INVENTORY MANAGEMENT

A Study of Inventory Management and Its Role in Business Performance

Riti Shah, Lenin Jothi, Rajat Gera

Amity Business School, Amity University Maharashtra, Mumbai, India

Published November 2026

Abstract

Inventory management is an essential business function involving the planning, procurement, storage and control of goods and materials. Effective inventory management helps organisations maintain optimum stock levels, minimise wastage, control operating costs and ensure the smooth functioning of business operations. It also supports working capital management and may contribute to improved profitability.

The present study examines the role of inventory management in business performance, focusing on cost control, operational efficiency, working capital utilisation and technology. The study follows a descriptive research design and uses primary data collected through a structured Google Forms questionnaire. A total of 53 responses were analysed using frequency and percentage methods. Secondary data was obtained from academic journals and published research studies.

The findings indicate that respondents generally recognise the importance of inventory management. A significant proportion agreed that inventory control minimises wastage, supports working capital management and improves overall business performance. The study highlights the importance of maintaining balanced inventory levels and adopting technology-enabled inventory control practices.

Keywords: Inventory Management; Business Performance; Working Capital; Cost Control; Operational Efficiency; Profitability

1 Internship overview

The researcher completed a Finance Internship at Raymond Lifestyle Ltd. during June–July 2026. The internship provided practical exposure to financial analysis and reporting activities.

The work involved analysing the company's FY 2023–24 and FY 2024–25 annual reports, including the Profit and Loss Statement, Balance Sheet, Cash Flow Statement and selected financial ratios. The researcher also gained exposure to inventory-related reports involving material consumption, procurement, vendors and material categories, using Microsoft Excel.

This experience helped develop an understanding of the relationship between inventory information, operational planning and financial management. It also provided the practical context for selecting inventory management as the area of academic research.

The present research is a separate academic study based on a general survey and does not represent company-specific findings of Raymond Lifestyle Ltd.

2 Objectives of the study

1. To understand the concept and importance of inventory management.

2. To examine the significance of maintaining optimum inventory levels.
3. To study the role of inventory management in reducing operating costs and wastage.
4. To understand its relationship with working capital management.
5. To examine the perceived contribution of inventory management to business profitability.
6. To study the role of technology in inventory tracking and control.
7. To assess respondents' awareness and perceptions regarding inventory management and business performance.

3 Scope of the study

The study covers the conceptual, operational and financial aspects of inventory management.

- **Conceptual Scope:** Understanding inventory, including raw materials, work-in-progress and finished goods.
- **Operational Scope:** Examining stock availability, procurement planning and inventory control.
- **Financial Scope:** Understanding the perceived relationship between inventory, operating costs, working capital and profitability.
- **Technological Scope:** Examining the role of digital systems in inventory tracking and monitoring.
- **Respondent Scope:** Individuals belonging to different age groups and occupational backgrounds.

The study is based on survey responses and academic literature. It does not measure the actual financial performance of a particular organisation.

4 Review of literature

A review of literature examines previous research studies to understand existing findings and establish an academic foundation for the present study.

In the study The Effect of Inventory Management on Firm Performance, published in the International Journal of Productivity and Performance Management, Koumanakos (2008) examined manufacturing firms in Greece. The findings indicated that higher inventory levels were associated with lower rates of return, highlighting the financial implications of excessive inventory.

In Working Capital Management: Financial and Valuation Impacts, published in the Journal of Business Research et al. (2020) examined working capital practices and their relationship with financial performance. The study considered inventory turnover along with other working capital components, highlighting the importance of efficient working capital management.

In Working Capital Management and Firm's Profitability: Evidence from Czech Certified Firms from the EFQM Excellence Model, published in Cogent Economics & Finance et al. (2021) examined 332 Czech firms. The study analysed the relationship between working capital components, including inventory-related measures, and firm profitability.

In Inventory Turnover and Firm Profitability: A Saudi Arabian Investigation, published in Processes et al. (2023) examined 78 Saudi Arabian manufacturing companies. The study investigated the relationship between inventory turnover and profitability, emphasising the importance of efficient inventory movement.

In Resilience in Cyclicality: Impact of Inventory Management Efficiency on Operational Profitability, published in Managerial and Decision Economics et al. (2025) examined US consumer goods companies. The study identified a non-linear relationship between inventory days and operating profitability, indicating the importance of maintaining balanced inventory levels.

Summary of Literature: Previous studies establish that inventory management is closely related to operating efficiency, working capital utilisation and profitability. The appropriate level of inventory, however, may vary depending on industry requirements and demand conditions.

5 Research gap

Previous studies have largely focused on company-level financial information, inventory turnover ratios and profitability indicators to examine the relationship between inventory management and business performance.

However, there is scope to understand how individuals from different occupational and educational backgrounds perceive inventory management.

The present study addresses this area by examining respondents' awareness of inventory concepts and their perceptions regarding cost reduction, wastage, working capital management, profitability and technology through a structured questionnaire.

6 Research methodology

Table 1. Research methodology at a glance.

Particulars	Description
Research Design	Descriptive research
Nature of Data	Primary and Secondary
Primary Data	Google Forms questionnaire
Secondary Data	Research papers, academic journals and publications
Sampling Method	Non-probability convenience sampling
Sample Size	53 respondents
Research Instrument	Structured questionnaire
Analysis Tools	Frequency and percentage analysis

The questionnaire consisted of 15 questions divided into three sections: respondent profile, awareness of inventory management and perceptions regarding inventory management and business performance.

The responses were analysed using frequency distribution and percentage calculations.

$$\text{Percentage} = \frac{\text{Number of responses}}{\text{Total responses}} \times 100 \quad (1)$$

7 Data analysis and interpretation

The analysis is based on 53 completed survey responses.

7.1 Respondent profile

Table 2. Profile of respondents (n = 53).

Characteristic	Category	Respondents	Percentage
Age	18–25 years	30	56.6%
	26–35 years	18	34.0%
	36–45 years	5	9.4%
Occupation	Students	29	54.7%
	Salaried employees	16	30.2%
	Business owners/entrepreneurs	6	11.3%
	Self-employed	2	3.8%
Relevant academic or professional background	Yes	34	64.2%
	No	19	35.8%

The majority of respondents belonged to the 18–25 age group.

Students constituted the largest respondent group, followed by salaried employees.

The majority reported having a background in finance, business, accounting, manufacturing or supply chain.

7.2 Awareness of inventory management

- 79.2% of respondents reported being either very familiar or somewhat familiar with inventory management.
- 73.6% correctly identified raw materials, work-in-progress and finished goods as components of inventory.
- 81.1% identified maintaining the right level of stock as the main purpose of inventory management.
- 77.4% recognised higher storage and holding costs as a consequence of excessive inventory.
- 81.1% recognised that insufficient inventory could affect production or sales.

These results indicate a generally positive level of awareness regarding the basic concepts and importance of inventory management.

7.3 Inventory management and business performance

The final seven questions examined respondents' agreement with statements concerning inventory management and business performance.

Table 3. Agreement with statements on inventory management and business performance (n = 53).

Statement	Agree + Strongly Agree
Reduces operating costs	86.8%
Minimises wastage and excess stock	90.6%
Helps meet customer demand	77.4%

Statement	Agree + Strongly Agree
Supports working capital management	88.7%
Improves profitability	86.8%
Technology improves inventory tracking	92.5%
Improves overall business performance	88.7%

The highest agreement was recorded for the role of technology in inventory tracking and control (92.5%). This was followed by the role of inventory control in minimising wastage and excess stock (90.6%).

Overall, the responses indicate that participants recognise inventory management as an important contributor to efficient business operations.

8 Major findings

- The study received 53 completed responses, with students representing 54.7% of the sample.
- A total of 79.2% of respondents reported being very or somewhat familiar with inventory management.
- 73.6% correctly identified all three major categories of inventory.
- 81.1% recognised maintaining optimum stock levels as the main purpose of inventory management.
- 77.4% associated excessive inventory with higher storage and holding costs.
- 81.1% recognised that insufficient inventory could affect production and sales.
- 90.6% agreed that proper inventory control minimises wastage and excess stock.
- 88.7% agreed that inventory management supports working capital management.
- 92.5% recognised the importance of technology in inventory tracking and control.
- 88.7% agreed that efficient inventory management improves overall business performance.

9 Suggestions and recommendations

- **Maintain Optimum Stock Levels:** Organisations should balance stock availability with storage and holding costs to avoid overstocking and stock-outs.
- **Implement ABC Analysis:** Inventory should be classified according to consumption value to improve monitoring and control.
- **Improve Demand Forecasting:** Historical sales and market trends should be considered while planning procurement.
- **Conduct Regular Inventory Audits:** Periodic verification can help identify discrepancies, wastage and obsolete stock.
- **Adopt Technology:** Inventory software, barcode systems and ERP platforms can improve tracking accuracy and operational efficiency.
- **Monitor Non-Moving Inventory:** Slow-moving and obsolete materials should be reviewed regularly to reduce unnecessary costs.
- **Integrate Inventory and Financial Planning:** Inventory decisions should be aligned with procurement budgets and working capital requirements.

10 Conclusion

The study highlights the importance of inventory management in supporting business operations and financial efficiency. The survey findings indicate that respondents generally recognise the role of inventory control in reducing wastage, managing operating costs, supporting working capital and improving overall business performance.

The responses also demonstrate strong recognition of technology as an important tool for improving inventory tracking and control.

The reviewed literature further establishes the relationship between inventory management, operational efficiency and profitability. Effective inventory management therefore requires a balance between stock availability and the costs associated with holding inventory.

Since the present study examines respondents' awareness and perceptions rather than actual company financial data, its findings should not be interpreted as proof of a direct causal impact on profitability.

11 Limitations of the study

- The study is based on a sample of 53 respondents and may not represent the wider population.
- Convenience sampling limits the generalisability of the findings.
- Students constitute more than half of the sample.
- The study relies on self-reported awareness and perceptions.
- The research does not analyse actual company-level inventory records or audited financial data.
- The study was conducted within a limited academic timeframe.

12 Future scope of the study

- Future research may include a larger and more diverse sample.
- Comparative studies may be conducted across manufacturing, retail and service industries.
- Further research may examine inventory turnover and profitability using company-level financial data.
- The effectiveness of techniques such as ABC analysis, Economic Order Quantity and Just-in-Time inventory systems may be studied.
- Future studies may examine the role of artificial intelligence, automation and ERP systems in inventory management.

References

[1] Alnaim, M., & Kouaib, A. (2023). Inventory turnover and firm profitability: A Saudi Arabian investigation. Processes, 11(3), 716. https://doi.org/10.3390/pr11030716

[2] Boisjoly, R. P., Conine, T. E., Jr., & McDonald, M. B., IV. (2020). Working capital management: Financial and valuation impacts. Journal of Business Research, 108, 1–8. https://doi.org/10.1016/j.jbusres.2019.09.025

[3] Koumanakos, D. P. (2008). The effect of inventory management on firm performance. International Journal of Productivity and Performance Management, 57(5), 355–369. https://doi.org/10.1108/17410400810881827

[4] Yeboah, S., Kjærland, F., & Kustec, I. (2025). Resilience in cyclicality: Impact of inventory management efficiency on operational profitability. Managerial and Decision Economics, 46(2), 832–842. https://doi.org/10.1002/mde.4406

[5] Yousaf, M., Bris, P., & Haider, I. (2021). Working capital management and firm's profitability: Evidence from Czech certified firms from the EFQM excellence model. *Cogent Economics & Finance, 9*(1), Article 1954318. https://doi.org/10.1080/23322039.2021.1954318