

An Analytical Study on the Factors Contributing Towards Outstanding Client Payments in the Logistics Sector

Yuvetha Sree R, Dr P Shanmughapriya
(Kumaraguru School of Business, Coimbatore, Tamil Nadu, India)
yuvetharaja782@gmail.com
(Kumaraguru School of Business, Coimbatore, Tamil Nadu, India)
shanmughapriya.p@ksbedu.in

Abstract:

This study examines the main reasons why Send Easy Logistics, a multi-regional logistics service provider, has unpaid clients. It employs a mixed-method approach, integrating qualitative information from stakeholder questionnaires and interviews with quantitative analysis of transaction data. The study looks at service delivery metrics, invoice workflows, payment trends, and departmental procedural inefficiencies. To find the main reasons for delays, historical documents, correspondence logs, and dispute cases were also examined. For service-based organisations, the study offers helpful suggestions for process enhancement, technology adoption, and improved cash flow management.

Keywords — Outstanding Client Payments, Cash Flow Management, Logistics Industry, Payment Delay Factors, Invoice Processing Efficiency, Supply Chain and Organisational Sustainability.

I. INTRODUCTION

By facilitating the transportation of goods between geographically separated markets, the logistics sector is essential to global trade. Outstanding client payments, which have a direct impact on liquidity and operational continuity, are a significant financial challenge for logistics companies. Cash flow imbalances and a greater need for outside funding are common outcomes of inefficient receivables management. High operating costs and disjointed supply chains present additional difficulties for small and medium-sized logistics companies in India. As a result, this study looks at the main variables affecting unpaid client

payments and how they affect payment practices in the logistics industry.

II. REVIEW OF LITERATURE

Dmitry Ivanov (2024), “Cash Flow Dynamics in the Supply Chain During and Disruptions, published in Transportation Research, using tools like SPSS and scenario analysis, the study reveals that disruptions. The study concludes that even when inventory is sufficient, a breakdown in payments can cripple operations, highlighting the critical importance of cash flow resilience in supply chain management.

Erna Lovita, Gatot Prabantoro, and Karisma Devi Roswida (2024). “Managing Cash Flow and Financial Efficiency in Logistics Companies:

Analysing Practices and Their Impacts”, an article published in the Accounting Information Systems and Information Technology Business Enterprise journal, using the Interactive Analysis Technique and qualitative research methods. The conclusion emphasised that effective cash flow management and growth of logistics companies.

Ehsan Badakhshan and Peter Ball (2023), “Applying digital twins for inventory and cash management in Supply Chain under physical and financial disruptions”, in a study published in the International Journal of Production Research, using simulation and predictive analytics as the primary tools for data analysis. They revealed that the proposed digital twin framework is highly effective in managing inventory and cash flows when supply chains face challenges.

Ayman Abdalmajeed Alsmadi, Anwar Al-Gasaymeh, Najed Alrawashdeh and Loai Naser Alhwamdeh (2022). “Financial Supply Chain Management: A bibliometric analysis”, The study utilised MS Excel for descriptive statistical analysis of questionnaire data, offering valuable insights into the evolving landscape of FSCM. The findings revealed that FSCM is increasingly recognised as a critical discipline that bridges operational and financial management.

Tetiana Kovtun, Victoriya Smrkovska, (2020), “Development of a cash flow model for the Eco-Logistics system project” in a 2020 study published in the International Journal of Business Management and Innovation (IJBMI). The findings demonstrated that the proposed cash flow model could effectively support economic feasibility, scalability, and environmental value.

Hillary K. Too and Elizabeth Nambuswa Makokha (2016), "Effects of Cash Flow Management on Logistics Outsourcing in Large Manufacturing Firms," published in IJCRT and CORE. The findings revealed a positive, though weak, correlation between cash flow management and logistics outsourcing in large manufacturing firms. The authors concluded that organisations with proper cash flow management are better positioned to outsource logistics effectively.

III. RESEARCH OBJECTIVE

Primary Objective:

- To analyse and identify the key factors contributing to outstanding client payments in the logistics industry.

Secondary Objectives:

1. To study the interrelationship between the factors contributing to outstanding client payments in the logistics industry.
2. To analyse the influence of the type of industry on the key factors contributing to outstanding client payments.
3. To examine the relationship between the tenure of the client in the logistics industry and the payment issues, along with the consequences faced by them.

IV. SCOPE OF THE STUDY

The scope of this study extends to a comprehensive investigation of the factors contributing to outstanding client payments within the logistics industry, focusing specifically on the nature of payment behaviours, billing practices, and administrative processes that drive payment delays in the logistics industry. The study also considers the impact of broader economic and sectoral trends, including how shifts in market conditions and supply chain disruptions influence timely payments. The study’s findings are expected to have implications for policy formation, process reengineering, and the adoption of best practices within the logistics industry.

V. NEED FOR THE STUDY

The need for the study emphasises the reasons why conducting the research is important. It addresses the practical benefits the organisation can achieve by undertaking this study. An analytical study on the factors contributing to outstanding client payments in the logistics industry is needed because such delays significantly strain the company's cash flow, disrupt daily operations, and

force reliance on costly external financing, which erodes profitability and restricts business growth. Persistent outstanding payments can damage client and supplier trust, lead to supply chain disruptions, harm the company's credit rating, and create operational inefficiencies by consuming valuable management time and resources that could otherwise be focused on expanding the business.

VI. LIMITATION OF STUDY

The limitations of the study on outstanding client payments include several key factors that may affect the overall findings.

1. Time Constraints

The data collection was conducted within a specific time frame, which means that seasonal payment trends or behavioural changes in clients' payment patterns may not have been captured.

2. Response Bias

As the study relies partly on survey feedback, clients may have provided responses influenced by personal perceptions, relationships, or potentially introduced bias into the results.

3. External Influences Beyond Control

Factors such as changes in the economic environment, fuel price fluctuations, regulatory modifications, or sudden market disruptions may influence client payment behaviour, but were beyond the scope of this research to fully measure or control.

VII. THEORITICAL BACKGROUND

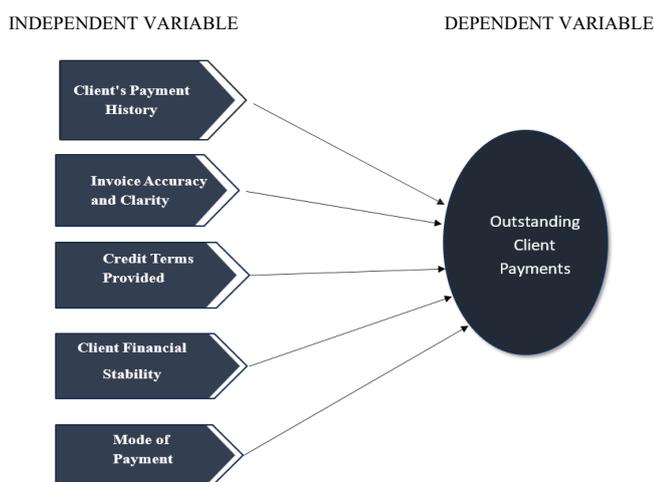


FIG. 1 CONCEPTUAL MODEL

The conceptual model for this study illustrates the relationship between various client-related and transactional factors and their collective impact on outstanding client payments in the logistics sector. The model considers five primary variables: client's payment history, invoice accuracy and clarity, credit terms provided, client's financial stability, and mode of payment. Each of these factors is hypothesised to influence the timeliness and completeness of payments received from clients. Similarly, the credit terms extended to clients may directly affect their payment schedules, and a client's financial stability can be a determining factor in their ability to meet obligations promptly.

VIII. RESEARCH DESIGN

The study employs a descriptive research design, which aims to methodically outline the details and characteristics related to outstanding client payments and their impact on the organisation's operations. To understand the causes, patterns, and consequences of payment delays, it will specifically examine the opinions and feedback from clients regarding their payment practices, invoicing challenges, communication with the company's accounts team, the effectiveness of payment reminders, and the availability of support services to resolve payment-related issues. This approach enables a clearer understanding of factors contributing to outstanding payments and helps identify strategies to improve collections and maintain healthy client relationships.

IX. ANALYSIS

The study was basically descriptive and involved 119 people who work in logistics. I think using the type of industry as one of the demographic things makes sense because it gives a sense of where these respondents are coming from, sector-wise. Then there is the duration of the business, which seems important for figuring out how experienced or mature the companies are. These details just help in getting a better profile of everyone involved. It feels like they aid in making sense of the perceptions and what people are actually doing in practice. Overall, the

demographics lay out a solid base for the findings, though some parts might not cover everything perfectly.

TABLE I
DESCRIPTIVE ANALYSIS

Type of Industry		
Types of industry	Frequency	Percentage
Manufacturing	24	20.2
Trading	14	11.8
Retail	9	7.6
Wholesale	72	60.5
Total	119	100.0
Duration of Business		
Duration	Frequency	Percentage
Less than 6 months	41	34.5
6 months to 1 year	35	29.4
1 to 3 years	19	16.0
More than 3 years	24	20.2
Total	119	100.0

INTERPRETATION

In the study, wholesale comes out on top for the type of industry. There were 72 respondents picking that, which is about 60.5 per cent. It really dominates things there. For how long the businesses have been running, the biggest group is under six months. That is 41 people, or 34.5 per cent. I think that shows a lot of new operations, maybe. Wholesale has way more concentration. Nothing in the duration side even gets close to that level. This indicates that respondents are largely wholesale-oriented while being relatively dispersed across business experience levels.

Hypothesis analysis correlation between the factors contributing to outstanding client payment in the logistics sector:

Null Hypothesis (H₀): There is no significant correlation between the factors contributing to Outstanding Client Payment in the logistics sector ($\rho = 0$).

Alternative Hypothesis (H₁): There is a significant correlation between correlation Factors Contributing to Outstanding Client Payment in the logistics sector ($\rho \neq 0$).

TABLE II
CORRELATION BETWEEN THE FACTORS CONTRIBUTING TO OUTSTANDING CLIENT PAYMENT

Correlation	Invoice & Billing Process	Follow-up & Communication	Service & Relationship	Internal & External Payment Factors	Payment Issues & Consequences
Invoice & Billing Process	1	.569	.608	.543	.429
Sig. (2-tailed)		.000	.000	.000	.000
Follow-up & Communication	.569	1	.568	.633	.534
Sig. (2-tailed)	.000		.000	.000	.000
Service & Relationship	.608	.568	1	.577	.531
Sig. (2-tailed)	.000	.000		.000	.000
Internal & External Payment Factors	.543	.633	.577	1	.529
Sig. (2-tailed)	.000	.000	.000		.000
Payment Issues & Consequences	.429	.534	.531	.529	1
Sig. (2-tailed)	.000	.000	.000	.000	

INTERPRETATION

The correlation analysis shows that all variables are positively and significantly correlated at the 0.01 level, indicating that improvements in one payment-related factor are associated with enhancements in others. The strongest relationships are observed between Service & Relationship and Invoice & Billing Process ($r = 0.608$), and between Follow-up & Communication and Internal & External Payment Factors ($r = 0.633$), suggesting that better service and communication closely align with smoother invoicing and payment practices. While all coefficients reflect moderate strength, the weakest correlation is between Invoice & Billing Process and Payment Issues & Consequences ($r = 0.429$), indicating that although related, efficient billing has a less direct influence on the issues and consequences experienced in payment processes.

X. MANAGERIAL IMPLICATIONS

Businesses really need to focus on wholesale clients since they make up the biggest part of the customer base. That means coming up with payment solutions that fit them just right, and

also working on trust over time. Things like loyalty rewards or flexible ways to pay, plus good help when they first start with you. It seems like that could keep things steady. To cut down on payment delays, clear terms from the start help a lot. Digital billing makes it easier too, and offers options that do not mess with cash flow. Reminders that work well, sorting out disputes fast, and getting deliveries on time all tie into that. Then there are other ideas to push for quicker payments. Seasonal plans could adjust for busy times, and maybe nudge their accounts team to process faster. That might reduce those intentional delays some people drag out. Keeping service levels high is key, no doubt. Enforce penalties for late payments, and have solid support for any billing problems. All these pieces connect in ways that are hard to ignore. Improving just one area, say the reminders, could make the rest better too.

XI. CONCLUSION

Using a descriptive research design and responses from 119 clients, the study sought to analyse the factors influencing outstanding client payments in the logistics sector. The results showed that the clarity of the invoice, communication methods, dispute resolution, seasonal variations in income, and the financial stability of the clients all

had an impact on payment delays. As a cash flow tactic, some clients purposefully postpone payments. All variables were found to be significantly correlated by correlation analysis, underscoring the necessity of a comprehensive approach to receivables management. Operational effectiveness and digital payment solutions were critical, but client tenure and industry type had little bearing. In order to improve cash flow and guarantee long-term financial sustainability, the study suggests adopting technology and implementing flexible payment methods.

REFERENCES

- [1] *Dmitry Ivanov* (2024), "Cash Flow Dynamics in the Supply Chain During and Disruptions, published in Transportation Research
- [2] *Erna Lovita, Gatot Prabantoro, and Karisma Devi Roswida* (2024). "Managing Cash Flow and Financial Efficiency in Logistics Companies: Analysing Practices and Their Impacts".
- [3] *Ehsan Badakhshan and Peter Ball* (2023), "Applying digital twins for inventory and cash management in Supply Chain under physical and financial disruptions".
- [4] *Ayman Abdalmajeed Alsmadi, Anwar Al-Gasaymeh, Najed Alrawashdeh and Loai Naser Alhwamdeh* (2022). "Financial Supply Chain Management: A bibliometric analysis.
- [5] *Tetiana Kovtun, Victoriya Smrkovska,* (2020), "Development of a cash flow model for the Eco-Logistics system project".
- [6] *Hillary K. Too and Elizabeth Nambuswa Makokha* (2016), "Effects of Cash Flow Management on Logistics Outsourcing in Large Manufacturing Firms," published in *IJCRT* and *CORE*.
- [7] <https://www.imarcgroup.com/india-logistics-market>.