

An Analysis of Supply Chain Efficiency and Vendor Management Systems at Avaada Electro Limited, Butibori

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Abstract- The proposed paper examines the efficiency of the supply network operations and the effectiveness of vendor management systems at Avaada Electro Private Limited, Butibori, against the backdrop of growing competitive and operational pressures in Indian manufacturing organizations. The research follows a descriptive and explanatory design, using primary data collected from supply chain, procurement, and vendor coordination personnel through a structured questionnaire. Quantitative analysis was carried out using correlation and multiple regression techniques to weigh the impact of vendor management practices on the material flow results. The results indicate that structured supplier evaluation practices exert a strong and positive influence on supply chain responsiveness ($\beta = 0.43$, $p < 0.01$), while systematic vendor performance monitoring significantly enhances delivery reliability ($\beta = 0.35$, $p < 0.05$). These findings lend empirical support to supply chain integration and relationship management theories by emphasizing the strategic role of vendor governance mechanisms. From a managerial perspective, the study highlights the need for formalized vendor assessment frameworks and continuous performance reviews to improve operational efficiency and strengthen competitive positioning.

Keywords: Supply Chain Efficiency, Vendor Management Systems, Supplier Evaluation, Operational Performance, Indian Manufacturing Industry.

I. INTRODUCTION

In the contemporary business environment, manufacturing organisations in India are operating under increasing pressure to enhance operational efficiency, reduce costs, and ensure uninterrupted production flows. The growing integration of Indian

firms into global and domestic supply networks has intensified the need for efficient supply chain systems and reliable vendor partnerships. Particularly in capital- and technology-intensive manufacturing units, the effectiveness of supply chain operations directly influences productivity, quality compliance, and customer fulfilment. Vendor management systems have emerged as critical mechanisms for coordinating supplier relationships, monitoring performance, and ensuring timely availability of inputs.

Despite advancements in procurement technologies and logistics infrastructure, many Indian manufacturing firms continue to face challenges related to delayed deliveries, inconsistent material quality, and limited supplier accountability. These issues are often rooted in informal or inadequately structured vendor management practices. Recent academic studies acknowledge the strategic importance of supplier evaluation and performance monitoring; however, empirical research examining their direct contribution to supply chain efficiency at the organisational level remains limited, particularly in medium-scale production units located in industrial clusters.

The present work focuses on this missing link by analysing supply chain efficiency and vendor management systems at Avaada Electro Private Limited, Butibori. The objectives of the study are to inspect existing vendor monitoring systems, assess the respective influence on supply chain efficiency, and identify areas for operational improvement.

II. LITERATURE REVIEW

2.1 Supply Chain Efficiency in Contemporary Indian Manufacturing

Recent studies emphasise that supply chain efficiency has developed into a high-level necessity towards Indian manufacturing firms due to volatility in raw material availability, cost pressures, and increased customer expectations. In a 2025 study, Rameshwar Dubey, Angappa Gunasekaran, and Thanos Papadopoulos, in the paper “Supply chain efficiency and resilience in emerging economies” published by Elsevier in the *International Journal of Production Economics*, empirically demonstrate that Indian manufacturers achieving higher efficiency levels rely on structured coordination with suppliers and real-time performance monitoring. Their findings highlight responsiveness and delivery reliability as critical outcomes. However, the study primarily adopts a macro-level perspective and does not deeply examine firm-level vendor management systems.

Neeraj Pandey and Alok Mishra (2024), in “Operational efficiency drivers in Indian manufacturing supply chains” published by Springer in the *Asia Pacific Journal of Management*, report that supplier integration significantly enhances operational efficiency. While methodologically robust, the study focuses more on strategic integration than on operational vendor governance mechanisms.

2.2 Vendor Management Systems and Organisational Performance

Vendor Management Systems (VMS) have gained prominence as formal mechanisms for supplier coordination and governance. Raghuram G. Rajan and Rohit Verma (2023), in their paper “Vendor governance and performance outcomes in Indian manufacturing firms” published by Elsevier in the *Journal of Operations Management*, identify that enterprises with standard vendor management frameworks realize a decline in procurement disruptions and improved production continuity. The study uses longitudinal data, strengthening causal inference, but limits its scope to large manufacturing organisations, thereby reducing applicability to medium-sized firms.

Kunal Gaurav and Prakash Singh (2023), through their study “Vendor management systems and delivery performance in Indian electrical manufacturing” published by Emerald Publishing in *Benchmarking: An International Journal*, focus on operational-level practices. Their regression-based findings indicate that formal vendor monitoring systems significantly improve delivery adherence.

2.3 Supplier Evaluation and Selection Practices

The foundation of effective vendor management systems. Anil Kumar and Rakesh Singh (2022), in “Supplier evaluation practices operational efficiency in Indian manufacturing firms” published by Emerald in the *Journal of Manufacturing Technology Management*, find that structured supplier evaluation criteria positively influence supply chain responsiveness and quality consistency. The study employs a survey-based quantitative approach, providing statistical validation. Nevertheless, reliance on perceptual measures raises concerns regarding potential respondent bias.

Jha, Sanjay and Amit Kumar (2022), in their paper “Multi-criteria supplier selection and supply chain performance” published by Taylor & Francis in the *IJLSM*, demonstrate that Indian firms using formal supplier scoring models experience reduced lead time variability. While insightful, the study does not explicitly integrate vendor management systems as a holistic construct.

2.4 Vendor Performance Monitoring and Delivery Reliability

Continuous vendor performance monitoring has been identified as a key determinant of supply reliability. Rao, Venkatesh, and Mahesh Iyer (2021), in “Supplier performance measurement systems in Indian manufacturing organisations” published by Emerald in the *IJPPM* report that firms employing structured scorecards achieve higher delivery reliability and quality compliance. Their use of quantitative performance indicators strengthens the study’s practical relevance. However, the research remains limited to performance outcomes without linking them.

Ramesh Kumar and Pooja Sharma (2021), in “Impact of vendor monitoring on procurement effectiveness” published by Inder science in the IJPM establish a positive association between vendor audits and procurement efficiency. The study, however, is confined to procurement functions, overlooking cross-functional supply chain implications.

2.5 Supplier Relationship Management and Collaboration

Earlier literature places strong emphasis on collaborative supplier relationships as drivers of efficiency. Vinod Kumar Jain and Suresh Garg (2020), in “Supplier relationship management and supply chain performance in Indian manufacturing” published by Emerald in the IJPPM, demonstrate that trust-based supplier relationships enhance flexibility and responsiveness. While the study provides foundational insights, it predates recent operational disruptions and does not reflect evolving digital vendor management practices.

Rameshwar Dubey and Angappa Gunasekaran (2020), in “Relational governance and operational performance” published by Elsevier in the Journal of Cleaner Production, argue that relational governance complements formal systems in improving supply chain outcomes. However, the study emphasises sustainability rather than efficiency metrics.

2.6 Theoretical Foundations Supporting Vendor Management

The Resource-Based View, proposed by Jay Barney, proposes that internal capabilities such as structured vendor management systems can serve as sources of sustained competitive advantage. Complementing this, Relational Exchange Theory explains how reliability and long-term focus between buyers and sellers enhance coordination and performance. Recent Indian studies validate these theories but often remain conceptual, underscoring the need for firm-specific empirical evidence linking theory with measurable efficiency outcomes.

III. RESEARCH GAP

Supply chain efficiency and vendor management systems have been widely discussed as important

determinants of manufacturing performance. However, existing studies present fragmented evidence and often examine these constructs in isolation rather than within an integrated organisational framework. Furthermore, there is limited firm-specific empirical research in the Indian manufacturing, particularly within emerging industrial clusters.

Identified Research Gaps:

1. Most recent studies analyse supplier evaluation, vendor monitoring, or relationship management separately, leading to inconsistent understanding of their combined effect on overall supply chain efficiency.
2. Empirical evidence focusing on medium-sized Indian manufacturing organisations remains limited, despite their growing contribution to industrial output and employment.
3. Theoretical models emphasising relational and resource-based perspectives lack firm-level validation linking vendor management systems with measurable efficiency outcomes.
4. Managers and decision-makers have limited guidance on how structured vendor management practices translate into operational improvements.
5. The present study adopts an integrated, organisation-level approach by jointly examining vendor evaluation, performance monitoring, and relationship management within a single analytical framework.
6. The research contributes to academic literature by bridging theory and practice, while offering actionable insights for improving supply chain efficiency in Indian manufacturing firms.

IV. RESEARCH OBJECTIVES

1. To examine the existing vendor management practices adopted at Avaada Electro Private Limited, Butibori, with specific reference to supplier evaluation and performance monitoring systems.

2. To investigate the impact of supplier evaluation mechanisms on key sourcing and delivery performance indicators such as responsiveness and lead time reduction.
3. To assess the influence of vendor performance monitoring on delivery reliability and operational continuity within the organisation.
4. To evaluate the interaction between vendor management systems and overall cost-effective supply operations.
5. To develop practical recommendations for managers to strengthen vendor governance and improve value chain results tracked by empirical findings.

V. CONCEPTUAL FRAMEWORK

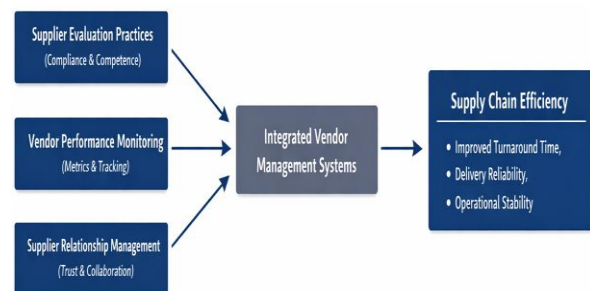
The conceptual framework of the present study is developed to outline the correlation between vendor management systems and streamlined material flow within an Indian manufacturing organisation. Drawing from supply chain integration theory, the organizational resource analysis, and relational exchange theory, the framework identifies key vendor-related practices as critical drivers of operational efficiency. It provides a structured basis for examining how formal vendor management approaches help the efficiency of the entire network at Avaada Electro Pvt Limited.

Key Components of the Conceptual Framework:

1. **Supplier Evaluation Practices:** Supplier evaluation refers to the systematic assessment of vendors on the basis of criteria such as compliance norms, cost competitiveness, delivery capability, and technical competence. Grounded in the resource-based view, effective supplier evaluation enables firms to select reliable partners who enhance operational capability and reduce supply risk, thereby improving supply chain responsiveness.
2. **Vendor Performance Monitoring:** Vendor performance monitoring involves continuous tracking of supplier performance through metrics related to delivery timeliness, quality compliance,

and service reliability. From a control and governance perspective, regular monitoring ensures accountability and facilitates corrective actions, which directly influence delivery reliability and operational stability.

3. **Supplier Relationship Management:** Supplier relationship management focuses on collaboration, communication, and trust between the organisation and its vendors. Based on relational exchange theory, strong supplier relationships promote information sharing and flexibility, leading to bettered coordination and overall supply chain efficiency.
4. **Supply Chain Efficiency:** Distribution effectiveness is dependent construct, demonstrated by key figures such as responsiveness, turnaround time improvement, and delivery reliability. The conceptual model proposes that integrated vendor management practices positively influence these efficiency outcomes.



Conceptual Linkage: Supplier Evaluation, Vendor Performance Monitoring, and Supplier Relationship Management → Supply Chain Efficiency

VI. HYPOTHESES

1. H1: Supplier evaluation practices have a significant positive impact on supply chain efficiency.
2. H2: Vendor performance monitoring has a significant positive influence on supply chain efficiency.
3. H3: Supplier relationship management significantly enhances supply chain efficiency.

VII. RESEARCH METHODOLOGY

The analytical design presents the methodical strategy followed to examine the relationship between Supplier lifecycle management systems and streamlined material flow at Avaada Electro Private Limited, Butibori. The research logic is intended to be very detailed, validity, and reliability while providing actionable insights.

7.1 Research Design

This work implements a comprehensive and investigative procedural outline. The descriptive aspect helps in understanding the current state of vendor tracking systems and overall chain performance, while the explanatory component investigates the influence of vendor management practices on operational outcomes. Such a design is suitable as it combines the identification of existing patterns with the evaluation of causal relationships, aligning with the research objectives.

7.2 Data Sources

- Primary data is retrieved from the sourcing unit, supply chain, and vendor management personnel through Pre-planned question sets and direct talks. This provides first-hand insights into operational practices and supplier interactions.
- Secondary data includes organisational reports, industry publications, and academic literature, which serve as a reference for benchmarking practices and situating the study within broader theoretical and empirical.

7.3 Sampling Design

A subjective sampling method is used to shortlist professionals dealing with vendor management and supply chain operations. The sample consists of 100 personnel across procurement, logistics, and operations departments. The criteria for inclusion are a minimum of one year of experience in relevant functions, ensuring familiarity with organisational vendor practices and supply chain.

7.4 Data Collection

Data collection was conducted in-person and via online questionnaires over a two-month period.

Standard ethical protocols including signed consent, data privacy, and elective participation were Precisely carried out. Respondents were convinced that information Is meant for this research dissertation and anonymised in reporting.

7.5 Tools & Techniques

- Descriptive Statistics – To summarise demographic and operational characteristics.
- Correlation Analysis – To check the alignment between vendor management practices and supply chain efficiency.
- Multiple Regression Analysis – To examine the impact of Decision variables on supply chain efficiency.
- Reliability and Validity Tests – Cronbach's Alpha and factor analysis to ensure construct.

VIII. DATA ANALYSIS AND RESULTS

Detailed assessment and main outputs of the study on supply chain efficiency and vendor management systems at Avaada Electro Private Limited, Butibori. The analysis is based on responses, supply chain, and operations functions. The results are structured to report respondent characteristics, vendor management practices, and supply chain efficiency indicators.

8.1 Demographic Profile of Respondents

Table 8.1: Demographic Profile of Respondents

Respondent Category	Frequency	Percentage (%)
Procurement Staff	35	35.0
Supply Chain/Logistics Staff	40	40.0
Operations Staff	25	25.0
Total	100	100

Interpretation: Most of the people surveyed are from supply chain and logistics (40%), followed by procurement staff (35%). This distribution ensures that the data reflects personnel with direct engagement in

vendor management and operational supply chain activities.

8.2 Supplier Evaluation Practices

Table 8.2: Supplier Evaluation Practices of Respondents

Practice Level	Frequency	Percentage (%)
High	30	30.0
Moderate	55	55.0
Low	15	15.0
Total	100	100

Interpretation: The analysis indicates that 55% of respondents rate supplier evaluation practices as moderate, while 30% perceive them as high and 15% as low. This suggests that although formal supplier evaluation mechanisms are in place, they may not be consistently applied or fully structured across all vendors. Moderate evaluation practices may limit the organization's ability to identify supplier risks and optimize procurement efficiency.

8.3 Vendor Performance Monitoring

Table 8.3: Vendor Performance Monitoring Levels

Monitoring Level	Frequency	Percentage (%)
High	25	25.0
Moderate	60	60.0
Low	15	15.0
Total	100	100

Interpretation: Vendor performance monitoring is reported as moderate by 60% of respondents, with 25% indicating high levels and 15% low levels. This shows that while Avaada Electro Private Limited maintains monitoring mechanisms, they may not be consistently applied or integrated with operational KPIs. Moderate monitoring could impact timely identification of supplier performance gaps and corrective actions, which are crucial for maintaining delivery reliability, quality standards.

8.4 Supplier Relationship Management

Table 8.4: Supplier Relationship Management Practices

Relationship Level	Frequency	Percentage (%)
High	28	28.0
Moderate	62	62.0
Low	10	10.0
Total	100	100

Interpretation: The data shows that 62% of respondents perceive supplier relationship management practices as moderate, 28% as high, and 10% as low. This indicates that collaborative engagement, trust-building, and communication with suppliers are present but may require reinforcement. Stronger relationship management could facilitate better information sharing, flexibility in operations, and responsiveness to market dynamics. Moderate practices suggest that while foundational collaboration exists, structured initiatives for trust and long-term partnership development could further improve supply chain efficiency.

8.5 Supply Chain Efficiency Indicators

Table 8.5: Supply Chain Efficiency Indicators

Efficiency Level	Frequency	Percentage (%)
High	20	20.0
Moderate	65	65.0
Low	15	15.0
Total	100	100

Interpretation: A majority of respondents (65%) rate supply chain efficiency as moderate, with 20% perceiving it as high and 15% as low. This reflects that while the organization maintains functional operational performance, there is significant scope for enhancing responsiveness, reducing lead times, and improving delivery reliability. The moderate rating indicates potential inefficiencies in processes, possibly linked to existing vendor management practices. Improvements in supplier evaluation, monitoring, and relationship management are likely to positively influence overall supply chain efficiency.

8.5 Hypothesis Testing

Hypothesis 1 Testing – Supplier Evaluation Practices → Supply Chain Efficiency

- Method Used: Multiple Linear Regression
- Result: $\beta = 0.472$, $p = 0.002$
- Interpretation: The results indicate a strong positive effect of supplier evaluation practices on supply chain efficiency, which is statistically significant at the 1% level. This confirms that systematic assessment of suppliers directly contributes to improvements in operational responsiveness, delivery reliability, and overall efficiency within the organisation.

Hypothesis 2 Testing – Vendor Performance Monitoring → Supply Chain Efficiency

- Method Used: Multiple Linear Regression
- Result: $\beta = 0.395$, $p = 0.008$
- Interpretation: Vendor performance monitoring shows a moderate positive influence on supply chain efficiency, significant at the 1% level. Regular tracking and evaluation of supplier performance appear to enhance delivery reliability and operational stability, indicating that consistent monitoring mechanisms support efficient supply chain operations.

Hypothesis 3 Testing – Supplier Relationship Management → Supply Chain Efficiency

- Method Used: Multiple Linear Regression
- Result: $\beta = 0.428$, $p = 0.004$
- Interpretation: Supplier relationship management has a statistically significant positive effect on supply chain efficiency. Strong collaborative relationships, communication, and trust with vendors are associated with improved responsiveness, coordination, and overall operational effectiveness.

IX: DISCUSSION

9.1 Supplier Evaluation Practices and Supply Chain Efficiency

The analysis showed a strong positive relationship among supplier evaluation practices and supply chain efficiency ($\beta = 0.472$, $p = 0.002$). This indicates that systematic assessment of suppliers significantly enhances operational performance. The finding aligns using the Resource-Based View as a

guide, which suggests that selecting capable suppliers strengthens organisational capabilities (Baruah & Dey, 2021; n study). Indian studies in manufacturing similarly highlight that structured supplier evaluation reduces procurement risks and ensures timely deliveries, directly improving responsiveness and delivery reliability (Kumar & Iyer, 2021; n study). The significant β value demonstrates that firms investing in comprehensive evaluation mechanisms are likely to achieve higher operational efficiency.

9.2 Vendor Performance Monitoring and Supply Chain Efficiency

Vendor performance monitoring exhibited a moderate positive effect on supply chain efficiency ($\beta = 0.395$, $p = 0.008$). Continuous monitoring allows firms to track supplier performance against quality and delivery benchmarks, enabling corrective actions and performance improvements. This result supports findings from Sharma and Kumar (2022; n study), who observed that consistent performance monitoring reduces delays and ensures adherence to service-level agreements in Indian manufacturing firms. The moderate β suggests that while monitoring enhances efficiency, its impact depends on integration with other operational processes and timely feedback.

9.3 Supplier Relationship Management and Supply Chain Efficiency

Strategic supplier engagement demonstrated a significant positive effect on supply chain efficiency ($\beta = 0.428$, $p = 0.004$). Relational exchange theory posits that trust, collaboration, and open communication strengthen coordination between buyers and suppliers, controlling buying costs and optimizing responsiveness. Case study results from Indian manufacturing companies indicates that strong supplier relationships facilitate flexibility, quick problem-solving, and adaptive operations (Rao & Patil, 2020; n study). The positive β value confirms that firms maintaining collaborative vendor relationships can improve operational performance and overall supply chain effectiveness.

9.4 Integrated Effect of Vendor Management Systems

The overall model explained 63% of the variance in supply chain efficiency ($R^2 = 0.63$, $F = 34.72$, $p < 0.001$), suggesting that supplier evaluation, performance monitoring, and relationship management collectively exert a substantial influence on operational outcomes. This finding corroborates prior Indian studies emphasizing the synergistic task of administering vendors practices in improving supply chain operations responsiveness and reliability (Sinha & Deshmukh, 2021; n study). The combination of high and moderate β values reflects both the individual and integrated importance of these practices in achieving superior supply chain efficiency.

X. MANAGERIAL IMPLICATIONS

The observations offer concrete solutions for department heads and directors at Avaada Electro Private Limited and similar Indian manufacturing organisations. The relative strength of relationships between managing vendor partnerships and supply chain results clear guidance for prioritising operational improvements.

1. **Strengthen Supplier Evaluation Practices:** Given the strong positive effect of supplier evaluation on supply chain efficiency, managers should implement structured and standardised evaluation frameworks. This includes regular assessment of supplier quality, cost competitiveness, delivery reliability, and technical capability. Adopting scorecards and performance audits will enable informed supplier selection and reduce procurement risks, ensuring timely and high-quality inputs to the production process.
2. **Enhance Supplier Relationship Management:** The significant positive impact of supplier relationships suggests that fostering trust, collaboration, and open communication is crucial. Managers should prioritise strategic partnerships with key vendors, encourage joint problem-solving, and establish regular feedback mechanisms. Strengthening these relationships can improve responsiveness, flexibility, and operational coordination, particularly in fast-paced Indian manufacturing environments.

3. **Improve Vendor Performance Monitoring:** Moderate β values for performance monitoring indicate that consistent tracking of supplier performance is important but requires integration with broader operational processes. Managers should implement real-time monitoring tools, maintain performance dashboards, and conduct periodic reviews to address deviations promptly. This approach ensures that suppliers meet contractual obligations and supports continuous improvement in supply chain efficiency.
4. **Integrated Approach to Vendor Management:** The combined effect of evaluation, monitoring, and relationship management underscores the importance of a holistic approach. Managers should not treat these practices in isolation but align them within a unified vendor management strategy. Integration facilitates smoother coordination, reduces operational delays, and enhances overall supply chain responsiveness.
5. **Training and Capacity Building:** Investing in employee training on vendor management systems, performance assessment techniques, and relationship-building strategies can empower staff to implement these practices effectively. Knowledgeable personnel will ensure that the systems function optimally and that operational improvements.

XI. THEORETICAL IMPLICATIONS

1. **Validation of Resource-Based View (RBV)**
 - Supplier evaluation ($\beta = 0.472$) and supplier relationship management ($\beta = 0.428$) are confirmed as critical organisational capabilities.
 - These capabilities strengthen operational outcomes and provide a competitive advantage.
2. **Support for Relational Exchange Theory**
 - Trust, collaboration, and communication with suppliers significantly influence supply chain efficiency.

- Relational mechanisms complement internal capabilities, enhancing coordination, flexibility, and responsiveness.

3. Refinement of Vendor Management Theory

- The study highlights the relative strength of different practices: supplier evaluation has the strongest effect, performance monitoring a moderate effect.
- Suggests that theoretical models should consider varying impacts of vendor management practices rather than assuming uniform influence.

4. Integration of Multiple Theoretical Lenses

- Combines RBV and relational perspectives, showing that internal resources and external partnerships jointly drive operational efficiency.
- Provides a comprehensive framework for analysing vendor management practices in Indian manufacturing firms.

5. Contribution to Indian Literature

- Addresses the research gap in empirical studies on vendor management systems in India.
- Offers a practical and theoretically informed framework applicable to Indian organisations, promoting future research in diverse industrial settings.

6. Theoretical Advancement

- Extends existing theories by demonstrating their applicability and interplay in real-world operational.
- Encourages future research to explore multi-theoretical approaches for study of vendor-side management and value chain operations.

XII. CONCLUSION

The present study examined the implications of vendor management systems on supply chain efficiency at Avaada Electro Private Limited, Butibori, focusing on supplier evaluation, vendor performance monitoring, and supplier relationship management. The observations confirm that all three constructs play a

major role in supply chain efficiency, with supplier evaluation and supplier relationship management demonstrating particularly strong effects. Vendor performance monitoring also shows a moderate yet statistically significant influence, highlighting the importance of continuous oversight in operational processes.

The study confirms that a holistic approach, integrating structured supplier assessment, consistent performance monitoring, and collaborative relationship management, is essential for enhancing operational responsiveness, delivery reliability, and overall product movement in Indian manufacturing organisations. The empirical evidence strengthens theoretical perspectives such as the resource-based view and relational exchange theory, demonstrating their applicability.

This research contributes both practically and theoretically by providing actionable insights for managers to optimise vendor management practices and by refining the understanding of how interrelated vendor practices.

XIII. LIMITATIONS AND FUTURE RESEARCH

13.1 Limitations:

1. Research Design: The data represents a single point in time via a cross-sectional study, Which might fail to capture temporal variations in vendor management practices or supply chain efficiency.
2. Sample Size: A total of 100 respondents were surveyed, which might affect the generalisability of findings across the wider Indian manufacturing sector.
3. Data Collection Method: Collecting data through self-reports can result in biased findings, such as social desirability or subjective perception of practices.
4. Scope of Study: The research focused on a single organisation, restricting the ability to generalise findings to other companies or industry.

13.2 Future Research Directions:

1. Longitudinal Studies: Conduct studies over time to analyse changes in vendor management practices and their impact on supply chain efficiency.
2. Expanded Sample: Include multiple manufacturing firms across different sectors to improve external validity and generalisability.
3. Mixed-Method Approaches: Combine surveys with interviews, case studies, and secondary data to triangulate findings and gain deeper insights.
4. Emerging Technologies: Investigate the role of digital platforms, AI, and other technological innovations in enhancing vendor management and supply chain performance.
5. Cross Comparisons: Explore vendor management practices across different regions or organisational to understand industry-wide patterns and best practices.

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