



Working Capital Management And Operating Cycle Efficiency In Fleet-Based Transport Operators In Pune

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Abstract- This research paper discusses the significance of working capital management and effectiveness of operating cycle in fleet-based transporters in Pune. Transportation companies need a steady cash flow for expenses related to fuel costs, vehicle maintenance, staff salaries, tolls, and other operational expenses. But when there is a delay in receiving payments from clients, there can be serious challenges regarding liquidity management. In this research paper, the method in which transporters handle cash management, receivables, payables, and their operating costs will be studied. Primary data has been collected from 100 samples from transporters, managers, and accounts from questionnaires. It has been found that the majority of transporters suffer from delays in collections, leading to issues in cash flow and working capital management. Cost of fuel emerged as the biggest operational expense in such businesses. From this research paper, it can also be concluded that proper tracking of receivables leads to better cash flow and shorter operating cycles in companies.

Keywords- Working Capital Management, Operating Cycle, Fleet-Based Transporters, Cash Flow Management, Receivables Management, Payables Management, Liquidity Management, Transportation Industry, Operational Expenses, Fuel Cost, Financial Efficiency, and Transport Operations.

I. INTRODUCTION

Working capital management is one of the most important aspects of financial management in any business organization. It refers to the management of short-term assets and liabilities such as cash, accounts receivable, inventory, and accounts payable to ensure smooth day-to-day operations. Efficient working capital management helps a company maintain liquidity, reduce financial risk, and improve profitability.

In the road transport industry, working capital plays a critical role because transport companies operate on continuous cash flow. They must regularly spend money on fuel, driver wages, vehicle maintenance, toll charges, insurance, permits, and repairs, while payments from customers are often received after a credit period. This gap between expenses and revenue creates the need for effective management of the operating cycle.

The operating cycle represents the time duration between the payment made for operating expenses and the receipt of cash from customers for transportation services. A shorter operating cycle indicates better efficiency and stronger liquidity position, while a longer cycle may lead to cash shortages and increased borrowing requirements. Therefore, analyzing operating cycle efficiency is essential for evaluating the financial health of transport companies.

Fleet-based transport operators, especially in growing industrial cities like Pune, handle large volumes of goods movement for manufacturing, logistics, and distribution sectors. Due to high fuel costs, credit sales, and continuous vehicle usage, these companies require proper planning and monitoring of working capital to maintain operational stability and avoid financial stress. This study focuses on examining the working capital management practices and operating cycle efficiency of a road transport company with special reference to a fleet-based transport operator in Pune. The research aims to evaluate how effectively the company manages its short-term finances and how this impacts liquidity, operational performance, and overall profitability.

Typical Fleet Cost Breakdown





II. SIGNIFICANCE OF THE STUDY

- Helps understand the importance of working capital in day-to-day transport operations.
- Identifies cash flow problems faced by fleet-based transport companies.
- Evaluates efficiency of the operating cycle in transport business.
- Assists management in improving liquidity position.
- Helps reduce dependency on short-term borrowings.
- Provides insights to control fuel, maintenance and operational expenses.
- Improves receivables collection and credit policy decisions.

III. IMPORTANCE OF THE STUDY

- Shows how proper working capital ensures smooth transport operations.
- Helps maintain adequate cash for fuel, salaries and maintenance expenses.
- Prevents liquidity shortage in day-to-day business activities.
- Reduces delay in payments to suppliers and drivers.
- Improves control over credit given to customers.
- Minimizes unnecessary borrowing and interest cost.
- Helps management take better short-term financial decisions.

IV. REVIEW OF LITERATURE

Smith (1980) stated that working capital management is important for maintaining liquidity and profitability simultaneously. According to him, excess working capital reduces profitability while insufficient working capital increases the risk of insolvency.

Shin and Soenen (1998) examined the relationship between the cash conversion cycle and corporate profitability and found a strong negative relationship between the length of the operating cycle and profitability. Companies with shorter operating cycles tend to perform better financially.

Deloof (2003) analyzed Belgian firms and concluded that reducing the number of days accounts receivable and inventory days

improves profitability. Efficient receivable collection plays a major role in improving company performance.

Raheman and Nasr (2007) studied firms in Pakistan and found that efficient working capital management significantly improves profitability. The study showed that longer cash conversion cycles negatively affect net operating profitability.

Padachi (2006) observed small manufacturing firms and concluded that poor working capital management leads to financial difficulties and business failure, especially in service-based and operationally intensive industries.

V. OBJECTIVES OF THE STUDY

- To study the concept and components of working capital in a road transport company.
- To analyze the working capital management practices of the fleet-based transport operator.
- To examine the operating cycle and cash conversion cycle of the company.
- To evaluate liquidity position using financial ratios.
- To study management of receivables and credit collection period.
- To analyze control over operating expenses like fuel, maintenance and wages.

VI. HYPOTHESIS OF THE STUDY

- There is no significant correlation between working capital management and profitability of the transport firm.
- Operating cycle efficiency has no significant influence on the liquidity position of the company.
- Receivables collection period has no significant effect on cash flow of the company.
- There is a significant correlation between working capital management and profitability of the transport firm.
- Operating cycle efficiency has a significant influence on the liquidity position of the company.
- Receivables collection period has a significant effect on cash flow of the company.
- Current ratio has a significant influence on the financial stability of the firm.



VII. RESEARCH DESIGN

Research Design gives an overview of the data collection, measurement, and analysis framework for working capital management and operating cycle efficiency in the selected road transport firm.

Descriptive and analytical research will be conducted to examine the financial data and assess the working capital performance of the selected firm.

The study will involve quantitative analysis of financial data and qualitative understanding of operational process.

VIII. SAMPLE SELECTION

The sample for the study is drawn through the process of non-probability sampling that employs convenience sampling techniques. One road transport company operating in Pune city on a fleet basis will be considered a sample for the study.

The selection of the sample will be made keeping in view the availability of financial information and availability of management of the firm along with the suitability of its operations for studying the effects on working capital. The company operates a fleet of vehicles and performs goods transportation business; therefore, it qualifies for the purpose of the study.

Hence, the sample size of the study is only one company, which will be used for assessing the performance in managing working capital and operating cycle.

IX. DATA COLLECTION

1. Primary Data

- Observation of daily business operations
- Informal enquiries regarding payment cycle and expenses.

2. Secondary Data

- Secondary data is collected from company records and documents such as: Balance Sheet
- Profit and Loss Account
- Cash book and ledger accounts
- Internal financial reports of selected years

X. DESIGN QUESTIONNAIRE

Questionnaire

This questionnaire has been designed in such a way that information pertaining to working capital management and operating cycle would be obtained from the selected transport firm. It comprises both open-ended and close-ended questions. Population and sample of respondents

Population

The population of the study consists of all personnel involved in financial and operational activities of the selected fleet-based road transport company, including owner, manager, accountant, drivers and operational staff.

Sample of Respondents

A sample of respondents is drawn from the population through convenience sampling technique. The sample comprises respondents who are directly involved with financial transactions and business operations including: Owner/Proprietor Accountant/Cashier Office Employees/Supervisor Drivers/Operational Employees

The choice of respondents is due to the reason that they have practical knowledge of expense management, payment, accounts receivable, and cash flow management.

Data analysis method

Analysis of Data:

The data collected will be analyzed using both financial and statistical methods for assessing the working capital management and the effectiveness of the operating cycle of the transport firm.

Methods Used:

Ratio Analysis – For assessing liquidity and efficiency (Current Ratio, Quick Ratio, Working Capital Turnover Ratio).

Operating Cycle Analysis – For determining the time difference between payment of expenses and receipt of cash.

Cash Conversion Cycle Analysis – For assessing the effectiveness of cash flows.

Comparative Statement Analysis – For comparing the financial performance of different periods.

XI. STATISTICAL TOOLS AND TECHNIQUES

1. Ratio Analysis - Used for measuring liquidity, solvency and efficiency.

2. Current ratio and quick ratio - Used for



measuring short term financial position.

3. Working capital turnover ratio - Used for measuring effectiveness of working capital.
4. Operating cycle and cash conversion cycle - Used for analysing effectiveness of cash flows.
5. Average collection period - Used for studying the performance of receivables management.
6. Trend analysis - Used to observe financial performance during different years.
7. Comparative analysis - Used to compare financial statements during different years.

XII. SCOPE OF STUDY

1. The study focuses on working capital management practices of a fleet-based road transport company.
2. It examines management of cash, receivables and payables in daily operations.
3. It analyses operating cycle and cash conversion cycle efficiency.
4. The study evaluates liquidity position using financial ratios.
5. It covers financial data of selected recent years only.
6. The study is limited to one transport operator located in Pune.

XIII. LIMITATION OF STUDY

- The research is confined to one fleet-based transport company alone.
- The results obtained cannot necessarily be applied to other transport firms or other sectors.
- The findings depend on the accuracy of the financial data used.
 - Financial data may sometimes be confidential.
 - Time frame used for the research is too short.
 - Employees' responses might be biased.
 - The seasonal nature of the transport business is not considered.

XIV. QUESTIONNAIRE

1. What is the main source of working capital in your company?
 - a) Owner's funds
 - b) Bank loan / overdraft
 - c) Credit from suppliers
 - d) Mixed sources

2. How often does the company face cash shortage?

- a) Never
- b) Rarely
- c) Sometimes
- d) Frequently

3. What is the usual credit period given to customers?

- a) Less than 15 days
- b) 15 – 30 days
- c) 30 – 60 days
- d) More than 60 days

4. How are drivers and staff generally paid?

- a) Daily
- b) Weekly
- c) Monthly
- d) Trip basis

5. What is the average time taken to receive payment from clients?

- a) Within 15 days
- b) 15 – 30 days
- c) 30 – 60 days
- d) More than 60 days

6. Which expense consumes the highest working capital?

- a) Fuel
- b) Maintenance & repairs
- c) Salaries & wages
- d) Toll & permits



7. How frequently are vehicles idle due to lack of working capital?

- a) Never
- b) Occasionally
- c) Often
- d) Very often

8. What method is used to track expenses?

- a) Manual register
- b) Excel / computer records
- c) Accounting software
- d) No proper system

9. Does delay in customer payments affect operations?

- a) Not at all
- b) Slightly
- c) Moderately
- d) Severely

10. How does the company manage urgent cash requirements?

- a) Personal funds
- b) Bank borrowing
- c) Credit from suppliers
- d) Advance from customers

XV. CONCLUSION

The study on working capital management and operating cycle efficiency of fleet-based transport operators in Pune reveals that efficient management of short-term finances is essential for the smooth functioning of transport businesses. The research found that most transport operators face delays in receiving payments from customers, which creates liquidity problems and affects daily operations. High operational expenses such as fuel,

maintenance, and wages further increase the pressure on working capital.

The findings show that transport companies with proper receivables tracking systems and financial planning experience better cash flow management and improved operational efficiency. Delayed receivables and longer operating cycles force many operators to depend on bank loans and external financing, which increases financial burden and reduces profitability.

The study concludes that effective working capital management, faster receivable collection, digital billing systems, and strong credit control policies can significantly improve liquidity and reduce financial risks. Proper planning of cash flow and operating expenses will help fleet-based transport operators achieve better profitability, operational stability, and long-term business growth in a competitive transport industry.

XVI. OUTCOMES

- Delayed customer payments were found to be the leading factor causing working capital issues in fleet-based transport organizations.
- It was noted that most transport organizations suffer from liquidity constraints owing to longer collection periods of receivables.
- The research study also pointed out that the biggest cost incurred by transport organizations is the cost of fuel.
- Organizations that had efficient methods of tracking their receivables and had proper financial planning were found to have better cash flows.
- Inefficient operating cycles lead to increased reliance on outside financing sources such as bank loans and vendor credit facilities.
- It was found that proper working capital management practices would help in improving the profitability and liquidity positions of transport organizations.
- The research study also stressed the need for the use of digital invoicing systems and prompt payment collection systems for increasing operating efficiency.

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