

## PROCESS FLOW ACCELERATION MECHANISM WITH A DIRECT IMPACT IN THE COMPANY'S WORKING CAPITAL

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**Abstract.** *In a rapidly changing business environment, one of the challenges that a multinational company faces is the investment decision in working capital, as it does not directly earn profits. Therefore, one of the areas that the Finance Manager is concerned with is reviewing the accounting strategy designed to monitor and utilize the two components of working capital, current assets and current liabilities, to ensure the most efficient operation of the company. Looking at the current assets structure, it is important to analyze the way in which the company manages the “best level” of accounts receivables, as the higher they are, the more cost is incurred, both in terms of the interest cost and in terms of the greater risk of losses through bad debts. A strategic process flow to help the cash collections by using the right acceleration mechanisms will have a critical impact in the company’s working capital. Successful completion of each business process step depends on the successful completion of the previous steps. A common understanding and execution of accurate and critical information being captured throughout the end-to-end process is critical in ensuring a quality invoice being generated and on due time collection. Internalize the key drivers for success for each major business process and think about its implications to an accurate and timely invoice and consequently our cash collection. At each point of performing a physical activity, critical information will need to be captured and communicated to key stakeholders in the invoicing process. As Key Performance Indicators are the measurable values that demonstrate how a company is achieving the key business objectives, from a billing and collection process standpoint we are using the following two drivers: Days to Invoice (DTI) and Days Sales Outstanding (DSO). For years, the firms have relied on basic desktop publishing and spreadsheet programs to keep track of their data with basic spreadsheets, but now dedicated Business Intelligence platforms are affordable and many times more powerful than a spreadsheet for analyzing and understanding business data needed to make key decisions. There are several reasons that business intelligence, or BI, is an indispensable asset to a modern organization. One of them being that BI improves the visibility of core business components and makes it easier to see each component part of a business, including those that are often overlooked. Consequently, we can more easily identify components that need improvement and to make changes with the goal of optimizing working capital.*

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## 1. Introduction

Working capital management is a critical component of corporate finance because it directly affects the liquidity and profitability of an organization. A lot of financial experts and researchers have clearly defined “working capital management” as being the process of formulating and developing strategies, policies, regulations and guidelines of the current assets and current liabilities in order to positively reinforce the daily projects to be performed successfully. In addition, watching over the firm’s short-lived assets and short-lived obligations to continue performing daily activities properly is defined as management of working capital. Working capital management is important due to many reasons. For one thing, the current assets of a typical manufacturing firm accounts for over half of its total assets. For a distribution company, they account for even more. Excessive levels of current assets can easily result in a firm’s realizing a substandard return on investment. However, firms with too few current assets may incur shortages and difficulties in maintaining smooth operations [1]. Efficient working capital management involves planning and controlling current assets and current liabilities in a manner that eliminates the risk of inability to meet due short term obligations on the one hand and avoid excessive investment in these assets on the other hand [2]. A popular measure of Working Capital Management (WCM) is the cash conversion cycle, in other words the time lag between the expenditure for the purchases of raw materials and the collection of sales of finished goods. The longer this time lag, the larger the investment in working capital [3]. A longer cash conversion cycle might increase profitability because it leads to higher sales. However, corporate profitability might also decrease with the cash conversion cycle, if the costs of higher investment in working capital rise faster than the benefits of holding more inventories and/or granting more trade credit to customers.

Due to the high importance of cash in running a business, it is in a company's best interest to collect on its outstanding account receivables as quickly as possible and an element of the cash conversion cycle is Days Sales Outstanding (DSO), often referred to as average collection period. DSO is the number of days that a customer invoice is outstanding before it is collected. The point of the measurement is to determine the effectiveness of a company's credit and collection efforts in allowing credit to reputable customers, as well as its ability to collect cash from them in a timely manner. The measurement is usually applied to the entire set of invoices that a company has outstanding at any point in time, rather than to a single invoice. When measured at the individual customer level, the measurement can indicate when a customer is having cash flow troubles, since

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it will attempt to stretch out the amount of time before it pays invoices. Days to Invoice (DTI) is tracking internal delays in invoice generation and submission to customers. This key performance indicator (KPI) will describe the efficiency of the end-to-end invoicing process and all activities involved. It highlights key areas in the process which directly or indirectly affect our cash flow and, therefore, our profitability. Regardless of industry, technology has transformed modern business. And for Financial Managers, business operations automation technology, such as an order to cash solution presents a substantial opportunity. With the right tool in place, Financial Managers can gain visibility over processes in a way that allows them to make agile strategic decisions to drive processes improvements, cost efficiencies and ultimately, deliver growth. Essentially, the latest developments in financial operations solutions including Business Intelligence platforms provide a new level of transparency, insight and analysis over legacy processes, which have previously been either inaccessible or incredibly complex to find.

## **2. Working Capital – Level, Policies, Financing and Cash Conversion Cycle**

Net working capital is the term given to the difference between current assets and current liabilities: current assets may include inventories of raw materials, work-in-progress and finished goods, trade receivables, short-term investments and cash, while current liabilities may include trade payables, overdrafts and short-term loans. The level of current assets is a key factor in a company's liquidity position. A company must have or be able to generate enough cash to meet its short-term needs if it is to continue in business. Therefore, working capital management is a key factor in the company's long-term success: without the 'oil' of working capital, the 'engine' of non-current assets will not function. The greater the extent to which current assets exceed current liabilities, the more solvent or liquid a company is likely to be, depending on the nature of its current assets. Liquidity for the ongoing firm is not reliant on the liquidation value of its assets, but rather on the operating cash flows generated by those assets [4].

Long-term investment and financing decisions give rise to future cash flows which, when discounted by an appropriate cost of capital, determine the market value of a company. However, such long-term decisions will only result in the expected benefits for a company if attention is also paid to short-term decisions regarding current assets and liabilities. Current assets and liabilities, that is, assets and liabilities with maturities of less than one year, need to be carefully managed.

To be effective, working capital management requires a clear specification of the objectives to be achieved. The two main objectives of working capital management are to increase the profitability of a company and to ensure that it has sufficient liquidity to meet short-term obligations as they fall due and so continue

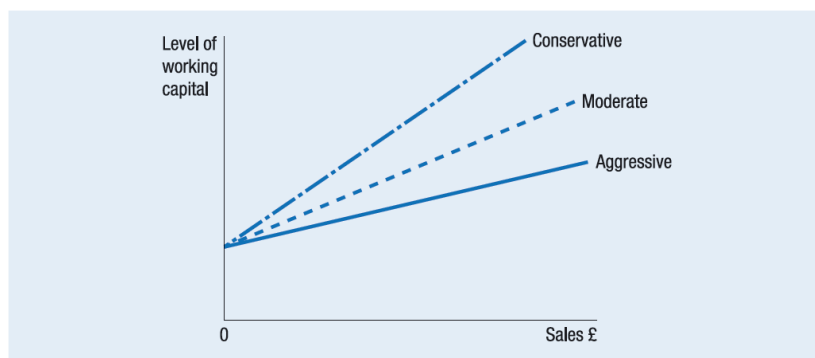
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in business [5]. Profitability is related to the goal of shareholder wealth maximization, so investment in current assets should be made only if an acceptable return is obtained. While liquidity is needed for a company to continue in business, a company may choose to hold more cash than is needed for operational or transaction needs, for example for precautionary or speculative reasons. The twin goals of profitability and liquidity will often conflict since liquid assets give the lowest returns. Cash kept in a safe will not generate a return, for example, while a six-month bank deposit will earn interest in exchange for loss of access for the six-month period. Shin & Soenen, (1998) highlighted that efficient Working Capital Management (WCM) was very important for creating value for the shareholders. Given the importance of working capital management, a company will need to formulate clear policies concerning the various components of working capital [6]. Key policy areas relate to the level of investment in working capital for a given level of operations and the extent to which working capital is financed from short-term funds such as a bank overdraft. A company should have working capital policies on the management of inventory, trade receivables, cash and short-term investments in order to minimize the possibility of managers making decisions which are not in the best interests of the company.

Working capital policies need to consider the nature of the company's business since different businesses will have different working capital requirements. A manufacturing company will need to invest heavily in spare parts and components and might be owed large amounts of money by its customers. A food retailer will have large inventories of goods for resale but will have very few trade receivables. The manufacturing company clearly has a need for a carefully thought out policy on receivables management, whereas the food retailer may not grant any credit at all. Working capital policies will also need to reflect the credit policies of a company's close competitors, since it would be foolish to lose business because of an unfavorable comparison of terms of trade. Any expected fluctuations in the supply of or demand for goods and services, for example due to seasonal variations in business, must also be considered, as must the impact of a company's manufacturing period on its current assets. An aggressive policy with regard to the level of investment in working capital means that a company chooses to operate with lower levels of inventory, trade receivables and cash for a given level of activity or sales. An aggressive policy will increase profitability since less cash will be tied up in current assets, but it will also increase risk since the possibility of cash shortages or running out of inventory is increased. A conservative and more flexible working capital policy for a given level of turnover would be associated with maintaining a larger cash balance, perhaps even investing in short-term securities, offering more generous credit terms to customers and holding higher levels of inventory. Such a policy will give rise to a

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lower risk of financial problems or inventory problems, but at the expense of reducing profitability. A moderate policy would tread a middle path between the aggressive and conservative approaches. All three approaches are shown in Figure 2.1. It should be noted that the working capital policies of a company can be characterized as aggressive, moderate or conservative only by comparing them with the working capital policies of similar companies. There are no absolute benchmarks of what may be regarded as aggressive or otherwise, but these characterizations are useful for analyzing the ways in which individual companies approach the operational problem of working capital management.



**Fig. 2.1** Different policies regarding the level of investment in working capital

The trade-off between risk and return which occurs in policy decisions regarding the level of investment in current assets is also significant in the policy decision on the relative amounts of finance of different maturities in the balance sheet, for instance on the choice between short- and long-term funds to finance working capital. To assist in the analysis of policy decisions on the financing of working capital, we can divide a company's assets into three different types: non-current assets, permanent current assets and fluctuating current assets [7, 8]. Non-current assets are long-term assets from which a company expects to derive benefit over several periods, for example factory buildings and production machinery. Permanent current assets represent the core level of investment needed to sustain normal levels of business or trading activity, such as investment in inventories and investment in the average level of a company's trade receivables. Fluctuating current assets correspond to the variations in the level of current assets arising from normal business activity.

The cash conversion cycle (also referred to as CCC or the operating cycle) is the analytical tool of choice for determining the investment quality of two critical assets—inventory and accounts receivable. The CCC tells us the time (number of days) it takes to convert these two important assets into cash. A fast turnover rate of these assets is what creates real liquidity and is a positive indication of the quality and the efficient management of inventory and receivables. The cash

conversion cycle, which represents the interaction between the components of working capital and the flow of cash within a company, can be used to determine the amount of cash needed for any sales level. It is the period of time between the outlay of cash on raw materials and the inflow of cash from the sale of finished goods, and represents the number of days of operation for which financing is needed. The longer the cash conversion cycle, the greater the amount of investment required in working capital. The length of the cash conversion cycle depends on the length of: the inventory conversion period; the trade receivables collection period; the trade payables deferral period.

The inventory conversion period is the average time taken to use up raw materials, plus the average time taken to convert raw materials into finished goods, plus the average time taken to sell finished goods to customers. The inventory conversion period might be several months for an engineering or manufacturing company, but negligible for a service company. The trade receivables period is the average time taken by credit customers to settle their accounts. The trade payables deferral period is the average time taken by a company to pay its trade payables, such as: its suppliers. If we approximate these three periods with the financial ratios of inventory days, trade receivables days and trade payables days, the length of the cash conversion cycle (CCC) is given by the following formula:

$$\text{CCC} = \text{Inventory days} + \text{Trade receivables days} - \text{Trade payables days} \quad (1)$$

### **3. Management of Receivables Objectives achieved through monitoring two Key Performance Indicators: DSO and DTI**

Organizations have to establish a business process to efficiently manage their resources, including cash. Company's Business Process outlines all activities involved in the management of its customer relationships and business transactions. Each step within the Business Process is dependent on the successful execution of previous steps and effective implementation of the Business Process requires collaboration across various roles. At a high level, Company's Business Process begins with the customer and the agreement entered to do business together. A sales contract is created and a credit rating established. As we are particularly interested in service sector, orders are then received from the customer, allowing company, the supplier, to begin fulfilling those orders, invoicing the customer and collecting cash. Once products and services are delivered to the customers, it is time for the company to send an invoice requesting payment and eventually collect the corresponding money. It is standard for the customers to take several days to process the invoice sent to them through all the required levels of approvals and to then send back to the company the corresponding payment. The bottom line is that while collecting and processing payments from customers, the company must continue paying

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all costs associated with running the business such as: leases, utilities, employee salaries. The longer it takes to request and receive payment, the more costs the company will have to absorb and will need to obtain that money somewhere else. Therefore, the trade receivables management policy formulated by senior managers should also take into account the administrative costs of debt collection, the ways in which the policy could be implemented effectively, and the costs and effects of easing credit. It should balance the benefits to be gained from offering credit to customers against the costs of doing so. Longer credit terms may increase turnover, but will also increase the risk of bad debts. The cost of increased bad debts and the cost of any additional working capital required should be less than the increased profits generated by the higher turnover. In order to operate its trade receivables policy, a company needs to set up a credit analysis system, a credit control system and a trade receivables collection system.

Since the purpose of offering credit is to maximize profitability, the costs of debt collection should not be allowed to exceed the amounts recovered. A company should prepare regularly aged trade receivables analysis and take steps to chase late payers. It is helpful to establish clear procedures for chasing late payers, to set out the circumstances under which credit control staff should send out reminders and initiate legal proceedings. Some thought could also be given to charging interest on overdue accounts to encourage timely payment, depending on the likely response of customers. The key performance indicator used to track the efficiency in collecting payment for the products and services is Days Sales Outstanding (DSO). This is the number of days of sales between the time products/services are delivered to the customers and the time when payment is actually received by the company. Our goal is to lower DSO. We can do this by submitting accurate and timely invoices, preventing and quickly resolving invoice disputes, and negotiating adequate payment terms with the customers.

Another important KPI to be used is Days to Invoice (DTI). The goal for the company is to invoice steadily throughout the month, so as the average number of days from job completion date or delivery date to be the lowest possible. Everyone responsible for gathering job information or customer signatures should be actively pursuing this information all month long. Delaying invoicing until the last few days of the month delays the cash collections potentially into many later months. When billing is done in mass quantities the last five to ten days of the month, there is a greater chance that invoices will not be correct and disputes will occur. It may also cause overtime, which is very costly to the company. Low invoice accuracy means that the customers are rejecting the invoices for various reasons and are not timely paying them.

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Therefore an increase in DSO is generated. It leads to the following 3 key areas of impact:

- Decreased Customer Satisfaction - One of the risks of incorrect billing is that a customer can see its own business at risk due to shipments being delayed or halted. The invoices might have been sent, but not to the correct address, resulting in an order block. Or a scenario where a customer needs to allocate resources to resolve a situation concerning invoicing;
- Increased Aging in Accounts Receivable - Customers are granted a payment term, if for whatever reason a customer does not pay it means the business is short of cash whilst its obligations and liabilities have not changed.
- Increased Cost-of-Rework - Invoice or Billing corrections cost money and in most of the cases the cost is not immaterial. Additionally, people within the Order to Cash organization have to be utilized. Cost-of-Rework means inefficiency.

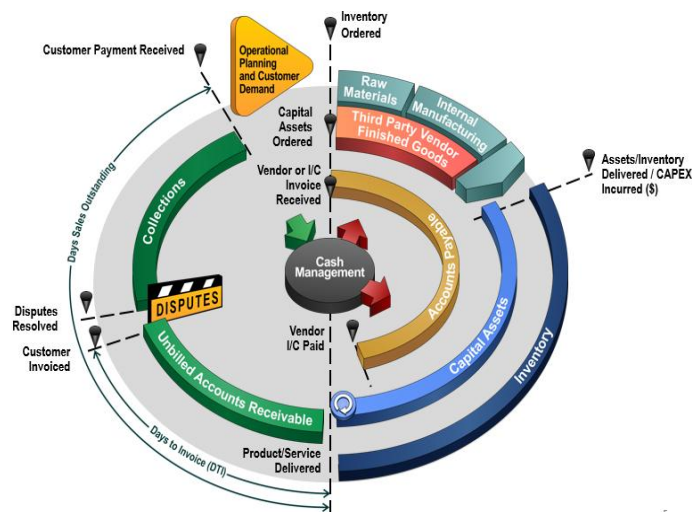


Fig. 3.1. Key Performers Indicators (KPI) in the context of a Company’s business process

#### 4. Business Intelligence and Digitalization used by Financial Managers as Credit Control tools to Deliver Growth

The role of the Financial Manager has become increasingly complex. In order to see success, modern Financial Managers and their teams have a growing array of responsibilities in managing “big data” across the business to ensure a growing, agile and sustainable business. New regulations, tax laws, corporate



governance awareness – plus the requirement to generate reports that provide decision makers with actionable real-time insight – all add to these complexities and challenges. Within this complex landscape, they still need to be able to gain clear visibility across their business and finance processes, to enable data-based decisions that will: mitigate risk in an economically volatile market, ensure optimum efficiency throughout the business, ensure business continuity and data integrity, build customer satisfaction and loyalty, and drive growth. Working capital analytics can increase liquidity and profitability by reducing the debt and cost of capital. The challenge lies in overcoming the lack of: Access to real-time information to evaluate working capital processes; Cross-functional view for a unified understanding; Skilled analytical resources to meaningfully focus on optimizing working capital. Utilizing Business Intelligence and Digitalization Solution, with the right expertise, analytics can draw action-based insights in collection effectiveness, slow pay, percentage adherence to payment terms, qualitative overdue analysis and past due ratios. Similarly, inventory analytics can uncover critical upstream issues in demand forecasting and inefficient logistics. It can also solve problems that are not confined to inventory issues. By breaking down cash, growth and profitability using the overall customer and strategic supplier performance dashboards, companies can get detailed visibility into leading and lagging key metrics across the working capital cycle. This will, in turn, enable more effective control and management.

## **Conclusions**

A reliable and stable working capital management is simply required to make it easy for a firm to maintain its daily operations without any disruption and pay out its short-lived debts to the creditor in a timely manner. As a result, a great number of business firms irrespective of their type and size have seen themselves in challenging circumstances with the creditors mainly in these modern days, simply because management of the firms do not regularly supervise and cope with the liquidity which is usually the sum of working capital. Working capital management (WCM) is expected to be given extra attention when it comes to the globalization and its fast currency fluctuations if the cost of capital is gradually rising, and source of funds is really becoming hard to find in an easy way. Thereby, if a business is definitely ineffective in dealing with working capital variables, then it is not going to only cut down profitability but also lead potentially into a financial meltdown which might possibly ruin the entire business. For that reason, both inadequate and irrational excessive working capital is detrimental to a firm's existence.

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