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**THE IMPACT OF WORKING CAPITAL MANAGEMENT ON  
PROFITABILITY OF A SMALL AND MEDIUM ENTREPRISE IN  
RWANDA**

**Case study - Nyirangarama Enterprise  
(Period of study 2009 - 2012)**

*Management Research Project Submitted to the  
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**Huye, July, 2014**

## **DECLARATION**

Student's declaration

This research project is my original work and has not been presented for a degree in any other university.

Sign: .....

Date: .....

**ISHAAZI SHARON**

## **APPROVAL**

This is to certify that this dissertation has been submitted with my approval as Supervisor.

**Dr Jonas BARAYANDEMA**

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Date and signature

## **DEDICATION**

This work is first dedicated to Almighty God for his grace to me and for protecting me day and night, to my parents and to my much loved family who struggle along with me so as to lead me to the success.

I dedicate this Work to Inge Beekman and Late Jan Brandt as a recognition for their generous heart and for every unforgettable thing they have done for me since my earlier childhood up to date, to all my former class mates for everything I accomplished with them and the rest of the entire community of University of Rwanda as whole, particularly the management team and the academic staff.

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# TABLE OF CONTENTS

DECLARATION.....	ii
APPROVAL.....	iii
DEDICATION .....	iv
ACKNOWLEDGEMENT .....	v
TABLE OF CONTENTS .....	vi
LIST OF ABBREVIATION AND ACRONYMS .....	ix
LIST OF TABLES .....	x
LIST OF FIGURE.....	xi
LIST OF EQUATIONS.....	xii
ABSTRACT.....	xiii
CHAPTER ONE: GENERAL INTRODUCTION .....	1
1.1 Background of the Study.....	1
1.2 Statement of the problem .....	3
1.3 Objectives of the study.....	4
1.3.1 General objective .....	4
1.3.2 Specific objectives .....	4
1.4 Research questions .....	4
1.5 Research hypothesis .....	5
1.6 Scope of the study .....	5
1.7 Significance of the study .....	5
1.8 Organization of the study .....	5
CHAPTER TWO: LITERATURE REVIEW .....	6
2.1. Introduction .....	6
2.1.1. Working Capital Management .....	6
2.1.2. Small and Medium Enterprises.....	7
2.1.3. Profitability .....	7
2.2. Concept of Working Capital.....	7
2.2.1. Working Capital .....	7
2.2.2. Position of Capital.....	8
2.2.3. Capital of the Business.....	8
2.2.4. Working capital can be classified.....	9

2.2.5.	Working Capital Characteristics of Different Business .....	10
2.2.6.	Determination of Working Capital.....	10
2.2.7.	Approaches to Working Capital Management .....	11
2.3.	Profitability Concept. ....	18
2.3.1.	Profitability measures .....	18
2.4.	Impact of Working Capital Management on Profitability .....	22
2.5.	Challenges faced by Small and Medium Enterprises in Rwanda.....	24
CHAPTER THREE: METHODOLOGY .....		25
3.1.	Introduction .....	25
3.2.	Research design.....	25
3.3.	Study Population .....	25
3.4.	Research instrument .....	25
3.5.	Data gathering procedures.....	25
3.6.	Administration of the Interviews and Financial Records.....	25
3.7.	Data analysis .....	26
3.8.	Ethical consideration .....	26
CHAPTER FOUR: DATA ANALYSIS DISCUSSIONS AND INTERPRETATION .....		27
4.1.	Introduction .....	27
4.1.1.	URWIBUTSO Enterprise's Historical and Evolution .....	27
4.2.	Analysis of the financial performance of Urwibutso enterprise .....	28
4.2.1.	Analysis of Products and Sales of Urwibutso Enterprise. ....	28
4.2.2.	Evolution of Sales of Akabanga Pepper from 2009 to 2012.....	29
4.2.3.	Evolution of sales of Agashya Juice from 2009 to 2012. ....	29
4.2.4.	Evolution of sales of Banana Wine called Akarusho from 2009-2012.....	30
4.2.5.	Evolution of Sales of Bakery Products from 2009 -2012. ....	31
4.2.6.	Evolution Sales of Kimaranzara restaurant service from 2009 to 2012 .....	31
4.2.7.	Analysis of working capital management in urwibutso enterprise. ....	32
4.2.8.	Current liabilities items ranked in percentage .....	34
4.2.9.	Techniques for effective Working Capital management.....	35
4.2.10.	Cash Budgeting/ management technique .....	35
4.2.11.	Inventory Management .....	36
4.2.12.	Profit analysis.....	36
CHARPTER FIVE: CONCLUSION AND RECOMMENDATION .....		38
5.1.	Introduction .....	38

5.2. Conclusions .....	39
5.3. Recommendations .....	40
5.3.1. Recommendations to URWIBUTSO Enterprise.....	40
5.3.2. Recommendation to stakeholders in the SMEs sector .....	40
5.3.3. Recommendations to the Rwandan government.....	40
5.4. The impact of working capital management of SMEs in Rwanda.....	41
5.5. Contribution to Knowledge and Practice .....	42
5.6. General Conclusion .....	43
REFERENCES .....	44



## **LIST OF ABBREVIATION AND ACRONYMS**

**WCM:** Working Capital Management

**RDB:** Rwanda Development Board

**SME:** Small and Medium Enterprise

**GWC:** Grossing Working Capital

**CA:** Current Asset

**EOQ:** Economic Order Quantity

**JIT:** Just in Time

**COD:** Cash on Delivery

**CBD:** Cash before Delivery

**ROA:** Return on Asset

**ROE:** Return on Equity

**EBIT:** Earnings Before interest and Taxes

**ISO:** International Standard Organization

**RWF:** Rwandan Francs

**DTO:** Debtors Turnover Ratio

**CTO:** Creditors Turnover Ratio

**ITO:** Inventory Turnover Ratio

**CR:** Current Ratio

## LIST OF TABLES

Table 1: Key Current Assets and Liabilities. ....	9
Table 2: Sales evolution of Akabanga Pepper product, during the period 2009-2012 Rulindo, 2012,.....	29
Table 3: Table showing the Evolution of sales of Agashya Juice from 2009 to 2012 .....	29
Table 4: Evolution of sales of Banana Wine called Akarusho from 2009-2012 .....	30
Table 5: Table showing the Evolution of Sales of Bakery Products from 2009 -2012.....	31
Table 6: Showing the Evolution Sales of Kimaranzara restaurant service from 2008 to 2011 ....	31
Table 7: Showing current assets items ranked in percentage.....	32
Table 8: Showing Current liabilities items ranked in percentage .....	34
Table 9: Evolution of Net Profit in Urwibutso industry from 2009-2012(amount in Rwf).....	36
Table 10: Evolution of Turnover in urwibutso industry from 2009-2012 (amount in Rwf).....	37

## **LIST OF FIGURE**

Figure 1: Theoretical Framework of Working capital management and Profitability. ....	4
Figure 2: Showing the Capital of the Business Frank and Fabozzi (2003) .....	8

## LIST OF EQUATIONS

Equation 1: Grossing Working capital .....	9
Equation 2: Total conversion cost per period can calculated by the use the formula, .....	13
Equation 3: Miller-Orr model .....	14
Equation 4: Accounts receivable period payment period .....	17
Equation 5: Rate of return.....	18
Equation 6: Profit Margin .....	19
Equation 7: Return on Assets.....	19
Equation 8: Return on Equity .....	19
Equation 9: Basic Earning Power .....	20
Equation 10: Gross profit margin.....	20
Equation 11: Net profit margin .....	20

## **ABSTRACT**

Working Capital Management affects the Profitability of a small and medium enterprise in Rwanda. Generally working capital consists of various components of current assets like inventories, bills, receivables, debtors, cash and bank balances and prepaid expenses. This implies that enterprises main target is making profits and this can only be successful if working capital concepts stated are fully managed.

This research aims to analyze the significant effect of working capital management on profitability of an enterprise in Rwanda.

Working capital management affects profitability and this leads to development of an SME. Therefore what is the level of managing all the components of managing capital in SMEs? How does each relate to the other? What is the correlation of their relationship impact the success of the business entity? This indicates that there is a gap for appropriate management of capital in SMEs, what can be done to enlance working capital management and all its components in growing SMEs?

## **CHAPTER ONE: GENERAL INTRODUCTION**

### **1.1 Background of the Study**

The term working capital management is globally a business technique for financial management; it is illustrated in many ways and included in the daily assignments of a financial manager. Working capital management has got main objectives that need effective management at all levels such as current assets and current liabilities and the adequate maintenance of both amounts of current assets and current liabilities. Working capital has got components like cash, inventories, receivables and payables of which, all these should be appropriately managed for a successful enterprise. Working Capital management mainly focuses on four principals' types of current assets, Inventory, accounts receivables and cash balances (Myers Allen, 2011).

Working capital is the capital that managers can immediately put to work to generate the benefits of capital investments. Short-term, or current, assets and liabilities are collectively known as working capital Brealey Myers (2011).

According to Fabozzi (2003) a corporation invests in long -term assets such as plant and equipment and short term assets such as cash, accounts receivable, inventory and marketable securities. Frank (2003) refers to short-term assets as working capital, since there are put to work, to generate sales that result to cash flow which ultimately generates profits.

Working Capital is composed of two types of working capital, temporary and permanent working capital of which all are illustrated and managed differently to maintain the success of the business Fabozzi (2003).

Further Frank (2003) suggests here that anecdotal evidence that working capital management results to the success of a business entity, how to operate, components, structures and how to manage whatever capital available and the different sources of capital.

Paramasivan and Subramanian (2009) argues that small business financial manager must look at financing their working capital as a long range continual process. Financial managers spend

most of their time and energy financing their enterprises than marketing and selling their products and services.

According to Michael & Nichols (2007) in either debt or equity financing, the lending sources will insist that the owner has made a major investment of his or her own asset in the business and will therefore improvise to the borrower the amount that was requested for, the lending sources normally calculates the interests, the terms of payment and period of recovering the loan given out. This is a very smart and good stage for a business starter and the issues normally evolved around the technique of managing working capital to maintain a profitable enterprise.

Most small and medium businesses only use a 12-months frame of planning their financial needs, eventually this wastes the business manager`s time, increases the cost of capital or funding and dilutes eventual ownership (Robert Calvin 2002).

According to the current report from African Development Fund (ADF) through RDB leveraging capital markets for SMEs financing in Rwanda (2012) Most SMEs remain small in size and they largely depend on internally generated equity and borrowing.

Therefore financial institutions consider SMEs to be highly risky and the transaction costs of lending to these institution are considered to be high, particularly quantity business development services have recommended and introduced, regularization and advancement in support of using capital markets for financing to SMEs among others have been highly considered. Nevertheless WCM impacts on SMEs as a turnaround tool to formation of high profits and revenue in Rwanda. Small businesses are particularly important for bringing innovative products or techniques to the market. However they are perceived to lack adequate financing nevertheless the available finances used to run the business (working capital) lack proper management of all the components of working capital in their relations for a profitable enterprise.

Therefore it is in this regard that proper management of working capital plays abig role for a profitable entreprise. Working capital management for any growing business is a crucial factor where by its management at all levels leads to the growth or down fall of an entreprise.

In this regards, this research seeks to analyze the impact of working capital management on profitability of SMEs in Rwanda.

## **1.2 Statement of the problem**

Working capital management involves the set control of the inflow and outflow of cash, as for the entire management of all activities in an enterprise. Capital being the initial value that upholds the success of an enterprise. There is need to acknowledge the component relationship of working capital management as the impact to profitability in SMEs.

Working capital management relates to profitability and this leads to development of an SME, growing capital, and opening up of new other branches hence business booming. For a profitable enterprise working capital management is the major technique to apply because it lines with the management of cash, inventory, payables and receivables.

However profits can only be analyzed when working capital concepts are fully managed in SMEs. Initially if cash, inventory, payables and receivables are not fully managed profits cannot be gained; results to failure, growing debts, accumulating expenditures and loss of assets. This implies that there would be an issue of high cash outflows compared to cash inflows hence closure of the enterprise with heavy debts.

Therefore what is the level of managing all the components of managing capital in SMEs? How does each relate to the other? What is the correlation of their relationship impact the success of the business entity? This indicates that there is a gap for appropriate management of capital in SMEs, what can be done to enlance working capital management and all its components in growing SMEs?

.The research study will be carried out from a selected SME in Rwanda, How the concept of working capital management is applied, whether there are profits or in particular if this SME is successful or not, their level of managing WC and appropriate measures and recommendation for a profitable enterprise in Rwanda.



### 1.3 Objectives of the study

#### 1.3.1 General objective

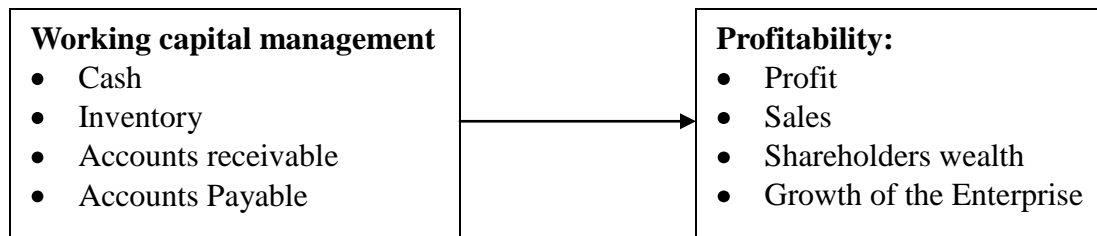
This study aims at analyzing how working capital management affects the profitability of SMEs.

#### 1.3.2 Specific objectives

To carry out the study, the following specific objectives will be achieved:

1. To analyze the impact of working capital management on profitability in SMEs
2. To find out challenges encountered by SMEs in working capital management
3. To formulate recommendations on improvement of working capital management in SMES

**Figure 1:** Theoretical Framework of Working capital management and Profitability.



The theoretical frame work; Working capital management rolls directly to the control set ups and systems of proper accounting measures of managing all activities in business of which include managing components, cash, inventory, accounts receivables and accounts payables of which lead to the growth rate in sales in a business, gaining of profits and also improve the rate of shareholders wealth as well as growth of the enterprise.

Profitability for that matter depends on the level of working capital management measures put in place of an enterprise. Profitability in business is one of the major targets in business.

### 1.4 Research questions

The research questions for which the study will seek to answer are:

What is the impact of the working capital management on profitability of SMEs in Rwanda?

What are the challenges encountered by SMEs in managing their working capital?

## **1.5 Research hypothesis**

H1: Working capital management has a significant impact on profitability of SMEs in Rwanda.

H2: Challenges encountered by SMEs in managing their working capital

## **1.6 Scope of the study**

This study will be taken from SME around Kigali through analyzing their working capital management in relation to the profitability of their business. This scope is initially selected to further research whether in the main capital where market is available and more booming compared to other districts, population sizes among others if working capital concepts are managed.

## **1.7 Significance of the study**

In Rwanda, the concept of enterprising is growing, this implies that less is known and a lot needs to be disclosed in the Rwandan context. This study will contribute to the extension of the existing knowledge and literature related to the field of the study. It will be done by means of investigation into small business managers' level of managing the available capital and the level of profitability in SMEs so as to establish the relationship between the two. Policy makers and decision makers (government) in financing small businesses or growing enterprises will also rely on findings.

## **1.8 Organization of the study**

The thesis will be organized as follows:

**Chapter 1** will contain the background, the statement to the problem, objectives, research questions, hypothesis, the significance, the scope, limitations and the organization of the study.

**Chapter 2** will deal with relevant theories related to the topic of the study.

**Chapter 3** will lay out the appropriate methodology that will be followed during the study.

**Chapter 4** will use qualitative and quantitative techniques to analyze collected data and interpret the results thereof.

**Chapter 5** the consistency of the results will examine from the literature review and methodology.

## CHAPTER TWO: LITERATURE REVIEW

### 2.1. Introduction

In this chapter, this research reviews literature relates to management of working capital in small and medium enterprise and the level of its management in relation to their business financiers.

#### 2.1.1. Working Capital Management

Osisioma (1997) explains working capital management as the regulation, adjustment, and control of the balance of current assets and current liabilities of a firm in that maturing obligation are met, and the fixed assets are properly serviced. In order to manage working capital efficiently, there must exist two elements as necessary components and desirable quantities.

Shin and Soenen (1998), points out that a firms working capital results from the time lag between the expenditure for the purchase of raw materials and the collection from sale of finished goods.

According to their submission, this entails various areas of company's operational management that includes receivables, inventories management, management and use of trade credit.

Also Ross (2008) adds that, these three components and how they are managed, determines some of a company's most vital financial ratios, e.g. the „inventory turnover, the „average collection period and the „quick ratio.

Hence, (García and Martínez, 2008) assert that, working capital management reflects a firms short-term financial performance. Given that current assets usually account for more than half of a company's total assets and owing to the fact that this investment tends to be relatively volatile the management of working capital deserves special attention.

Although working capital management is the concern of all firms, it is the small firms that should address this issue more seriously. Given their vulnerability to a fluctuation in the level of working capital, they cannot afford to starve of cash. The study undertaken by Peel *et al.*, (2000) revealed that small firms tend to have a relatively high proportion of current assets, less liquidity, exhibit volatile cash flows, and a high reliance on short-term debt.

### **2.1.2. Small and Medium Enterprises**

CAPMER (2004) notes that, SMEs are businesses which are owned, controlled, and managed by family members with an annual turnover of 0.3 to 12 million Rwandan Francs. Likewise they employ workers ranging from 3 to 30, who are semi to skilled laborers owning capital assets of at least 50 million Rwandan Francs (MINICOM, 2007).

### **2.1.3. Profitability**

After providing operational definitions of key concepts and a brief review of working capital, profitability of SMEs review is done under the objectives of the study and focuses mainly on small and medium enterprises working capital management, level of involvement of financing institutions and other government projects and their relationship with small and medium enterprises under the study in operation. Documentation such as policy documents, reports, library (books, magazines, scholarly publication and seminar papers,) and surfing of relevant websites will facilitate the review.

## **2.2. Concept of Working Capital**

### **2.2.1. Working Capital**

Working capital is the capital which is needed to meet day to-day transactions of the business concern in that this may cross working capital and networking capital. Working capital consists of various components of current assets like inventories, bills, receivables, debtors, cash and bank balances and prepaid expenses.

Brealey Myers Allen (2011) states that management of short-term assets and Liabilities are collectively known as Working capital. Net working Capital is equal to current assets less current liabilities.

Hillier and Ross (2010) also says, Net working Capital is current assets minus currents liabilities, Net working capital is positive when current assets are greater than current liabilities. This implies that the cash that will become available over some period will be greater than the cash that must be paid out.

Paramasivan and Subramanian (2009) states that working capital is needed to meet a number of purposes that include: Purchase of raw materials, Payment of wages to workers, Payment of day to day expenses, Maintenance expenditure etc.

### 2.2.2. Position of Capital

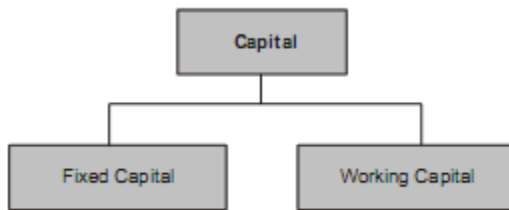
Working Capital in many different ways;

Working capital means Current Assets.

The sum of current assets is the working capital of a business

Working capital refers to firm's investments in short-term assets, cash, short-term securities, accounts receivables and inventories.

**Figure 2:** Showing the Capital of the Business Frank and Fabozzi (2003)



### 2.2.3. Capital of the Business

Frank and Fabozzi (2003) stated that working capital is the capital managers can immediately put to work to generate the benefits of capital investment. He further defines working capital as current capital or circulating capital. Firms invest in current assets for the same reason they invest in long term, capital assets, to maximize owner's wealth.

Hiller, Ross and Westerfield (2010) working capital is referred to as net working capital and an important part of any capital budget analysis.

An investment in net working capital arises whenever;

- a) Inventory is purchased
- b) Cash is kept in the project as a buffer against unexpected expenditure
- c) Credit sales are made, generating trade receivables rather than cash
- d) Investment in net working capital is reduced by credit purchases, which generate trade payables.

Investment in net working capital represents cash outflow because cash generated elsewhere in the firm is tied up in the project.

#### 2.2.4. Working capital can be classified

Working capital is classified with the help of two important concepts,

- a) **Grossing Working capital** is the general that determines the working capital, this is capital invested in total current assets of the business concern.

**Equation 1:** Grossing Working capital

$$\text{GWC} = \text{CA}$$

- b) **Net Working capital** is the specific concept that determines both current assets and current liabilities of the concern.

Net working capital is the excess of current assets over the current liabilities of the concern during a particular period.

As for Paramasivan and Subramamian (2009) if the current assets accessed the current liabilities it is said to be positive working capital, it is reverse, it is said to be negative working capital.

Working capital is termed as part of capital which is needed to meet day to day requirement of the business concern. For example it required to pay off creditors, salary paid to workers, purchase of raw materials and so and so forth. It consists of recurring in nature and it can easily be converted into cash hence termed as short- term capital.

The amount tied up in working capital is equal to the value of raw materials, work in progress, finished goods, inventories and account receivables and less accounts payables. Normally the size of this net figure has a direct effect on the liquidity and profitability of an enterprise. (ACCA 2010)

**Table 1: Key Current Assets and Liabilities.**

<b>Current Assets</b>	<b>Current Liabilities</b>
Cash	Trade accounts payable
Inventory of raw materials	Taxation Payable
Inventory of work in progress	Dividends payment due
Inventory of finished goods	Short-term loans
Amounts receivable from accounts receivable	Long term loans maturing within one year
Marketable securities	Lease rental due within one year
<b>Net Working capital of a business is equal to currents assets less current liabilities</b>	

As stated from (ACCA 2010)

### 2.2.5. Working Capital Characteristics of Different Business

Different businesses normally have different working capital characteristics and there are three main aspects to these differences;

- a) Holding inventory (from their purchase from external suppliers through the production and warehousing of finished goods, up to the time of sale)
- b) Taking time to pay supplier and other accounts payable
- c) Allowing customers (accounts receivable) time to pay.

Management of accounts receivable, accounts payable and inventory deals with specific techniques that include overall credit control policies. (Should the business offer credit, if so, how much and to whom) and ensuring amounts owned are not excessive. Whistling working through to manage available capital, one tries not to think accounts receivable and accounts payable in isolation; they are part of working capital, each element will have a knock-on effects when there is a change in another. For example, an increase in the credit period taken by accounts receivable will reduce the amount of cash available to pay accounts payable and invest in inventory and this will affect the success of the business positively or negatively (make a profit or loss).

### 2.2.6. Determination of Working Capital

Paramasivan and Subramanian (2009) there are factors that determine working capital, Working capital requirements depends on various factors which determine working capital requirement and these include;

**Nature of the Business:** working capital of a business depends upon the nature of the business. If the business concerns follow rigid credit policy and sells goods only for cash, they can maintain lesser amount of working capital.

**Production cycle:** working capital of a business depends upon the length of the production cycle. If the production cycle length is small, they need to maintain lesser amount of working capital, if it is not, they have to maintain large amount of working capital.

**Business cycle:** working capital here also depends upon the fluctuation that lead to cyclical and seasonal changes in the business condition and it will affect the requirements of the working capital. When condition are booming, Working Capital requirement is larger and in the depression condition, requirement of working capital will reduce. Better business results lead to increase the working capital requirements.

**Production cycle;** this is one of the factors that affect working capital requirement of the business concern. When a company maintains the production policy, there is a need of regular working capital. If the production policy of the company depends upon the situation or condition, working capital requirements will depend upon the conditions laid down by the company.

**Credit policy;** credit policy of sales and purchases also affect the working capital of the business concern. When a company maintains liberal credit policy to collect payments from its customers, they have to maintain more working capital and if the company pays the dues on the last date it will create the cash maintenance in hand and bank.

**Growth and Expansion;** During growth and expansion time of the business, working capital requirements are higher due to the need of additional working capital and incurs some extra expenses at the initial stages.

**Availability of raw materials;** working capital also depends largely on the availability of raw materials, raw materials are the basic components of the production process. If raw materials are not available it leads to production stoppage.

**Earning capacity;** when the business consists of higher level of earning capacity, they can generate more working capital with the help of cash from operation.

### **2.2.7. Approaches to Working Capital Management**

Management of working capital and its main objective is to manage current assets and current liabilities effectively and to maintain adequate amount of both current assets and current liabilities.

Normally working capital consists of various compositions of current assets such as inventories, bills, receivables, debtors, cash and bank balances and prepaid expenses. Paramasivan and Subramanian (2009) referred to management of working capital with the components of working capital like cash, bank balance inventory, receivables, payables, overdraft and short-term loans.

Working Capital Management being one of the most important parts of financial management it is concerned with the short – term Finance of the business concern which is closely related trade between profitability and Liquidity.

The study of working capital management is not only an important part of financial management, but also are overall management of the business concern Paramasivan and Subramanian (2009).

When it comes to business concern one either makes profit or loss therefore for one to have profits, control setups of managing working capital appropriately leads to the profitability and



success of an enterprise. Working capital is normally described as the capital which is not fixed but the more common uses of the working capital is to consider it as the difference between the book value of current assets and current liabilities.

Working capital management provides simple terms as,

1. The amount of capital needed to carry on a business.
2. Accounting. Current assets – Current liabilities.
3. Liquid capital assets as distinguished from fixed capital assets.

Working capital management ensures a company has sufficient cash flow in order to meet its short- term debt obligation and operating expenses.

Working capital measure both a company`s efficiency and its short-term financial health. The working capital ratio is calculated as; positive working capital means that the company is able to pay off its short-term liabilities. Negative working capital means that a company currently is unable to meet its short-term liabilities with its current assets (cash, accounts receivables and inventory) (Michael & Nichols, 2007).

If a company`s current assets does not exceed its current liabilities, then it may run into trouble paying back creditors in short term. The worst case scenario is bankruptcy. A declining working capital ratio over a long time period could also be a red flag that warrants further analysis. For example it could be that the company`s sale volume are decreasing and as a result, its accounts receivables number continues to get smaller and smaller (Michael & Nichols, 2007).

Working Capital also gives investor an idea of company`s underlying operational efficiency. Money that is tied up in inventory or money that customers still owe to the company cannot be used to pay off any of the company`s obligation, if a company is not operating in the most efficient manner (slow collection), it will show up an decrease in the working capital. This can be seen by comparing the working capital from one period to another , slow collection may signal underlying problem in the company`s operations.

As for Brealey Myers (2011) working capital management tends to focus on the four principal types of current assets that include; management of inventory, accounts receivable, cash balances and marketable securities.

### 2.2.7.1. Cash management

According to David Hillier, Ross, Jeffery and Jaffe (2010) cash is one of the most important issues a firm needs to consider. Even though a firm is growing and has excellent performance, if it runs out of cash then it cannot survive. David states that ` the economic definition of cash includes, currency, savings account deposits at bank and undeposited cheques. However, cash management is concerned more with how to minimize cash balances by collecting and disbursing cash effectively.

Paramasivan and Subramanian (2009) Cash is one of the most important and key parts of current assets. Cash is the money which the business concern can disburse immediately without any restrictions. Cash is normally referred to, in terms of coins, currency, cheques held by business concern and balance in its bank accounts. Therefore its management means the control set up of the inflow and the outflow with the concerns as planned.

As for Fabozzi (2003) cash flows out of the firm as it pays for goods and services it purchases from others and in other wards cash flows into the firm as customers pay for the goods and services they purchase. Therefore cash management refers to the management of cash inflows and outflows as well stock of cash on hand.

Brealey Myers (2011) cash management evolves the use of two techniques. Managing cash flow constitutes two important parts;

- a) Speed cash collection
- b) Slowing disbursement

Brealey (2011) states that, ` Good cash management implies some degree of centralization. ` Cash management involves the use models used in finance which are called cash management models. There are three popular finance models which include;

- a. **Baumal model**; its objective is to determine the minimum cost amount of cash conversion and the lost opportunity cost.

**Equation 2:** Total conversion cost per period can calculated by the use the formula,

$$t = \frac{Tb}{C}$$

Where; T = Total transaction cash needs for the period

c = Cost per conversion

b = Value of marketable securities

- b. **Miller-Orr model;** as suggested by Miller- Orr this model is to determine the optimum cash balances level which minimizes the cost of management of cash and this can be calculated with help of a formula;

**Equation 3:** Miller-Orr model

$$c = \frac{bE + (N)}{t} + iE(M)$$

Where;

C = total cost of cash management

b = fixed cost per conversion

E (M) = expected average daily cash balances

E (N) = expected number of conversion

t = numbers of days in the period

I = lost opportunity cost

- c. **Orgler`s Model;** this model provides for the integration of cash management with production and other aspects of the business concern. Orgler`s model is formulated basing on the set of objectives of the firm and specifying the set constrains facing the firm. Therefore these models can be used in the management cash to determine amount of funds to transfer in and out of cash.

The connection between investment of working capital and cash can be illustrated by means of cash operating. This cash operating cycle is the period of time which elapses between the point at which cash begins to be expended on the production of the product and the collection of the cash from a purchaser (ACCA 2010).

The cash operating cycle in a manufacturing business equals;

- The average time raw materials remain in inventory
- Less the period of credit taken from the suppliers
- Plus the time taken to produce the goods
- Plus the time taken by customers to pay for the goods.

If the turnover period for inventories and accounts receivables lengthen or the payment period of accounts payable shortens then the operating cycle will lengthen and the investment in working capital will increase (ACCA 2010).

### 2.2.7.2. Inventory Management

As for Frank Fabozzi (2003), stock of physical goods for eventual sale, Inventory is raw materials, work –in- process and finished goods available for sale. There are several reasons for holding inventory but the most obvious one is that if you sell a product you can't transact business out inventory.<sup>12</sup>

Brealey (2011) evaluates that to do business; firms need to reserve raw materials, work in process and finished goods. Many times inventories are expensive to store and they tie up capital, inventory management involves trade-off between the advantages of holding large inventories and the costs. Most firms keep inventories of raw materials, work in process or finished goods awaiting sale and shipment but many are not obliged to do so. For example, they can buy materials day by day in regards to the need but they will pay higher prices for ordering in small lots, and they would risk production delays if the materials are not delivered on time. This can be avoided by ordering more than the firm`s immediate needs. In addition to this firms similarly can do away with inventories of finished goods by producing only what they expect to sell immediately or the next day.

According to Brealey (2011) On the other hand this can also be a dangerous strategy, a small inventory of finished may mean shorter and more costly production runs, and it may not be sufficient to meet an unexpected increase in demand.

There are also costs to holding inventories that must be set against the benefits, money tied up in inventories does not earn interest, storage and insurance must be paid for, and there may be risk of spillage or obsolescence.

Therefore firms need to strike a sensible balance between the benefits of holding inventory and the costs. Most companies carry any sort of inventory even if there are inventories of consumable such as stationary. For a manufacturing business, inventories in form of raw materials, work in progress and finished goods may account to a substantial proportion of the total assets of the business.

There are scientific attempts of controlling inventories that may be analyzed include;

The economic order quantity (**EOQ**) model can be used to decide the optimum order size for inventories which will minimize the costs of ordering and holding inventories.

**If discounts or bulk accounts** are available, it may be cheaper to buy inventories in large order sizes so as to obtain the discounts.

Uncertainty in the demand of inventories and /in the supply lead time may lead a company to decide to hold **buffer inventories** in order to reduce or eliminate the risk of stock out( running out of inventories). Uncertainties in demand and lead times taken to fulfill orders mean that inventory will be ordered once it reaches the re-order level. (Re-order level = maximum usage x minimum lead time)

**Just- in- time (JIT) Procurement**, some manufacturing companies sought to reduce their inventories of raw materials and components to as low a level as possible. Just in time procurement is term which describes a policy of obtaining goods from suppliers at a latest possible time (ie when they are needed) and so avoiding the need to carry any materials or components inventory. (ACCA 2010)

### **2.2.7.3. Accounts Receivables**

Firms allow customers to pay for goods and services at a later date, it creates accounts receivables and this implies granting credit which is referred to as trade credit. Trade credit is granted when a customer buys goods or services.

According to Frank J. Fabozzi (2003) Firms extend credit to customers to help stimulate sales. When a firm extends credit to its customers, it does so to encourage sales of its goods and services and the most direct benefit is the profit on increased sales.

When a firm has a variable cost margin (that is, variable costs/sales) of 80%, then increasing sales by \$100,000 increases profit before taxes by \$200,000. This is illustrated in a way that any credit has got a cost where by a firm granting credit is forgoing the use funds for a period which creates an opportunity cost associated with giving credit.

As for Brealey Myers (2011) accounts receivables, companies frequently sell goods and services on credit so that it may be weeks or even months before the company is paid. These unpaid bills are shown in the accounts receivables.

This normally involves terms of sale where by not all sales involve credit, like if one supplies goods at a wide variety of irregular customers you may demand cash on delivery (COD) and if your product is custom-designed, it may be sensible to ask for cash before delivery (CBD) or to ask for progress payments as the work is carried out.

According to David Hillier, Ross, Jeffery and Jaffe (2010) when it comes to credit management there are terms of sale developed which are referred to as the period for which credit is granted, the cash discount, and the type of credit instrument. When sales are seasonal a firm might use seasonal dating.

A trade or account receivable is created when credit is granted; a trade or account payable is created when a firm receives credit. And the term `trade credit` refers to credit granted to other firms.

Accounts receivable normally holds a period which is known as Accounts receivable payment period or accounts receivable days.

**Equation 4:** Accounts receivable period payment period

$$\text{Accounts receivable period payment period} = \frac{\text{Trade receivables}}{\text{Credit sales turnover}} * 365 \text{ days ...}$$

The trade accounts receivable are not the total figures of accounts receivables in the statement of financial position, the trade accounts receivable will be itemized in an analysis of the total accounts receivable in a note to the accounts. (ACCA 2010)

#### **2.2.7.4. Marketable Securities**

Marketable securities are referred to as substitute for cash.

This can be illustrated as a process where cash management deals with the storing of excess cash in an asset that earns a return such as marketable securities as it concerns Fabozzi (2003).

Models of cash management assume that managers stash cash they don't need right away into marketable securities and they later convert them into cash as needed.

Marketable securities are temporary investment. For instance, if short term borrowing is not possible, or is costly marketable securities can be used. Buy marketable securities if cash flows exceed outflows. Sell marketable securities when cash inflows are less than outflows.

Marketable securities are stores for cash that is not needed immediately. There are types of marketable securities including; money marketable security that have little purchasing power risk according to Fabozzi and they also have less interest rate risk. Among others we have certificate of deposits, commercial paper, Eurodollar deposits etc.

Brealey (2011) states that many money –market investment are pure discount securities, and this implies they don't pay interest. The return difference between the amount you pay and the amount you receive at maturity. Among others he illustrates the international securities.

Securities that cannot be converted so quickly and cheaply into cash need to offer relatively high yields.

### **2.3.Profitability Concept.**

Profitability is the degree of uncertainty of that future economic benefits associated with an item will flow to or from the entity and this is normally judged on the characteristics of the entity`s environment and the evidence available when financial statements are prepared.( ACCA 2010)

The profitability concept depends on the state growth of a firm. Paramasivan (2009) says that `profitability of the business concern purely depends on the effectiveness and utilization of the available funds.

As for Paramasivan and Subramanian (2009) profitable position of a firm is when dividend decision is build on profitable position of the business concern. That is when the firm earns more profits and it can distribute more dividends to its shareholders.

High growth rate also indicates profitability of a firm and can therefore disburse dividends between its shareholders accordingly.

#### **2.3.1. Profitability measures**

According to Brealey Myers (2011) profitability should be measured in principle. The easiness is to compute the true, or economic, rate of return for a common stock that is continuously traded. It needs recording cash receipts (dividends) for the year, add the change in price over the year, and divide by the beginning price.

**Equation 5:** Rate of return

$$\begin{aligned} \text{Rate of return} &= \frac{\text{cash receipts} + \text{change in price}}{\text{Begin in price}} \\ &= \frac{P_1 - P_0}{P_0} \end{aligned}$$

As for Hiller and Ross (2010) Profitability is best-known and more widely used of all financial ratios. There are intended to measure how effectively the firm uses its assets, and how efficiently the firm manages its operations. This focuses normally on the net income.

He further goes on to say that profitability is determined in three measures, profit margin, return on assets and return on Equity. Companies pay a great deal of attention to their profit margins.

**Equation 6:** Profit Margin

$$\text{Profit margin} = \frac{\text{Net income}}{\text{Sales}}$$

A relatively high profit margin according to Hiller and Ross (2010) is obviously desirable and this corresponds to low expense ratios relative to sale. Lowering sales price usually increase unit volume but will normally go up or down so the fact that margins are smaller isn't real bad. Profit margins are very different for different industries.

#### **2.3.1.1. Return on Assets**

Return Assets (ROA) is a measure of profit per asset value.

**Equation 7:** Return on Assets

$$\text{Return on Assets} = \frac{\text{Net income}}{\text{Total assets}}$$

#### **2.3.1.2. Return on Equity**

Return on equity (ROE) is a measure of how the shareholder fared during the year. Benefiting shareholders is normally the target; ROE is in an accounting sense the true bottom-line measure of performance.

**Equation 8:** Return on Equity

$$ROE = \frac{\text{Net income}}{\text{Total equity}}$$

The above measures should properly be called return on book assets and return on book equity. According to Frank J. Fabozzi (2003) to assess a firm's operating performance then one wants to know if it is applying its assets in an efficient and profitable manner. When you assess a firm's financial condition, you want analyze if the firm is profitable. This can be through use of financial ratios by evaluating the aspects of operating performance and financial condition these include;

#### **2.3.1.3. Return on investment**

Return on investment ratios compares measures of benefits, such as earnings or net incomes with the measures of investment. If you want to evaluate firm's operation process of its assets,



calculate the return on assets known as basic earning power ratio as the ration of earnings before interests and taxes (EBIT) which is normally termed as operating earnings, to total assets;

**Equation 9:** Basic Earning Power

$$\text{Basic Earning Power} = \frac{\text{Earnings before interest and taxes}}{\text{Total Assets}}$$

#### **2.3.1.3.1. Liquidity**

Liquidity reflects the ability of the firm to meet its short term obligations using those assets that are most readily converted into cash. Assets that are likely to be converted into cash in short period are known as liquid assets, which are listed in the financial statement as currents assets which are referred to as working capital.

#### **2.3.1.3.2. Profitability**

Profitability ratio helps to gauge how well a firm is managing its expenses. Profit margin ratios compare components of incomes with sales. This tends normally to focus on the gross profit (sales less cost of goods sold) comparing gross profit with sales produces the gross profit margin

**Equation 10:** Gross profit margin

$$\text{Gross profit margin} = \frac{\text{Sales} - \text{cost of goods sold}}{\text{Sales}}$$

Gross profit margin and operating profit margin reflect a company`s operating performances but normally do not consider how these operations were financed, to evaluate both, it needs to compare the net income ( that is earnings after deducting interest and taxes) with sales and obtain net profit margins.

**Equation 11:** Net profit margin

$$\text{Net profit margin} = \frac{\text{Net income}}{\text{Sales}}$$

#### **2.3.1.3.3. Activity**

Activity for most parts turn over ratios can be used to evaluated the benefits produced by specific assets like inventory, accounts receivables or to evaluate the benefits produced by the totality of the firm`s assets.

#### **2.3.1.3.4. Financial Leverage**

Refers to an increased means of accomplishing some purpose. In Finance there are ratios that assess the level of financial risk when a firm is intending to seek finance its assets either by equity or debt. Financing a firm with debt legally obligates to pay by interest and to repay the principal as promised and with equity it is different but obligates dividends to be paid after the discretion of the board of director, there are always some risk encountered which are termed as financial risks.

Financial risks are associated with the firm`s ability to satisfy its debt obligation often measured to which extent debt financing is used relative to equity and this leads to the use of financial leverage.

There are two types of leverages;

1. Component percentages compare a firm`s debt with either its total capital (debt plus equity) or its equity capital.
2. Coverage ratios compare a firm`s ability to satisfy fixed financing obligations like interest, principle repayment or lease payment.

#### **2.4. Impact of Working Capital Management on Profitability**

The results of the research show that there is a significant impact of the working capital management on profitability of an SME, Therefore, managers may enhance the profitability of their enterprises by minimizing the inventory turnover, account receivables ratio and by decreasing creditors turnover ratios, there is no significant effect of increasing or decreasing the current ratio on profitability. So, the results indicate that through proper working capital management SMEs can increase profitability.

An enterprise ought to optimize its liquidity and profitability while conducting its daily business operations. Working Capital Management contains proportion balance of working capital European Scientific Journal January 2014 edition vol.10, No 1 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431 375 components i.e. – debtors, inventory and payables and the use of cash effectively for daily business operations. Proper optimization of working capital balance means minimizing the working capital requirement and realizing maximum possible revenues Ganesan, (2007). There is a strong linear relationship between profitability of the firm and its working capital efficiency. The ability of an enterprise to earn profit can be referred to as the profitability of its business. Profit is determined by deducting expenses from the revenue incurred in generating that revenue. The amount of profit can be a good measure of the performance of a growing enterprise, so we can use profitability as a measure of the financial performance of a business.

Effective working capital management is very important due to its significant effect on profitability of an enterprise and thus the existence of that particular business in the market. If it minimizes its investment in current assets, the resulting funds can be invested in value creating profitable projects, so it can increase the firm's growth opportunities and shareholders return.

However, management can also face liquidity problems due to underinvestment in working capital. The ability of financial managers to effectively and efficiently manage their receivables, inventories, and payables has a significant impact on the success of the business and on profitability as well. The study attempts to enhance the knowledge of companies by identifying the ways that SMEs manage their working capital in order to increase profitability.

Research question: impact of working capital on profitability, there is significant relationship between profitability (ROA) and working capital management (DTO,CTO, ITO, CR). IB-Key terms and their definitions Return on assets ratio (ROA): Return on assets is a ratio of net income (annual) divided by the total assets (average) of a business during its financial year. It explains the performance and progress of the business in utilizing its resources to generate the income. It is a profitability ratio. The formula to calculate return on assets is total annual net income divided by the average total assets during a financial year. Debtors turnover ratio (DTO): It shows how many times enterprises collect its account receivable. High ratio increases the liquidity of the company. It calculates by dividing net credit sales by average account receivable. Creditors turnover ratio (CTO): Accounts payable turnover ratio shows how much credit worthy is the business.

Inventory turnover ratio (ITO): Inventory turnover ratio may vary significantly from business to business. A high ratio means fast moving inventories and a low ratio means slow moving or obsolete inventories in hand. A low ratio can also be the result of maintaining excessive amount of inventory needlessly. Maintaining excessive inventories means tying up the capital that could be used in other profitable operations. Therefore, the formula for calculating inventory turnover ratio is sales divided by inventory. Current Ratio: Current ratio is the ratio of current assets of a business to its current liabilities. It is the most commonly used method for testing the liquidity of a business and measures the ability of a business to repay its short term debts. Hence, the formula for calculating current ratio is current assets divided by current liabilities of a particular financial year. Current ratio should be greater than 1. Current ratio below 1 shows critical liquidity problems faced by the business because it shows that the total amount of current liabilities are more than the total amount of current assets and that the business is not in the position to pay its short term debts. Abnormally, high current ratio may be the result of underutilized resources in the business.

## **2.5.Challenges faced by Small and Medium Enterprises in Rwanda.**

There is a high rate of growth in SMEs never the less there are still some hindrances to the desired level especially in many low developed centers.

Due to different factor in and around these growing SMEs, they are faced with some challenges that include;

- a. Limited knowledge about SME management and its daily operations of their account, the entire SMEs business.
- b. Majority of the growing SMEs, ignore the procedures of working papers, documentation of key issues to access loans from banks that giving them loans for their businesses.
- c. Poor presentations of their daily operation and flow up of the key requirements, how to manage monthly cash flows, maintain accurate book of accounts for the entire business that is continuously maintained.
- d. There is the issue of finding customers for the particular business that affects the growth of the SMEs, for development.
- e. There is high increasing rate of competition in the growth of SMEs today and high interest rate based of insufficient capital.
- f. Due to the issue of increase of competition, there normally face the challenge of access to finances or capital hence failure to development.
- g. In the same range majority of the SMEs that access the finances face the challenge of managing loans given and this leads to failure of the business.
- h. SMEs growth on another point are usually faced with the challenge of where by their lack awareness of what business to deal with, particular goods or services to do that's indicates the availability of customers.

## **CHAPTER THREE: METHODOLOGY**

### **3.1. Introduction**

The methodology applied for this research is through financial data collections, measurement of variables and data analysis for financial statements and balance sheet period 2009 2012, from Nyiragarama enterprise for the study.

### **3.2. Research design**

A cross sectional design is used together with the research design to answer the research questions. In order to obtain reliable and representative study results within the limited time, this study is designed as the secondary data in nature. The survey was designed mainly through the financial managers of small and medium enterprise including managers of the supporting financial institutions like banks, microfinance and supporting government Institutions.

### **3.3. Study Population**

The population was consisted of manufacturing small and medium enterprise operating from most around Kigali. Nyiragarama enterprise is in different sectors including manufacturing, Agricultures, furniture among others in Rwanda.

### **3.4. Research instrument**

The researcher will use an interview and analyzing documentary review as instruments of data collection. Interview will be designed for Rwandan financing Institutions, government projects, managers and owners of SMEs including other association authorities.

### **3.5. Data gathering procedures**

During the research period, the researcher will seek for the authorization to conduct study from respondents' institutions and thereafter, contacts will be made and interviews will be conducted for data collection. After having collected data, the researcher will proceed with editing, coding and tabulation for better data analysis which will end up with writing and defending final report.

### **3.6. Administration of the Interviews and Financial Records**

Before the administration the researcher will seek a recommendation letter from UR/Huye Campus and an authorization to conduct the study from the respondents' institutions. Then the researcher will select research assistant who will assist in administering what will be provided to them. Thereafter, the researcher and his assistants will make retrieval of the information given as required by the supervisor.

### **3.7. Data analysis**

Data analysis will be done using financial records after collecting data, the researcher will organize all financial records and interview sets for validation and checking purpose. Questions will be coded and data entered into computer system. Processed data will be stored in form of tables and charts from which meaningful information will be produced.

### **3.8. Ethical consideration**

During the research period, the researcher will seek the authorization to conduct the study from respondents' institutions and the consent of the respondents. The researcher has no intention whatsoever to reveal the source of confidential information that will be obtained through the research. The researcher will be guided by integrity, respect towards respondents, humility and neutrality during the research by ensuring the confidentiality and neutrality to respondents. In order to be available after the research for whoever interested by the findings the researcher will provide required contacts.

## **CHAPTER FOUR: DATA ANALYSIS DISCUSSIONS AND INTERPRETATION**

### **4.1. Introduction**

This chapter presents a comprehensive analysis and the discussions of the results as obtained from various interviews held with a few different business sectors in Rwanda. The design of the analysis it elaborates the summarized answers of the study interviewed questions and financial records analyzed that were stated before in chapter one. Each research question will be answered and discussed by the results obtained from the data analysis appropriate for each question.

#### **4.1.1. URWIBUTSO Enterprise's Historical and Evolution**

URWIBUTSO Enterprise started in 1983 by a young and dynamic Rwandan man with one employee as compared to 421 employees today. It uses local human capacity and resources to develop business that benefits over 3000 families. URWIBUTSO means something to remember. It started with a small shop located in Ruhengeri or current Musanze and the bakery started working in 1985 at Nyirangarama.

At first SINA Gerard offered free beef stews and bread to travelers and drivers with the aim of allowing them to taste his products. Later in 1993 after 10 years in business experience, SINA Gerard legally registered his business under the name of URWIBUTSO delivered from people who taste his beignet or amandazi.



## **4.2. Analysis of the financial performance of Urwibutso enterprise**

Analysis of the financial performance of urwibutso enterprise

In 1996, the enterprise diversified its activity portfolio and is oriented towards agro pastoral activities (passion fruits, banana and pineapple, red and yellow pepper, cattle farming, pig). In 1998, as producer of great quantity of fruits particularly passion fruit, commercialized at a weak price on national market, the producer has taken a decision of introducing his proper little unit of production of commercialized juice under the mark Agashya.

In 1999, the carpentry workshop opened in URWIBUTSO with the major aim of developing skills of the local people engaged in carpentry. Enterprise URWIBUTSO provided trainings to over 200 workers in carpentry workshop. Today carpentry workshop competes with other companies once there is bidding for any market nationally and many occasions, they have been successful.

In 2002, the enterprise began the production of banana beer called Akarusho and the condition of natural honey. In 2003, the enterprise introduced on the market red and yellow pepper called Akabanga. In 2004, the enterprise began the construction and public work activities. In 2006, Mr. SINA Gerard received award in Frankfurt.

In 2007, the business of URWIBUTSO Enterprise was certified by the International Standard Organization (ISO) hinged on achievement of adding value to local raw agricultural products such as fruits and vegetables.

The major focus however, was to produce and process organic fruit and vegetable product in Rwanda.

### **4.2.1. Analysis of Products and Sales of Urwibutso Enterprise.**

In this section we are making an analysis on the products and their sales at Urwibutso Enterprise. Urwibutso has different products which are: AKABANGA, AGASHYA, AKARUSHO, RESTAURANT SERVICE, BAKERY, and other Activities. In the following lines we briefly present performance of these products, in terms of sales:

#### 4.2.2. Evolution of Sales of Akabanga Pepper from 2009 to 2012.

**Table 2:** Sales evolution of Akabanga Pepper product, during the period 2009-2012 Rulindo, 2012,

Years	Sales in	Evolution in percentage
2009	153,848	
2010	199,900	29.9%
2011	221,234	11.6%
2012	240,146	8.5%

**Source: Enterprise Urwibutso, Sales of the Akabanga products 2009-2012**

According to the data presented in the table 4 above, sales of Akabanga have evolved under the study time period, from 2009 to 2010 there was an increase of 46,052,000Rwf representing 29.9% of increase. From 2010 to 2011 Akabanga sales have varied 21,334,000Rwf, representing 11.6% of increase and lastly from 2010 to 2011, the enterprise has gained increased revenue from the sales of Akabanga product which were of 18,912,000Rwf, representing 8.5%. From the percentage obtained, it is showed that from 2009 to 2010, Urwibutso gained more income from the sales of Akabanga compared to other years. According to views from interviews, Sales of Urwibutso have been increased due to the promotions through media (TV, Radio, News papers, etc.), also, the quality of.

This product was the main cause of the increase and hence, products were also used by many restaurants, hotels, bars and households.

#### 4.2.3. Evolution of sales of Agashya Juice from 2009 to 2012.

**Table 3: Table showing the Evolution of sales of Agashya Juice from 2009 to 2012**

YEARS	SALES (frws 000)	EVOLUTION IN PERCENTAGE
2009	450,288	
2010	463,020	2.8%
2011	460,025	(0.64%)
2012	468,813	1.9%

**Source: Urwibutso Enterprise sales of Agashya product 2008-2011**

Data from the table above do show that sales from Agashya juice changed from 2009 to 2012, it shows that from 2009 to 2010, there was a variation of 12,732,000Rwf representing 2.8% of increase. In 2009-2010, the enterprise obtained a decrease of 2,995,000 Rwf representing 0.64% of sales increase of Agashya, due to the lack of raw materials and competition from other companies which produce similar products like Inyange Industry and products that came from abroad. During the period from 2010 to 2011 Urwibutso tried to increase the sales of Agashya product which changed by 8,788,000Rwf representing 1.9% of increase. This increase was influenced by the quality of the Agashya product and advertisements done by the enterprise in the country and abroad.

#### 4.2.4. Evolution of sales of Banana Wine called Akarusho from 2009-2012

**Table 4:** Evolution of sales of Banana Wine called Akarusho from 2009-2012

Years	Sales in Rw	EVOLUTION IN PERCENTAGE
2009	139,194	-
2010	153,450	10.2%
2011	160,432	4.5%
2012	170,210	6%

**Source:** Urwibutso Enterprise, Rulindo unpublished.

Data in the table above show that sales of Akarusho changed and went increased year after year. In 2009 to 2010, the sales of Akarusho have increased by 14,256,000Rwf, representing 10.2% of increase. The sales of the Akarusho product has changed by 6,982,000Rwf representing a shift of 4.5% from 2010 to 2011. In the period from 2011 to 2012, the enterprise gained sales increased by 9,778,000Rwf representing 6% of the sales done by enterprise. According to the information obtained by the researcher from the sales department, it shows that the enterprise made an effort in advertisements in order to increase the profit maximization.

#### 4.2.5. Evolution of Sales of Bakery Products from 2009 -2012.

**Table 5: Table showing the Evolution of Sales of Bakery Products from 2009 -2012**

YEARS	SALES (rwf'000)	EVOLUTION IN PERCENTAGE
2009	287,200	-
2010	303,456	5.6%
2011	309,458	1.9%
2012	313,014	1.1%

**Source:** Urwibutso Enterprise, Rulindo unpublished

The sales of bakery products (Amandazi, cakes and breads) as showed by the table above increased under the study period: 2009 to 2012. From 2009 to 2010, the sales have increased with a high level of 16,256,000Rwf representing 5.6% due the quality of these products. From 2010 to 2012, these products obtained a variation of 6,002,000Fwf representing 1.9%. Lastly From 2011 to 2012, these products have generated sales increase of 3,556,000 Rwf representing 1%. This variation was influenced by its quality and the way they are liked by customers' .For example in restaurants, in hotel like Serena, and in super markets like Nakumatt and Simba. Also these sales increased due to the effort used by enterprise in to advertisements on TV, on Radio, etc.

#### 4.2.6. Evolution Sales of Kimaranzara restaurant service from 2009 to 2012

**Table 6:** Showing the Evolution Sales of Kimaranzara restaurant service from 2008 to 2011

YEARS	SALES (frws000)	EVOLUTION IN PERCENTAGE
2009	19,389	~
2010	32,340	66.7%
2011	43,234	33.6%
2012	51,590	19%

**Source:** Urwibutso Enterprise, Sales of Kimaranzara services, 2009-2012,

DATA from the table above shows the sales variation of Urwibutso restaurant call Kimaranzara, from 2009 to 2012. As the table above shows it, sales from the restaurant has increased year after year. From 2009 to 2010, the sales have changed from 12,951,000Fwf representing 66.7% of

increase, but from 2010 to 2011, sales from Kimaranzara have increased by 10,894,000 Rwf, representing 33.6%. Lastly from 2011 to 2012, the enterprise gained a sales variation of 8,356,000 Rwf representing 19% of increase. The variation was influenced by the good quality customer care in Kimaranzara restaurant and the enterprise uses a system of self service in order to satisfy the need of each customer.

URWIBUTSO enterprise has other different activities which are tailoring shops, a Garage, Lodges, Shop for various products, bar and agriculture activities including rearing of pigs ,dogs ,goats, hens and cows. These activities contribute to the increase of profit to the enterprise. The list of product in this study was not exhaustive, the researcher considered only main products that are very sound to the Rwandan population

#### 4.2.7. Analysis of working capital management in urwibutso enterprise.

Managing working capital means managing current assets. Major focus is on current assets because current liabilities arise due to current assets only.

Therefore, controlling the current assets can automatically control the current liabilities. Through the management of both current assets and liabilities, the researcher will look at the effective working capital management in ENTREPRISE URWIBUTSO in this part

**Table 7: Showing current assets items ranked in percentage**

CURRENT ASSETS	2009		2010		2011		2012	
	Amount	%	Amount	%	Amount	%	Amount	%
Inventory	265,959,499.00	90.01	584,564,205.00	88.76	339,481,986.00	92.20	399,319,773.00	90.36
Trade receivables	28,392,090.00	9.61	67,224,062.00	10.21	15,156,140.00	4.12	23,630,780.00	5.35
Prepaid expenses	-	-	-	-	-	-	-	-
Accrued Income	-	-	-	-	-	-	-	-
Cash at Bank	1,120,340.00	0.38	3,960,000.00	0.60	3,456,792.00	0.94	18,250,846.00	4.13
Cash in Hand	847.00	0.00	2,863,000.00	0.43	10,100,575.00	2.74	692,352.00	0,16
Total	295,472,776.00	100.00	658,611,267.00	100.00	368,195,493.00	100.00	441,903,751.00	100.00

Source: ENTREPRISE URWIBUTSO Financial statement, 2009-2012

In the above table the researcher found the following results:

1. In the years 2009, 2010, 2011 and 2012 the percentage of the percentage of inventory are 90.01%, 88.76%, 92.20% and 90.36% respectively compared to the total amount of current assets. Normally, inventory in most businesses has a big share (around 50%) in the total value of the current assets but for the case of ENTREPRISE URWIBUTSO, obviously, the company has invested more in inventory compared to other current assets items as its percentage is kept around 90% apart from the year 2009 where it has been seen that the inventory percentage is rounded to 50%. One of the reasons that may have pushed the company to invest more in inventory is that its products require enough raw materials and products ready to be consumed in order to satisfy customers' demand which keeps increasing intensely. However, holding such a huge amount invested in inventory ties-up the company's investment thus reducing its profitability.

For trade receivables in the four consecutive years (2009-2012) their percentages were 36.20%, 9.61%, 10.21%, 4.12% and 5.35% respectively compared to the total amount of current assets, it has been noticed that the percentage of trade receivables kept on falling. This may explain two assumptions: (a) that the company has decreased the amount of credit sales allowed to trade receivables or (b) the collection period has been decreased over the past three years.

The researcher noticed again that the percentage of cash at bank in 2008 was 11.76% but dramatically decreased in 2009, 2010 and 2011 to 0.60%, 0.94% and 4.13% respectively. This may be explained by the fact that the company was newly established and it invested almost all cash at the bank in other operating activities.

The cash at hand was 0.43% in 2010; it went up to 2.74% in 2011 and fallen down again to 0.16% in 2012. The amount of cash balance kept on fluctuating due to its use in the business.

5. The researcher found that there were neither accrued incomes nor prepaid expenses.

However as the management of current assets involves the management of all current assets items combined as well as the management of these items individually, more detailed clarifications will be given when dealing with the management of current assets individually.

#### 4.2.8. Current liabilities items ranked in percentage

**Table 8: Showing Current liabilities items ranked in percentage**

CURRENT LIABILITIES	2009		2010		2011		2012	
	Amount	%	Amount	%	Amount	%	Amount	%
Short-term loan	211,000,000	83.43	300,000,000	62.37	335,000,000	80.49	292,479,653	62.19
Trade payables	41,917,661	16.57	181,032,216.	37.63	56,991,272	13.69	170,278,649	36.21
Accrued expenses					24,235,116	5.82	7,511,790	1.60
Prepaid income								
Bank overdraft								
<b>TOTAL</b>	<b>252,917,661</b>	<b>100</b>	<b>481,032,216</b>	<b>100</b>	<b>416,226,388</b>	<b>100</b>	<b>470,270,092</b>	<b>100</b>

**Source:** Enterprise Urwibutso Financial Statement, 2009-2012

Table above shows us that:

1. Short term loan has a big portion over the total current liabilities: 80.88% in 2007, 83.43% in 2009, 62.37% in 2010, 80.49% in 2011 and 62.19% in 2012. Short term loan percentage decreased only in 2010 and 2012 meaning in these years the company was using more trade payables than short term loan to finance its current assets.. Obviously, the company's management has adopted the moderate or matching policy to finance its current assets.
2. In the same period *trade payables* were 19.12%, 16.57%, 37.63%, 13.69% and 36.21% respectively. But noticed-that in 2010 the percentage went down meaning that in this year the company preferred short term loan as an alternative to trade payables to finance the current assets. These percentages the claim that trade payables over the current assets as a results of credit purchases made by the company Accrued expenses in ENTREPRISE URWIBUTSO are basically, taxes and were held in the business as follows: 0.00% in 2007-2009, 5.82% in 2010

and 1.60% in 2011. Often the tax declaration period differ from accounting period (when financial statements and other final accounts are prepared)

4. There was neither prepaid income nor bank overdraft in ENTREPRISE URWIBUTSO.

#### **4.2.9. Techniques for effective Working Capital management**

Working Capital Management techniques are used for finding optimal level of working capital. These Techniques are important and are very effective in managing working capital. It has been seen earlier that working capital management techniques are very effective tools in managing the working capital efficiently and effectively. Therefore, this section the effectiveness of working capital management on profitability and liquidity of firms wanted to know the techniques used in ENTREPRISE URWIBUTSO to reach the optimum level of working capital in order to ascertain the effectiveness of working capital management in this company.

#### **4.2.10. Cash Budgeting/ management technique**

A cash budgeting and management technique is extremely important because it allows a company to assess whether it has sufficient cash to fulfill regular operations and/or whether too much cash is being left in unproductive capacities and to determine how much credit it can extend to customers before it begins to have liquidity problems. The effectiveness of working capital management on profitability and liquidity of firms wanted to know how effective was this technique used in ENTREPRISE URWIBUTSO.

Generally, the major source of receipts was from sales. The disbursement section consists of all cash payments that are planned for the budgeted period. These payments include raw materials purchases, direct labor payments, manufacturing overhead costs, and so on. They argued that, .if there was a cash deficiency (shortage) during any period; the company would need to borrow funds in form of bank overdrafts and/or short-term loans. If there is cash excess during any budgeted period, funds borrowed in previous periods could be repaid or the excess funds can be reinvested.

According to Urwibutso Enterprise, cash management is carried out by:

Monitoring the daily cash position daily, the cash manager typically spends the first part of the day developing the cash position. This exercise identifies shortages and surpluses in time to either borrow funds to cover the shortfall or invest excess funds.



Controlling balances on deposit, cash manager maintains bank balances at an adequate level to avoid overdrafts and to compensate the bank for cash management services. Moving funds as necessary. The transfer of cash from one account to another is often a daily exercise to prevent cash shortages in the accounts and to promptly invest surpluses. Managing short-term (working capital) borrowing and investing. Forecasting future shortages and surpluses, Managing banking relationships; maintaining a mutually beneficial relationship with the company's bankers and, Performing analytic reviews and feasibility studies of banking services.

#### **4.2.11. Inventory Management**

Inventory management as the process of efficiently overseeing the constant flow of units into and out of an existing inventory, thus the researcher wanted to know how this process is carried out in EXTREPRISE URWIBUTSO.

#### **4.2.12. Profit analysis**

Profit generally is the making gain in business activity and is the basic index for measuring the impact of marketing strategy in success of company. Urwibutso Industry for the periods of three years was increasing its profits mainly because this comes from good marketing strategy on company success as a result of increasing of sales through its products and services which are provided by this company and Urwibutso Industry is experienced enough in marketing strategy in production Industry, this was helping the company to increase its profit due to the increase in turnover because shareholders have tried reinvest the dividends.

**Table 9:** Evolution of Net Profit in Urwibutso industry from 2009-2012(amount in Rwf)

<b>Year</b>	<b>Net Profit</b>	<b>Evolution (%)</b>
2009	94,709,747	-
2010	102,502,961	7.6
2011	109,348,459	6.7
2012	124,265,214	21.2

**Source:** Urwibutso Industry, financial report, 2009-2012

In 2009, the bank realized the benefic result of 94,709,747Rwf. In 2009 the result was of 102,502,961Rwf; in 2011 the result was 109,348,459Rwf and in 2012 the net profit increase of 124,264,214Rwf. According the results obtained the net profit increase from 2010 to 2012

respectively result of 7.6% and 2009 to 2011 the percentage decrease of 6.7% because of unpaid loans and 2011 to 2012 these percentage increase to the 21.2%.

The analysis of turnover

**Table 10:** Evolution of Turnover in urwibutso industry from 2009-2012 (amount in Rwf)

Year	Turnover	Evolution
2009	220,485,524	-
2010	338, 057,746	34.7
2011	427, 465,797	26.4
2012	501, 123,314	48.2

**Source:** Secondary urwibutso industry financial report, August 2011.

The total sales of the company as it refers to us as turnover, the table above indicates that urwibutso has realized a positive result whereby the turnover for the studied years were respectively: 220,485,524Rwf; 338, 057,746Rwf, 427, 465,797Rwf, and 501, 123,314Rwf, with corresponding evolutions respectively 34.7%, 26.4% and 48.2% showing that there has been a decrease in 2012 due to various facts especially to competition and other factors.

## **CHARPTEF FIVE: CONCLUSION AND RECOMMENDATION**

### **5.1. Introduction**

Working capital management is a concept in financial management that sets cash outflow and inflow to any business especially growing small enterprises in Rwanda. This counts the purpose of profit making growing business, nevertheless the researcher realized that small medium enterprise lack sufficient working capital management concepts, sufficient funds, financial knowledge and the finance record order keeping.

The study revealed that the URWIBUTSO Enterprise keeps financial records due to finance knowledge that managers have. There is some use of finance information to support financial performance measurement.

The study also showed that, in URWIBUTSO Enterprise they prepare financial information in order to meet the requirements of the shareholders, business registration and revenue authorities. They are aware that financial information useful to measure the enterprise performance, growth, financial position and continuously make smart profits. URWIBUTSO Enterprise considers financial information as an important tool for the management of their daily activities.

SMEs' managers believe that financial information add comprehensive value to their enterprise. Therefore, this should be the main factor for high increase of their financial capacity.

It is recommended that, SMEs' managers should always prepare and utilize financial information in their daily activity in order to hold sound financial decisions that will boost take their enterprises.

## **5.2. Conclusions**

Working capital management is that company's capital which is used for purchasing raw materials and it is involved in paying current liabilities, current assets are very significant to operate long-term assets. This study revealed that communication of working capital management goals was very important to the strategic competitiveness of Urwibutso enterprise.

For effective working capital management, an enterprise will ensure that sufficient cash is available to meet day to day cash flow needs, pay creditors to ensure continued supplies of goods and services, the payment of wages and salaries when they fall due etc. Management of receivable is also a condition for the success in management of working capital, clients should be evaluated and monitored according to credit policy in order to establish acceptable credit standard this has been confirmed by 67% of the respondents who argued that the customer are supposed to be evaluated in order to assess whether their credit obligation will be met.

The study revealed that when approaches to inventory management are effectively employed this may control to help to solve the problem of liquidity and increase strategic competitiveness of the enterprise this was confirmed by 100% of the respondents.

The results portray that performance of Urwibutso Enterprise was influenced by diversification of its product as well as differentiation of its product. It has been revealed also that both customer loyalty and the firm's access to the distribution channels were other ingredients to the success of the enterprise; this was confirmed by 72.5% of the respondents. Besides that, there is a strong positive relationship between working capital management and strategic competitiveness of the enterprise.

### **5.3. Recommendations**

Based on the results of this study, the researcher wants to give the recommendation to various stakeholders in the management finances of SMEs sector in order to affect profit as a right factor. Therefore recommendations include the following:

#### **5.3.1. Recommendations to URWIBUTSO Enterprise**

It is recommended that, managers of URWIBUTSO Enterprise should always prepare and utilize financial information in their daily management of the enterprise. And should further be an implication to all product centres of the enterprise.

#### **5.3.2. Recommendation to stakeholders in the SMEs sector**

This study recommends that the regulators should come up with some SME-specific financial guidelines and provide template forms for capturing information to SMEs. Shareholders need to come up with further continuous study of working capital management concepts in order improve their finances, understand finance controls and its measurement when it comes to receivables and profit mechanisms.

#### **5.3.3. Recommendations to the Rwandan government**

The ministry responsible for SMEs should initiate finance training programs to Rwanda growing entrepreneurs. Further, this study recommends that record keeping in SMEs must be made mandatory to improve their financial measurements and increase chances of them formalizing their business operations.

#### **5.4. The impact of working capital management of SMEs in Rwanda**

To determine working requirements of SMEs there are no specific rules and regulations, there are a number of factors that influence working capital of SMEs; these include among others;

**Nature of Business:** Working capital requirement of a firm is normally influenced by the nature of the business, its norms of cash flow and outflows. As matter to small firms investing in fixed assets require huge sums of money invested in this working capital.

**Sales and Demand Conditions:** Sales and working capital of an organization normally have significant relationship; however it is not easy to determine the volumes of sales and working capital needs. In general current assets will have to be employed before growth takes place. Therefore advance planning on working capital of an enterprise in a critical level that is necessary for profit making of SMEs.

**Technology and manufacturing Policies:** Production process carries an impact on the management of working capital in SMEs. The manufacturing cycle comprises of the purchases and use of raw materials and the quality of the finished goods. The time level of the production process the more working capital is required.

**Credit policy of the SME:** Credit policy of a firm affects the working capital by influencing the level of debtors and credit terms granted, therefore this influences the cash flow in terms of working capital of a firm.

**Operating Efficiency:** this rotates at the optimum utilization of available resources at minimum costs. This affects the working capital investment at a lower level if it is efficient in controlling operating costs and utilizing current assets.

**Credit granted by Suppliers:** SMEs can also be affected by the credit terms of their creditors and this draws impact on the management of working capital. A firm will need less working capital if liberal credit terms are available. The availability of credit from banks also influences the working capital needs of a firm. Therefore a firm that can get bank credit easily on favorable conditions will operate with less working capital than a firm without.

**Price Level Changes:** Purchasing of materials and all other needs influence price levels, the increase in shifts in pricing make functions influences working capital of SMEs. In general pricing levels require a firm to maintain higher amount of working capital. Same levels of current assets will need increased investment when prices are increasing.

### **5.5. Contribution to Knowledge and Practice**

There is a need for SMEs maintain adequate working capital concepts. This is not just to meet the daily operations of the organizations or SMEs but also to enhance the various performances of the SMEs. The time has come when managers or owners of the SMEs should not only look at various sections and parts of organizations as it concern them but rather look at a determining factor which is working capital management that can generate a positive or negative effect on SMEs.

Hence, other researchers, managers or owners must look beyond the financial Statements of their working capital because it will go a long way in determining the overall profitability, efficiency and survivals of the organizations.

## **5.6. General Conclusion**

In regards to the business world, gaining profit is the main target. Profitability therefore can only be ensured by percentages input in clear management of working capital concept. Cash managements, inventory, payable and receivables are the leading cause of profitability of SMEs in Rwanda.

URWIBUTSO enterprises as analyzed from the period it opened up business management of their finances is still developing, Even though the institution faced some operation periods where their profits had a decreasing rate, much effort was put in the working capital management leading to an increase in the profitability of the enterprise periodically.

Therefore any business especially small and medium enterprise draws a huge impact on the end results of making good profits, hence sustainable development of the business.

Therefore cash flow in SME should be regularly managed in terms of ensuring continuous sufficient liquid resources in business and this implies that working capital management draws an impact on profitability of SMEs.



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