

Role of Working Capital Management in Achieving Financial Performance

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Abstract

The paper identifies various components of both Working Capital Management and Financial Performance. It also attempts to see if there is link conceptually between components of Working Capital Management and that of Financial Performance. The study found that Working Capital Management has Cash Conversion Cycle (CCC), Day Sales Outstanding (DSO), Day Inventory Outstanding (DIO) and Day Payables Outstanding (DPO) as components while Financial Performance has Return on Assets (ROA), Return on Equity (ROE), Return on Capital Employed (ROCE) etc as components. The study also finds how to quantitatively measure each component and various conceptual relationship between components of Working Capital Management and that of Financial Performance. The study therefore, concludes that having the right components mix will improve Financial Performance. It is therefore recommended empirical study need to be carried out as more data emerges in different sector of the economy.

Keywords: Working Capital Management, Financial Performance, Return on Assets, Day Sales Outstanding, Day Payables Outstanding and Cash Conversion Cycle.

Introduction

Financial Performance refers to how well a firm can engage assets in the primary business activities towards generating revenue. Financial Performance is used as an approach of estimating the financial health of firms over a certain period and can be used to compare firms operating in the same industry or sector. Raheman, (2018) averred that corporate Financial Performance is key to management as it reflects the result achieved by individuals or group of persons in an organization as well as the quality of management and the level of conformance with stipulated ethics. Managers were equally equipped with the opportunity of having a new insight on how to use Working Capital Management to improve the Financial Performance of the firm as shown in (Nguyen *et al.*, 2019).

Again, an entity ought to be managed efficiently and profitably by sustaining a balance amid liquidity and profitability perpetually. In reality, it is not easy to achieve. If there is a disparity amid liquidity and profitability, an entity might be profitable during the short run, but there may be a risk of its continued existence as an entity over the long run (Olabisi *et al.*, 2018). Although the economy of Nigeria is characterized by numerous alarming activities, including slowing down the pace of converting produced goods into cash and safeguarding the interest of investors in the company (Gbadegesin *et al.*, 2017). The

longevity of a firm relies significantly on its ability and efficiency in applying the components of financial management. Following this, adequate planning of Working Capital Management is urgent to ascertain impressive results despite the pressure from the increasingly competitive business environment in Nigeria. All over the world, Working Capital Management is one of the most vital techniques required by an organization to ensure adequate management of its resources as this determines the continued existence of the business (Owolabi & Alu, 2012). He also averred that working capital is an extremely important aspect in the structure of an organization; it requires an increased attention, control and proper planning. Considering the scarcity of resources available to organizations, it is expedient for an organization to critically manage its working capital as it plays a vital role in the attainment of attractive financial position and the general performance of the organization (Agarwal *et al.*, 2009) as cited in (Obafemi *et al.*, 2021). Similarly, liquidity and profitability are today's most important issues of corporations. Addressing these subjects is one of the needs of society and industries in the country. Working Capital Management is one of the strategies for the companies to achieve the desired liquidity. So that desired liquidity for the companies is maintained to the extent that they do not confront excess abnormal liquidity or unnatural lack of liquidity (Salman *et al.*, 2016). Therefore, the main objective of the paper is to explore relevant literature of working capital management and financial performance.

Financial Performance

Over the years, the Financial Performance of the companies has drawn a noticeable concern due to its capacity in causing rapid economic prosperity in Nigeria (Banjoko *et al.*, 2012). considering level of growth experienced by the companies are capable of exerting significant influence on poverty alleviation through the creation of employment and increase in the standard of living of individuals and households alike. Even though the sector possesses this capability, the growth of Nigeria's different industries has cascaded over the years. This depressing situation have since the 80s been demonstrated in the performance of Nigerian industries (Chete *et al.*, 2014).

Also, Financial Performance is the rate at which business success is measured. Business performance can be assessed in the basis of its Financial Performance. The term Financial Performance refers to the money generated as a result of carrying out a particular business activity; it can also be described as the reward for the entrepreneurs' investment in the business. The Financial Performance or profitability as it is otherwise called refers to the performance of business measure in terms of Return on Asset (ROA), Return on Equity (ROE), Net Profit Margin, Earning Per share, Return on Investment (ROI), Return on Capital Employed etc.

However, the ability of a company to remain in business for a long time and continue to exist as a going concern is greatly dependent in the efficient management of its working capital. Although profitability may be considered as the governing factor of a business, nevertheless, if working capital is no effectively managed, the business may come to a halt,

even if the business was otherwise a successful and profitable company. It is essential that at any point in time a business should be in a position of stabilise solvency. That is, in a position to pay its debt as at when due and take advantage of business opportunities as they come or meet contingencies that may be reasonably visualized, a business may have a large amount of surplus assets and liabilities but if such asset are fixed, there will probably be a great difficulty in finding them ready to meet their current liabilities without having recourse to borrowing on the security fixed asset (Abimbola & Kolawole, 2017). Thus, in this regard current asset and consequently working capital plays a vital role. Considering the significance of Working Capital Management in determining business success and the continued failure of small businesses due to liquidity problem the research centred on the issues and different tools of Working Capital Management which will invaluablely contribute to achieve efficiency.

In a similar vein, the centrality of profit as the measure of company performance is well established, even considering That profit is a short-term measure whose use may inappropriately encourage short-term thinking. Profit is a bottom-line measure, which may nevertheless be supplemented by forecasting accuracy and other measures, such that those are incorporated into their Balanced Scorecard model, a model that (Dickinson, 2003) and last decade studied in gaming-simulation application. central role in the measurement of firm performance justifies the careful examination of this measure in a variety of settings, simulated and actual. as cited in (Rita & Christian, 2019).

Similarly, Profit expansion is seen as a critical objective of a business entity because corporate sustainability heavily relies on it. It is also an accepted benchmark to measure success and efficiency in addition to the growth of the entity. It is a significant requirement for the long-term survival and success to firm, while it is a necessity for the achievement of other financial goals. Consequently, liquidity is similarly significant for the proper operational function of the organization (Olabisi *et al.*, 2018). An entity embodying liquidity issues will face problems in meeting short-term financial commitments in daily operations, creditor's demands, and so on. Hence, the main objective and goal of the system of inventory management system are to keep the required inventory necessary for production, as it enhances a smooth output without interruption.(Olabisi *et al.*, 2018).

Equally, the primary objective of any financial manager is to maximize the shareholders' wealth. In this regard, he has to make optimized decisions about maintaining assets and liability levels (Gitman, 2002) as cited in (Raheman, 2018).

Various components of Financial Performance are illustrated in figure 1.

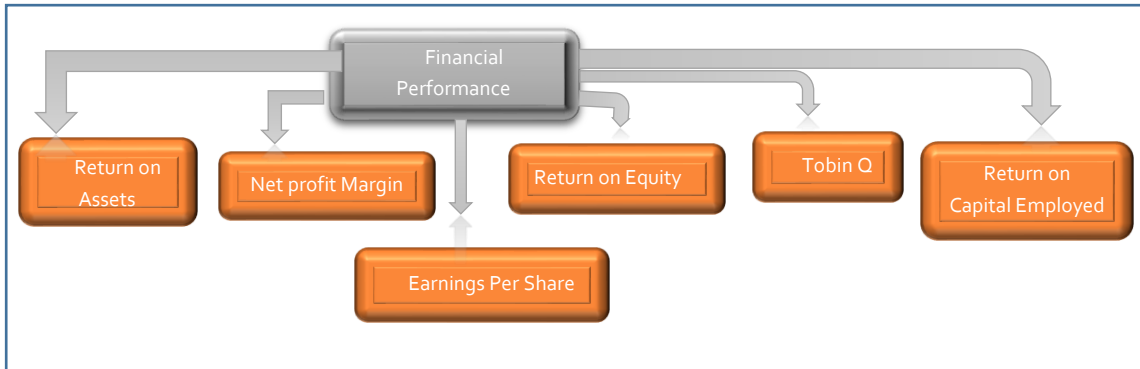


Figure 1: Components of Financial Performance

Source: (Olabisi *et al.*, 2018)

Various components of financial performance as outlined by different scholars were illustrated in figure 1 which include Return on Asset, net profit margin, Return on Equity, Return on Capital Employed, earning per share, tobin Q etc.

Working Capital Management

The main objective of working capital is to ensure that firms have sufficient cash flow to continue normal operations in such a way that minimize risk of inability to pay short-term commitment. Moreover, managers should try to avoid from necessary investment in working capital. The term working capital refers to the quantum of fund required to maintain day-to-day expenditure on operational activities of a business enterprise(Akgün & Şamiloğlu, 2016).

Nurein (2014) and Finau (2011) defined working capital as the excess of current assets over current liabilities. This definition actually brought together the basic tenets of working capital (current assets and current liabilities). There is a consensus among scholars with respect to the definition of working capital which is an amount of money available to finance the organization's short-term debt obligation. The availability of this short-term fund is a function of excess of current assets over current liabilities.

While the definition of working capital remains same among scholars, effective management of firms' working capital is what put firms apart. This is because, while some managers may exercise due care and diligence in the management of firm's current assets and current liabilities, other managers may result to the use of intuition, rule of thumb and personal judgment which could mare effective Working Capital Management. Organization's working capital components are categorized according to Arnold (2008) and Gitman (2009), into three main components. These are: Inventory management consisting of raw materials, work in progress and stock of finished goods; Accounts receivable and payable management which Accounts for amount recoverable and owed to other firms and individuals in the ordinary course of business of the firm (Feletilika, 2011), and finally cash management which requires the formulation of strategies to facilitate early

collection of debt owe to the firm and delaying payments for credit by the firm (Block & Hirt, 1992 and Lantz, 2008). This enables firms to have adequate cash balances to discharge short term debt obligations when they fall due.

One of the severe challenges faced by most financial managers is how to effectively and efficiently manage various components of Working Capital Management to maximize their profits. This is because Working Capital Management components comprise many different things and its management is complex since these are often linked. Hence, altering one item may impact adversely other areas of the business. Working capital could have both a positive and negative impact on profitability of the firm. If a firm has excess and idle current assets, it would hurt profits. At the same time, scarcity of current assets would reduce revenues and lead to bankruptcy (Horne & Wachowicz, 2004). Working Capital Management has a direct impact on liquidity and profitability, and by adopting good practices, firms can achieve a balance between profitability and liquidity (Shahid *et al.*, 2015) As cited in (Mahmood *et al.*, 2019).

Poor Management of working capital results in attendant cash flow problems, which reduce firms' financial management and invariably lead to financial crises coupled with its associated effects. However, all the efforts and interventions by financial managers to halt the problems affecting their growth and profitability proved abortive (Abimbola & Kolawole, 2017).

All over the world, working capital is an all-important technique required by an organization to ensure adequate management of its resources as this determines the continuous existence of the business (Owolabi & Alu, 2012). (Owolabi & Alu, 2012) averred that working capital is an essential aspect of the structure of an organization; it requires increased attention, control and proper planning. Considering the scarcity of resources available to organizations, it is expedient for an organization to critically manage its working capital as it plays a vital role in attaining an attractive financial position and the general performance of the organization (Agarwal *et al.*, 2009) as cited in (Obafemi *et al.*, 2021).

According to Uzoamaka, Nweze, Offor and Ikediachi (2017) Working Capital Management entails management of liquidity in such a way as to eliminate any case of short term obligation crises. Therefore, Working Capital Management is vital for all firms, most especially those that have massive amounts of investment in receivables, payables and inventories as cited in (Mohammed & Abosede, 2019).

The interaction between current assets and current liabilities is the central theme of the concept of Working Capital Management. According to Napompech (2012), Working Capital Management involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet short-term obligations on one hand and avoid excessive investment in current assets on the other. Qazi, Seyd, Zaheer and Nadeem (2011) define Working Capital Management as an accounting strategy focusing on maintaining efficient levels of current assets and current liabilities with respect to each other.

Working capital is an important issue during financial decision making since its being a part of investment in asset that requires appropriate financing investment (Francis, 2015). However, many authors have different perceptions about the concept of "Working Capital". Khan and Jain (2005) defined working capital as the funds locked up in materials, work in progress, finished goods, receivables and cash equivalent.

Effective management of inventories, payables, receivables as well as cash is categorized under WCM. For proper understanding, Working Capital depicts the amount of liquidity available to realize short-term commitment as a result of operational activities (Olaoye & Okunade, 2020a)

Naser *et al.*, (2013) identified WCM as the management of cash, receivables, inventories and payables. (Ganesan, 2007) has explained WCM as the short-term financing requirements of a firm. The needs of working capital depending on the type of business and industry. However, the components of working capital generally include cash, debtors, receivables, inventories, marketable securities and redeemable futures (Appuhami, 2008).

The knowledge of the Working Capital Management can be quickly drawn and derived from the working capital cycle, which is the best element to describe the Working Capital Management. According to Arnold (2008), working capital cycle contains the main characteristics of business operations. Expectedly, ineffective management of a particular account in the working cycle can trigger working capital issues for the firm and deteriorate its Financial Performance.

Working Capital Management plays a significant role in any types of firm and it leads to increase in profitability (Rahman & Ahmed, 2021). Eventually, management of working capital is most vital rather than others. A lot of works has been conducted on this phenomenon as well as they got positive and negative impact combination of both. Some researchers' findings are given below which motivates to take such topic.

The variable will be measured as followed. Return on Assets measured by the profit for the year to the Average Total Assets as done by (Akgün & Şamiloğlu, 2016). ROA will be our dependent variable. Working Capital Management is measured by its proxies; Cash Conversion Cycle (CCC) is measured by Day Sales Outstanding plus Day Inventory Outstanding minus

Day Payables Outstanding as measured as done in (Raheman, 2018). Day Sales Outstanding is measured as the ratio of the net sales to the average debtors (opening and closing debtor balances/2) multiplied by no of days in a year. Day Inventory Outstanding is measured as the ratio of the cost of goods sold to average inventory multiplied by number of days in a year as done in (Ogundipe *et al.*, 2012). Day Payables Outstanding is measured as the average account payables divided by cost of sales multiplied by the number of days in a year (Ramon Mohammed *et al.*, 2019).

Various components of Working Capital Management are illustrated in figure 2

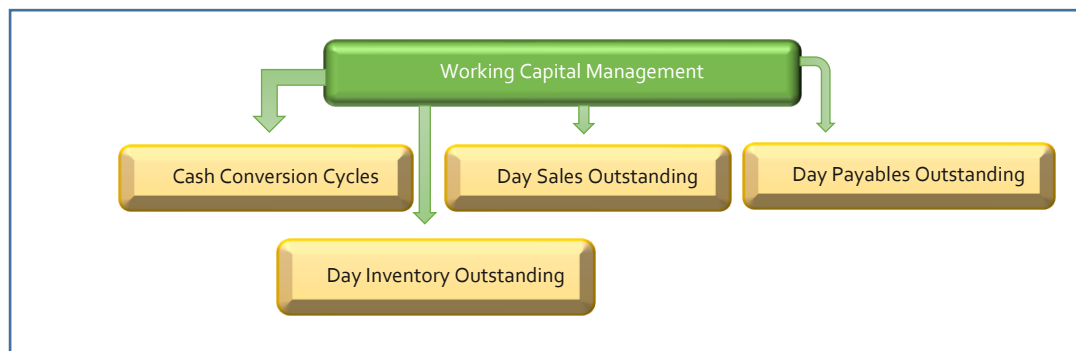


Figure 2: Components of Working Capital Management

Source: (Ramon Mohammed *et al.*, 2019)

Figure 2 shows various components of Working Capital Management. It is important to outline various proxies of working capital as they will be used as measures/constructs of Working Capital Management they include as outlined in figure one above, cash conversion cycles, day sales outstanding, day inventory outstanding and day payables outstanding. Their measurement quantitatively was outline in table 1 below.

Measurement of the Components

VARIABLE	DEFINITION	MEASUREMENT	SOURCE
Dependent Variable: ROA	Return on Assets	It is measured by the net income to the average total assets.	Lazaridis & Tryfonidis (2006) Ajao & Nkechinyere (2012)
Independent Variable: (i) DSO	Day Sales Outstanding	It is measured as the ratio of the net sales to the average debtors multiplied by no of days in a year	(Mohammed & Abosede, 2019) and (Michasiki, 2006)
(ii) DIO	Day Inventory Outstanding	It is measured as the ratio of the cost of goods sold to average inventory multiplied by yhe number of days in a year	Uramadu (2012), Napompech (2012),
(iii) CCC	Cash conversion cycle	It is measured as average collection period plus inventory turnover in Days minus average payment period	Usama (2012), Rehaman & Nasr (2007), Alipour (2011), Kurawa(2011)

(iv) DPO	Day Payables Outstanding	It is measured as the average account payables divided by cost of sales multiplied by the number of days in a year.	(Mohammed & Abosede, 2019), (Korode, 2017) and
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Table 1: Measurement of working capital management and financial performance

Measure of each working capital management component is shown in table 1 with a backing literature, where Return on Assets is measure as net income divided by average total assets, day sales outstanding is measured by net sales divided by average debtor multiplied by number of days in a year, day inventory outstanding is measured by average inventory by cost of goods sold multiplied by number of days in year, cash conversion cycles is measured by the sum average collection period in days and inventory turnover in days minus average payment period in days and day payables outstanding is measured as average account payables divided by cost of goods sold multiplied by number of days in a year usually 360 days.

Figure 3 shows schematic conceptual framework of Working Capital Management and Financial Performance cycle

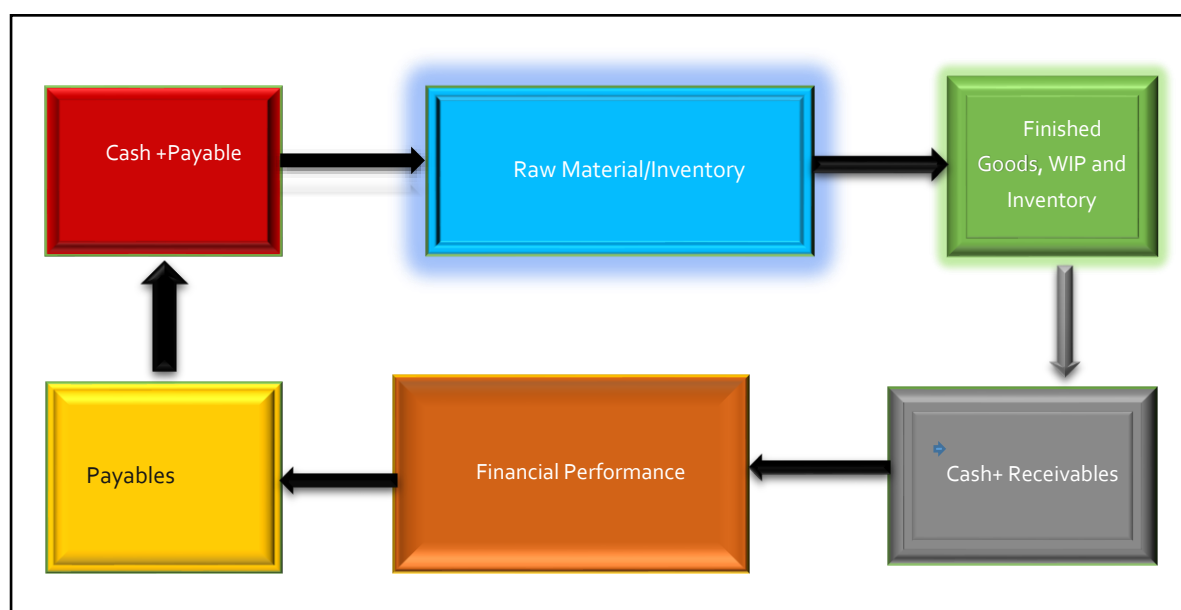


Figure 3: Working Capital Management and Financial Performance Cycles

Source: Adapted from Micheal *et al.* (2017)

It illustrates the cycles within with various components in the model revolves and how they are interlinked with one another. It shows that the entry gate of companies starts at cash and payables available, next is acquisition of raw material stored as inventory, finished goods and work in progress stored as inventory, from here, when sales are made in cash and credit, finished goods will turn into cash and receivables from debtors, from there profit

is realised from sales which will improve financial performance and lastly payments are made to creditors in cash to enable them supply more raw materials for further production. This is how the cycles continue perpetually.

Conceptual Model

Conceptual Model shows the interactive nature of various components of both working capital management and financial performance.

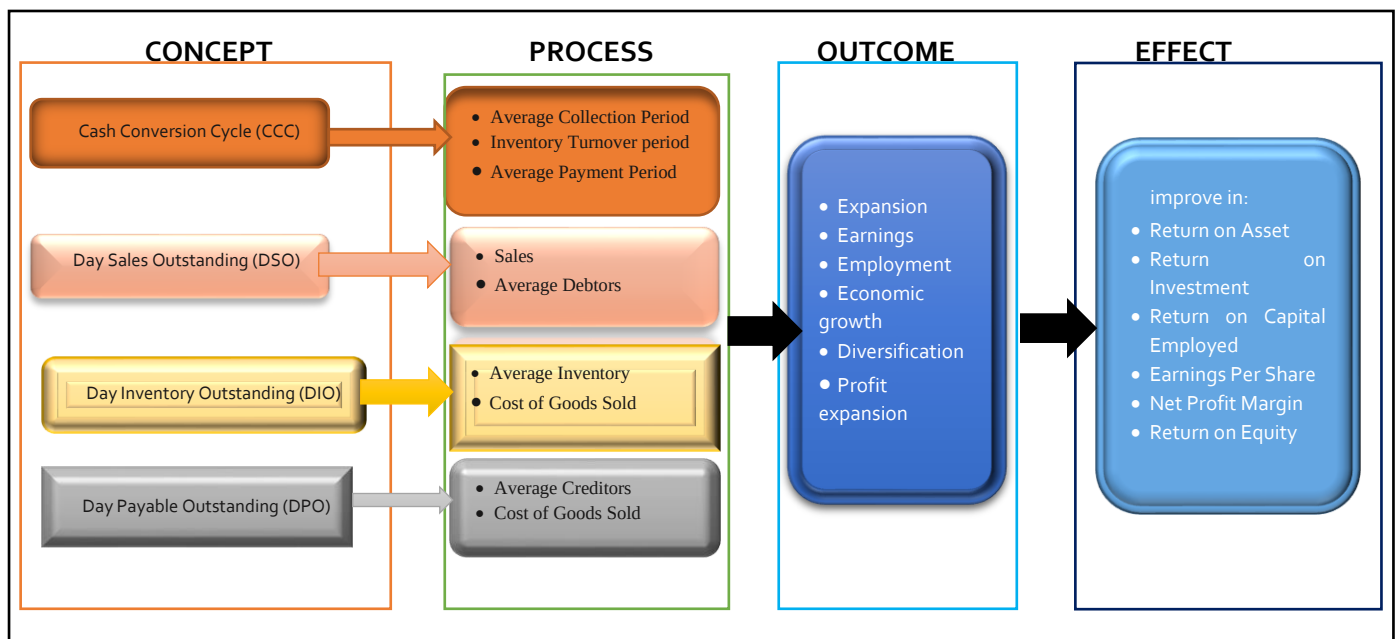


Figure 4: Conceptual Model

The scenario starts with the concept/component in which it process is stated at process stage. It further moves to outcome stage which says what happen when concept and process stages are manage effectively and efficiently, that is expansion, earnings in form of salaries, bonus, dividend, employment of more resources, economic growth from more income, diversification of investment into other profitable sectors which will lead to profit expansion. The aforementioned will have effect on firms' financial performance in form of Return on Assets, Return on Investment, Return on Capital Employed, earning per share, net profit margin, Return on Equity etc.

Summary

The study starts with introduction where the problem statement and various terms were briefly explained. Followed by Financial Performance and its components where scholarly definitions were explained. Working Capital Management and its components were also explained. Insight into the concept of Working Capital Management and Financial

Performance. Conceptual model was developed that explained different stages of working capital management up to how they affect financial performance in an organisation.

Finally, the research itemises the following gap that need to be filled on effect of Working Capital Management on the Financial Performance. The following recommendations were deduced:

Working capital may or may not improve Financial Performance depending on the working capital mix available. This is so because various industries have different working capital mix that improve performance. It is recommended that empirical studies should be carried out in different sectors of the economy to examine the level of each components of working that need to be retained in order to improve performance

It is also recommended that various components Working Capital Management such as cash conversion cycles, Day Sales Outstanding, Day Inventory Outstanding and Day Payables Outstanding need to be studied individually and how it will empirically affect performance of firms.

It is also Recommended that various components/proxies of Financial Performance such as Return on Assets, Return on Equity, Return on Capital Employed and Tobin Q etc to be employed to see which best describe performance of a firm.

The paper recommended ways by which each component is measured quantitatively.

It developed conceptual model that explained interactive links among variables within the model. This is imperative as pictorial/graphical representations of all components in the model.

The paper identifies major concept that need to be addressed in order to be abreast with the dynamism of business environment because as financial manager, most of his/her activities cycles around Working Capital Management and how to improve performance of the organisation. Therefore, it is pertinent to ensure that right mix of various working capital components are in place to improve Financial Performance. It is recommended that firms need to identify the dynamism of such components and the role they play in improving or otherwise of business Financial Performance.

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