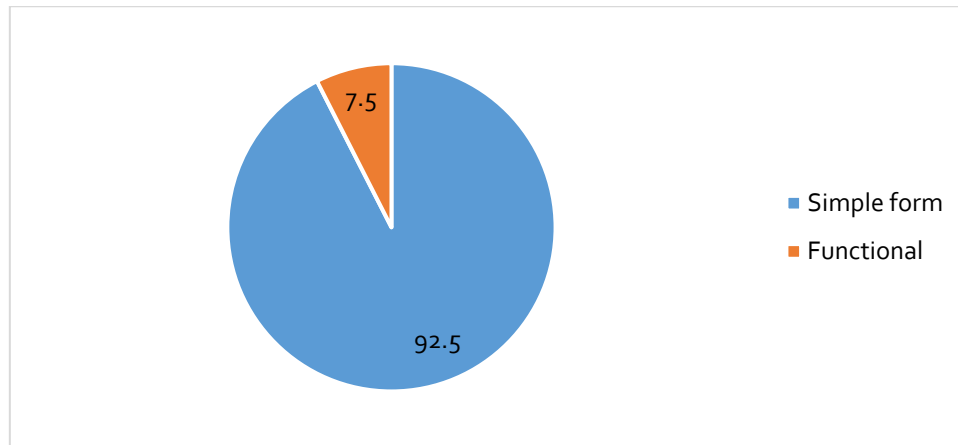


Figure 5. Organization structure

Source: Fieldwork, 2024

The results above show that 92.5% (n=29) of the companies had a functional structure, while 7.5% (n=3) of the companies had a simple form structure.

Working Capital Management Practices Among Medium-Sized Businesses

The first objective of this study was to investigate the various working capital management practices that are common or in use among the various medium-sized businesses. Table 3 below shows the results for this objective.

Table 3. Working capital management practices among medium-sized businesses

Working capital management practice	Percent	Frequency
Presence of working capital management practice		
Yes	97.5	39
No	2.5	1
Kinds of working capital management practice put in place		
Credit and receivable management	5	2
Inventory management	37.5	12
Cash conversion efficiency	22.5	9
Incorporating sustainability into working capital management strategies	2.5	1
Receiving adequate financing	5	2
Technology integration	5	2
Working capital cycle optimization	5	2
Tightening expense controls	12.5	5
Cash flow forecasting	5	2
Effectiveness of working capital management		
Very effective	32.5	13

Effective	47.5	19
Moderate	20	8
Challenges with the current working capital management		
Yes	75	24
No	25	8
Any need of new ideas		
Yes	85	34
No	12.5	5
Maybe	2.5	1
Increase in profit		
Yes	78.1	25
Maybe	3.1	1
No	18.1	6
Kind of working capital management to put in place		
Financial control management	56.3	18
Tightening expense control	37.5	12
Credit and receivable management	3.1	1
Profit optimization	3.1	1

Source: Fieldwork, 2024

The results show that 97.5% (n=39) of the medium-sized business have a working capitals management practice. These consisted of inventory, cash conversion cycle, accounts receivables and incorporation of sustainability. The most prevalent being inventory management, followed by cash conversion and the least which is incorporation of sustainability. Studies indicate the most prevalent working capital management practices used by companies are the accounts receivables, cash conversion cycle, accounts payables and inventory turnover days. Bhandari, and Gupta (2013) in analysing working capital management and profitability of a firm, found a negative relationship between working capital management and profitability for Indian firms. They discovered that firms that practice account receivables and inventory which are of high levels had lower profitability ratios. Similarly, Raheman and Nasr (2007) found a negative relationship between working capital management and profitability for a sample of Pakistani firms. They found that firms with longer cash conversion cycles (CCC) had lower profitability ratios.

A study by Arunkumar & Ramanan, (2013) is in line with the findings that were discovered of the working capital management practices that are prevalent among the medium businesses. The findings from the research indicate that, current ratio, inventory days and turnover management are the most found. Though Arunkumar & Ramanan, (2013) in their study indicate that the debtor days, creditor days, financial assets to total assets, and size with return on assets used are also part of it.

The Relationship Between Working Capital Management Practices and Profitability Among Medium-Sized Businesses

The second objective of this study focused on evaluating the association of the various working capital management practices alluded to under objective one above, and the profitability of the sampled medium-sized companies. These results are shown in table 4 below.

Table 4. Relationship between working capital management practices and profitability among medium-sized businesses

Working capital management practice	Low profit		High profit		P-value
	Percent	Frequency	Percent	Frequency	
Presence of working capital management practice					
Yes	28.2	11	71.8	28	0.122
No	100	1	0	0	
Kinds of working capital management practice put in place					
Credit and receivable management	50	1	50	1	0.908
Inventory management	33.3	5	66.7	10	
Cash conversion efficiency	22.2	2	77.8	7	
Incorporating sustainability into working capital management strategies	0	0	100	1	
Receiving adequate financing	50	1	50	1	
Technology integration	0	1	100	1	
Working capital cycle optimization	50	0	50	2	
Tightening expense controls	20	1	80	4	
Cash flow forecasting	50	1	50	1	
Effectiveness of working capital management					
Very effective	30.8	4	69.2	9	0.941
Effective	31.6	6	68.4	13	
Moderately effective	25	2	75	6	
Challenges with the current working capital management					
Yes	30	9	70	21	1.000
No	30	3	70	7	
Any need of new ideas					
Yes	35.3	12	64.7	22	0.220
No	0	0	100	5	
Maybe	0	0	100	1	
Increase in profit if new ideas are implemented					
Yes	40	10	60	15	0.067
Maybe	100	1	0	0	
No	0	0	100	100	
Kinds of new working capital management ideas to implement					
Financial control management	27.8	5	72.2	13	0.427
Tightening expense control	33.3	4	66.7	8	

Credit and receivable management	0	0	100	1	
Profit optimization	100	1	0	0	

Source: Fieldwork, 2024

Based on the findings in this study, it was found that none of the working capital practices had a statistically significant influence on the amount of profit a medium-sized business made at a given period of time. This was due to the fact that the p-values for all the independent variables which were considered here were greater than the significance value of 0.05 (or 5%). These variables could hence not be used to explain the changes which the medium-sized businesses saw in their profitability.

When compared to what has been found in other studies, it was discovered that working capital has a huge influence on the amount of profit a medium-sized business makes. For instance, Deloof, and Jegers (1996) found that firms with better working capital management had higher profitability ratios such as return on assets (ROA) and return on equity (ROE). In another study done by Arunkumar & Ramanan, (2013) it was revealed that there is a strong correlation between inventory days and debtor days and profitability. In a study done by Rebelo, et al, (2015), it was further found that the profitability of businesses as determined by return on asset had no statistically significant correlation with cash conversion cycle metrics.

Other studies have also showed that the average payment period and cash conversion cycle were significantly related to profitability of manufacturing firms. More so, it was established that cash conversion cycle had a negative effect on firm's profitability. However, average payment period positively influenced profitability (Muya & Gathogo, 2016). In addition to the above, another study revealed that working capital management is particularly important to small firms. Although such firms can minimize their investment in fixed assets by renting or leasing plant and equipment, they cannot avoid investment in cash receivables and inventories (Tauringana, 2013).

It was discovered that there is a significant relationship between inventory management, operating cycle and profit when in place. Medium sized businesses with inventory management recorded high profit as compared to companies without inventory management. This result is inverse to the studies carried out by Newstyle, D. & Opuene, E.G, (2022). According to Newstyle & Opuene, (2022), the result of the study showed that there is a negative and insignificant relationship between inventory turnover (management) and profit after tax; there is a negative and insignificant relationship between operating cycle and profit after tax; there is a negative and insignificant between inventory conversion period and profit after tax; firm size has negative and significant relationship between with inventory management techniques but has positive and significant relationship with financial performance; and finally, operational efficiency has positive and significant relationship between with inventory management techniques and financial performance.

The study also examined that credit and receivable management have a negative insignificant influence on the profitability of the company. This is in line with the study done by Mulwanda, (2022). He found a negative relationship between the amount of non-performing loans and the banks' credit risk management procedures. This suggests that the profitability of the banks is impacted by the credit risk management procedures in an inverse manner. It is interesting to note that both studies have almost similar correlation coefficient, the study done by Mulwanda recorded a correlation coefficient of 0.918, while study done in this research recorded 0.908. The study implies that medium businesses with credit and receivable days have a high chance of making loss in profit as compared to companies without credit and receivable days.

Also, the study examined the impact of tightening expense control on the profitability of the company. The findings of this study find a negative association between cash conversion cycle and the profitability of the company. In other words, the study concludes that medium businesses that have included working capital in their business have been able to perform poorly in profit. This is in disagreement with the research conducted by Ogunmakin, A.A, et al, (2022). He found out that there is a considerable positive association between effective financial management practice, profit after tax, and retained profits.

All the above differences in the results of this study and what has been found in other studies done by other scholars could be attributed to the following issues:

- Differences in the sizes of the samples used.
- Differences in the definitions of what a medium-sized business is/was.
- Differences in how working capital was defined, and what working capital management practices were considered.
- Differences in the way the data was analysed (e.g., regression, thematic analysis, etc.)

It is therefore important to note that even the above issues could be responsible for the differences observed in the results, this study still provides an invaluable amount of new information in as far as working capital management practices and their impact on profit maximization is concerned.

It will be worth to note that, if the medium size businesses are to perform well or make profit, some participants suggest that, there is need to improve on the account receivables. This means that, the money that debtors should be able to pay their debts in a shortest possible time in order for them to be able to use it to finance their deliverables. Contrary to the findings carried out by Mulwanda, 2022. He suggests that the profitability of the banks is impacted by the credit risk management procedures in an inverse manner, (Mulwanda, 2022). In other words, credit management or accounts receivable management doesn't play a significant role in the profitability of the company.

The other findings in this study indicates that if medium businesses are to make profit, the companies must consider on working on inventory days of supply. This means that, the businesses are to put in place measures that will enable them receive inventory in time from the supplies. Most of them complained that they most challenging area in their businesses

was due to increased number of days from the time they make their orders. They received their inventory late and that impeded on the company's performance and it affected the profit of the company. It is consonance with Ahmed, (2018) study, in which the study found that account inventory management, had a significant positive influence on the financial performance of small and medium enterprises. This inventory management also refers to managing inventory ordered from suppliers to the company's door step.

Furthermore, another suggestion made was that medium businesses could perform better or make profit if cash conversion cycle was fast. Raheman and Nasr (2007) in their study, they indicate thing, they found a negative relationship between working capital management and profitability for a sample of Pakistani firms. They found that firms with longer cash conversion cycles (CCC) had lower profitability ratios. El-Maude, J.G & Shuaib, A.I, (2016), recommends that among others that management of Food and Beverages companies in Nigeria should decrease period involved in their cash conversion cycle as it will lead to improving the company's performance The most attributed factor to longer days in cash conversion was due to poor economy of the country, high levels of loadshedding and inflation in the country.

Another suggestion made was that for those medium businesses that do not apply working capital management practices, they should engage in them as it improves the profitability of the business. Ifoastri, et al, (2020), agrees to it as he found out when looking at the role of working capital management, capital intensity in affecting the profitability of manufacturing company. The research objective was to analyse and test the effect of working capital management and capital intensity on the profitability of manufacturing companies. The research results indicate that working capital management affect profitability, capital intensity has a significant negative effect on profitability and working capital management and intensity capital together has an impact on profitability. it is thus, potent for businesses especially medium businesses to engage in working capital management.

Not only that, the research found out that medium businesses could not afford to get the loans as the loans had higher interest rates. Hence, they suggested that if banks could reduce their interest rates on medium businesses, they businesses would also perform well, as they will be encouraged to get loans from the banks at a cheaper rate as compared to the rate they have put in place.

Table 5. The influence of background characteristics and working capital management practices on profitability

Prob > F = 0.3901			
R-squared = 0.9186			
Adjusted R-squared = 0.3492			
Amount of profit	Coefficients	P-value	[95% CI]
When company started its operations			
1-10 years ^{RF}			
11-20 years	-77921	0.718	-703582 to 547738
21-30 years	-159386	0.563	-941139 to 622367
Length of time a company has been a member of ZAM			
1-5 years ^{RF}			
6-10 years	175065	0.294	-264196 to 614327
11-15 years	98678	0.636	-500372 to 697728
Classification of a company			
Building, mining and construction sector ^{RF}			
Energy, electrical and electronics sector	-68355	0.618	-461090 to 324380
Motor vehicles accessories sector	-309594	0.391	-1294045 to 674856
Organizational form			
Partnership ^{RF}			
Sole proprietorship	69906	0.603	-313965 to 453779
Number of workers currently employed at company			
1-10 workers ^{RF}			
11-50 workers	-51813	0.567	-308841 to 205214
51-100 workers	-291248	0.338	-1106907 to 524410
Organizational structure			
Simple form ^{RF}			
Functional	-144940	0.530	-796422 to 506540
Kinds of working capital management practice put in place			
Credit and receivable management ^{RF}			
Inventory management	87715	0.687	-540797 to 716229
Cash conversion efficiency	405557	0.082	-95451 to 906566
Technology integration	449518	0.206	-438429 to 1337467
Working capital cycle optimization	84120	0.777	-780831 to 949071
Tightening expense controls	75373	0.663	-422216 to 572962
Effectiveness of working capital management			
Very effective ^{RF}			
Effective	4574	0.966	-308687 to 317836
Moderate	-300660	0.204	-891413 to 290093
Challenges with the current working capital management			
Yes ^{RF}			
No	-131689	0.221	-403444 to 140064
Increase in profit			
Yes ^{RF}			
No	-186828	0.241	-595053 to 221396
Kind of working capital management			
Financial control management ^{RF}			

Tightening expense control	-26417	0.890	-583514 to 530679
Credit and receivable management	310359	0.427	-766278 to 1386997
Constant	43748	0.854	-649268 to 736765

Note: ^{RF} denotes the reference category of a given variable

Source: Fieldwork, 2024

It is worth noting that the above model was not statistically significant, because the p-value of the model of 0.3901 was greater than 0.05. The R-squared value of 0.9186 entails that the independent variables in the Table 5, which were included in the linear regression model explained 91.9% of the change in the amount of profit a medium-sized business made. If the results of the above model were to be generalized to all the medium-sized businesses, it would explain 34.9% of the change in the amount of profit a medium-sized business made, based on the adjusted R-squared value of 0.3492.

When it comes to the actual independent or predictor variables in the model, the results show that all the variables were not statistically significant, hence they could not determine or influence the dependent or outcome variable, which was the amount of profit a medium-sized business made at given time.

Strategies medium-sized businesses have put in place to increase profitability

Figure 7 below shows the percent distributions of what strategies various medium-sized businesses have put in place to boost profitability.

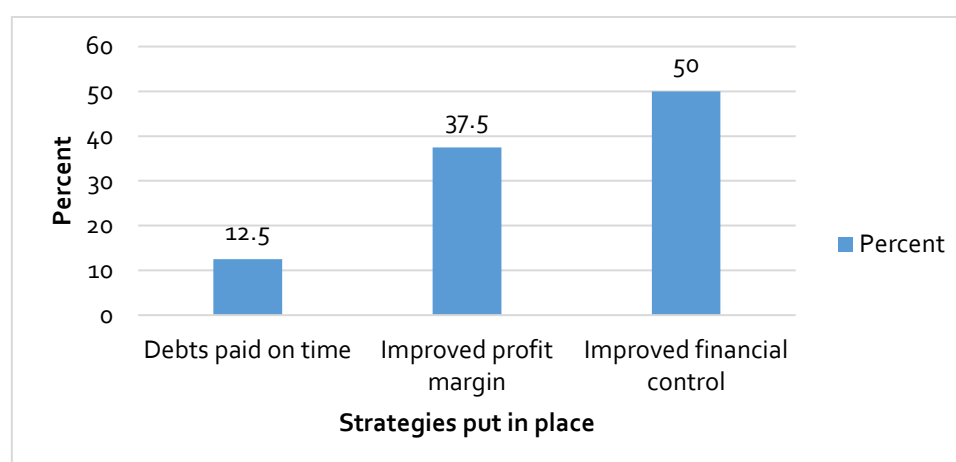


Figure 6. What strategies has the business put in place to improve its profit?

Source: Fieldwork; 2025

The results in the figure above shows that most of the medium-sized businesses have put in place measures to improve financial control in their business (50%; n=20), while the least number of businesses have put in place measures to ensure that they pay debts on time (12.5%; n=5).

Increased capital

Apart from the above stated strategies, others alluded to increased capital as well. Most of the participants suggested that, if their companies were to perform better or increase in profit, they needed to increase capital. Enough capital enables the businesses to be able to increase their inventories which allows them to make more profit. Increased capital can significantly enhance profitability by enabling businesses to invest in assets, expand operations, and drive sales growth. Higher capital levels allow firms to invest in technology, skilled labor, and marketing, all of which can increase efficiency and revenue generation (Ross, Westerfield, & Jaffe, 2013). Additionally, increased capital helps firms manage operational costs and optimize supply chains, leading to better profit margins. This capital growth also provides a buffer against market fluctuations, allowing businesses to sustain operations and profit in volatile conditions (Pandey, 2021).

Advertisement of inventories

Not only that, advertising inventory can directly impact profitability by increasing product visibility, enhancing brand awareness, and driving customer demand. Effective inventory advertisement connects potential buyers to available products, reducing stock levels and minimizing holding costs. This approach not only speeds up inventory turnover, allowing quicker reinvestment of capital, but also supports customer acquisition and retention by keeping products top-of-mind (Kotler & Keller, 2016). By strategically advertising inventory, companies can also create demand for slower-moving items, improving overall sales and maximizing revenue from current stock (Belch & Belch, 2020).

Motivating workers

Because engaged employees are more likely to be imaginative, productive, and dedicated to quality all of which are factors that propel corporate success motivating employees is essential for profitability. According to Herzberg (2003), motivational techniques include acknowledging accomplishments, offering chances for advancement, and cultivating a happy work atmosphere motivate staff to provide their best effort, which lowers mistakes and boosts productivity. Employees are more inclined to support the company's objectives when they feel appreciated and inspired, which raises production overall, improves customer happiness, and eventually boosts profitability (Robbins & Judge, 2018). Furthermore, a motivated staff usually has reduced turnover, which lowers training and recruitment expenses and has a beneficial effect on profit margins.

Reduced interest rates from the banks

Reduced bank interest rates may greatly increase a company's profitability by reducing the cost of borrowing, which frees up cash flow for essential operations, product development, and growth. Profit margins are directly improved when a business keeps more of its income due to lower interest costs (Brigham & Ehrhardt, 2017). Furthermore, lower interest rates facilitate funding availability, allowing businesses to fund high-yield initiatives that boost

expansion and competitiveness. Businesses frequently see faster growth in both revenue and profit as they raise their investment in response to decreased capital costs, particularly in capital-intensive industries (Ross, Westerfield, & Jaffe, 2013).

More of business workshops

Business workshops can substantially enhance profitability by equipping employees and management with the latest industry knowledge, skills, and innovative practices. Workshops foster continuous learning, enabling teams to streamline processes, adopt efficient strategies, and improve customer service, all of which contribute to a company's bottom line (Kotler & Keller, 2016). By encouraging collaboration and problem-solving, workshops also spark creativity and innovation, helping businesses adapt to market changes and meet consumer demands more effectively. Moreover, training in financial management, marketing, and technology optimization through workshops leads to informed decision-making, which directly impacts profitability by reducing costs and increasing revenue (Robbins & Coulter, 2018). The long-term gains from investing in employee growth and development often translate into a sustainable competitive advantage.

Conclusion and Recommendations

In conclusion, this study has been an examination of working capital management and its effects on profitability. The research looked at working capital management and the profitability of medium size businesses in Lusaka district. The results indicate that the most prevalent working capital management practices used by companies are the accounts receivables, cash conversion cycle, accounts payables and inventory turnover days. Unlike the study that was carried out, Bhandari, and Gupta (2013) found a negative relationship between working capital management and profitability for Indian firms who used cash conversion cycle, account receivables and inventory management, while those that did not use made high profit. It can be concluded that not all companies that use cash conversion cycle, accounts receivables and inventory management are able to make profit. Probably some other factors could be the cause of such results.

About 97.5% of the medium-sized businesses had a working capital management practice in place; the most common working capital management practice in place in the medium-sized businesses was inventory management (37.5%) followed by cash conversion efficiency (22.5%); close to half (78.1%) of the medium-sized business reported that their working capital management practice in place has led to profit.

None of the background characteristics and working capital management practices in place had a statistically significant influence on the amount of profit a medium-sized business recorded.

To increase how much profit they made, most of the medium-sized businesses (50%) have put in place measures to improve financial control in their business; 95% of the medium-

sized businesses reported that the strategies put in place led to improved profit, and most of the medium-sized businesses reported that they have been facing challenges with inventory turnover days (57.5%).

Recommendations

1. Managers or businesses owners should use cash conversion cycle, accounts receivables and inventory management as they do not help the profitability of the company.
2. Medium businesses in Zambia should use working capital management practices as there is significant relationship with profit.
3. Managers or business owners should focus on implementing cash conversion cycle practice as it helps in the profitability of a company.
4. Managers or businesses owners should also reduce accounts receivables days as it could enhance the profitability of the companies.
5. Managers should also reduce on inventory days as it enables them receive inventory in time and thereby enabling the company to make profit.
6. There is need for the medium-sized business to expand their knowledge and understanding of the various types of working capital management practices they know so that the chances of profit maximization are increased.
7. There is need to fully and properly integrate the working capital management practices adopted by a particular medium-sized business so that they can become more effective.

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