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Digital-Era Inventory Optimization and Corporate Profitability: Empirical Evidence from PT Gramedia Asri Media, Indonesia

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Abstract

Effective merchandise inventory management is essential for maintaining operational efficiency and financial performance in an increasingly digitalized retail environment. This study examines the relationship between merchandise inventory optimization and profitability at PT Gramedia Asri Media in Medan, Indonesia. A quantitative research approach was employed, utilizing company financial statements and observations of inventory management practices. Data were analyzed using simple linear regression to evaluate the statistical relationship between inventory optimization and profitability. The findings reveal a positive and statistically significant relationship ($B = 0.798$, $p < 0.001$), indicating that higher inventory optimization scores are associated with improved profitability. The coefficient of determination ($R^2 = 0.968$) indicates that inventory optimization accounts for 96.8% of the observed variation in profitability within the estimated model. These findings highlight the strategic relevance of inventory optimization in supporting financial performance and suggest that digitally supported inventory management practices may enhance stock control, resource utilization, and operational decision-making. The study provides firm-level empirical evidence on the relationship between inventory management and profitability in the Indonesian retail sector.

Keywords: Merchandise Inventory Optimization, Profitability, Digital Inventory Management, Retail Sector, Financial Performance.

INTRODUCTION

The rapid development of digital technologies has transformed retail operations, particularly in inventory control, supply chain coordination, and financial performance management. In an increasingly competitive business environment, retailers must balance product availability, inventory holding costs, and responsiveness to changing consumer demand (Berlinski & Morales, 2024). These challenges became particularly evident during the COVID-19 pandemic, when disruptions to retail supply chains exposed weaknesses in inventory planning, product distribution, and operational resilience. Previous research has highlighted the importance of adaptive supply chain strategies in addressing disruptions and maintaining retail operations (Ma et al., 2024). Consequently, merchandise inventory optimization has become an important operational capability for maintaining business continuity and supporting sustainable profitability.

Inventory management plays a critical role in retail financial performance because merchandise represents a substantial investment in working capital and a primary source of sales revenue. Excessive inventory increases storage costs, ties up financial resources, and exposes businesses to product obsolescence, whereas insufficient inventory may result in stockouts, lost sales, and declining customer satisfaction. From a working capital management perspective, inventory optimization seeks to improve the efficiency of capital utilization while maintaining adequate product availability. (Ali et al., 2024) demonstrated that inventory turnover varies considerably across retail firms and is associated with gross margins, capital intensity, and unexpected sales fluctuations. These findings emphasize the importance of evaluating inventory efficiency in relation to firm-specific operating conditions rather than relying solely on inventory turnover as an isolated performance indicator.

Digital transformation provides additional opportunities to strengthen inventory management through improved information visibility, transaction accuracy, and operational coordination. Technologies such as enterprise resource planning (ERP), barcode-based systems, and radio-frequency identification (RFID) facilitate inventory tracking, data integration, and more timely decision-making. (Ifeanyiwa & Ajayi, 2026) highlighted the potential of ERP and RFID integration

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to improve supply chain efficiency, while recent research on RFID-enabled digital transformation further emphasizes the importance of inventory visibility, automation, and traceability in modern supply chains (Idemudia et al., 2023). These developments suggest that digitally supported inventory management can contribute to more efficient resource allocation and improved operational responsiveness. Nevertheless, technological capabilities do not automatically translate into higher profitability, as financial outcomes also depend on implementation effectiveness, operating costs, and market conditions (Rahman & Karim, 2022).

Despite these technological developments, the relationship between inventory optimization and profitability remains an important empirical issue. Inventory efficiency may support profitability by reducing unnecessary holding costs, improving stock availability, and strengthening working capital utilization. However, inventory turnover and profitability do not necessarily move in the same direction because financial performance is also influenced by pricing policies, product margins, operating expenses, and demand fluctuations. Accordingly, the financial implications of inventory optimization require investigation within specific organizational and market contexts.

PT Gramedia Asri Media Medan provides a relevant setting for examining this relationship. As a retailer specializing in books and related merchandise, the company manages diverse product categories supplied by multiple publishers and distributors. Variations in customer demand, product availability, and sales performance create operational challenges in determining appropriate inventory levels. Ineffective inventory allocation may increase holding costs or reduce sales opportunities, potentially affecting profitability. These challenges became particularly relevant during the COVID-19 pandemic, when retail businesses experienced changes in consumer purchasing behavior and operating conditions.

Company sales records for 2020 indicate fluctuations in monthly performance, as presented in Table 1. Total recorded sales amounted to IDR 8.687 billion against a target of IDR 8.878 billion, representing approximately 97.85% target achievement. Sales performance weakened particularly during March, April, and May, when achievement rates fell to approximately 88%, 86%, and 91%, respectively. Although sales recovered during several subsequent months, the annual shortfall of IDR 191 million highlights the company's difficulty in consistently achieving its sales targets. These fluctuations provide an empirical basis for examining whether inventory optimization is associated with improved financial performance. However, sales deviations alone do not establish that inventory management deficiencies caused the observed performance changes.

Existing research has established the operational importance of inventory management, while digital supply chain studies have increasingly emphasized information integration and technology-enabled inventory visibility. Nevertheless, these research streams address different dimensions of organizational performance. Inventory management research commonly focuses on turnover and working capital efficiency, whereas digital supply chain research frequently emphasizes operational integration, tracking accuracy, and technological implementation. The present study brings these perspectives together by examining the statistical relationship between merchandise inventory optimization and profitability within a specific Indonesian book-retailing context. Its contribution lies in providing firm-level empirical evidence rather than claiming a universally applicable causal relationship.

Accordingly, this study aims to examine the relationship between merchandise inventory optimization and profitability at PT Gramedia Asri Media Medan using a quantitative approach and simple linear regression analysis. Specifically, it investigates whether higher levels of inventory optimization are significantly associated with improved profitability. The findings are expected to contribute contextual evidence to the inventory management and retail financial performance literature while offering practical insights for improving inventory planning, operational efficiency, and financial decision-making in the digital retail environment.

LITERATURE REVIEW

Merchandise Inventory Optimization

Merchandise inventory optimization refers to the systematic management of inventory levels, replenishment decisions, and stock movements to maintain product availability while minimizing

inventory-related costs (Sridarta & Rondonuwu, 2025). In retail businesses, effective inventory management requires balancing sufficient merchandise availability against the financial burden of excessive stock. Inventory optimization is therefore closely associated with operational efficiency, working capital utilization, and the ability to respond to fluctuations in consumer demand. From an operations management perspective, inventory efficiency reflects a firm's ability to coordinate purchasing, storage, and sales activities. (Sauri & Suteja, 2024) demonstrated that inventory turnover among retail firms is associated with gross margins, capital intensity, and unexpected sales fluctuations (Ma et al., 2024). Their findings suggest that inventory performance should be evaluated in relation to business characteristics and market conditions rather than through inventory turnover alone. Accordingly, merchandise inventory optimization encompasses not only reducing inventory levels but also maintaining an appropriate balance between stock availability, inventory costs, and sales opportunities (Alsoussi & Tahboub, 2026).

In book retailing, inventory optimization is particularly relevant because retailers manage diverse product titles with varying demand patterns and sales potential (Khan et al., 2025). Excessive inventory may increase storage costs and create unsold merchandise, whereas insufficient stock may reduce sales opportunities and customer satisfaction. Effective inventory planning, stock monitoring, and replenishment decisions are therefore essential for maintaining operational continuity and improving financial efficiency (Muteti & Makhamara, 2026).

Digital Inventory Management

Digital inventory management refers to the application of information technologies to support inventory recording, monitoring, forecasting, and control (Sridarta & Rondonuwu, 2025). Digital technologies enable businesses to integrate inventory information with purchasing and sales activities, improving data accuracy and operational visibility (Muteti & Makhamara, 2026). Enterprise resource planning systems, barcode technology, and radio-frequency identification can support inventory tracking and facilitate more timely operational decisions (Ramadan et al., 2024). The strategic importance of digital inventory management can be explained through information processing theory, which emphasizes the need for organizations to develop information-processing capabilities that correspond to operational uncertainty and information requirements (Alsoussi & Tahboub, 2026). In retail environments characterized by fluctuating demand and diverse merchandise categories, digital inventory systems may reduce information delays, improve stock visibility, and strengthen coordination between inventory planning and sales activities (Ifeanyiwa & Ajayi, 2026).

Nevertheless, digital technology adoption does not necessarily guarantee improved financial performance (Bouazizi et al., 2024). Its potential benefits depend on the quality of implementation, data accuracy, employee capabilities, and alignment with organizational processes. Accordingly, digital inventory management is considered an enabling operational context through which retailers may strengthen inventory optimization and financial decision-making, rather than an independently tested variable in the present study (Ali et al., 2024).

Corporate Profitability

Corporate profitability represents a firm's ability to generate earnings from its business activities relative to sales, assets, or invested capital (Aulia et al., 2025). Profitability is a fundamental indicator of financial performance because it reflects the effectiveness of operational decisions, cost management, and resource utilization (Harianto et al., 2025). In retail businesses, profitability depends on several interrelated factors, including sales revenue, merchandise costs, inventory efficiency, operating expenses, and pricing strategies (Yama, 2026). From a working capital management perspective, profitability can be strengthened through efficient management of current assets, including merchandise inventory. (Bouazizi et al., 2024) found that shorter inventory holding periods were associated with improved corporate profitability among Belgian firms. This finding suggests that reducing unnecessary capital tied up in inventory may support financial performance (Dewi et al., 2025). However, excessively low inventory levels may increase stockout risks and limit sales opportunities, indicating that profitability depends on an appropriate balance between inventory efficiency and product availability (Alfira et al., 2026).

Profitability can be evaluated using financial ratios such as net profit margin, return on assets, and return on sales (Fajaryati et al., 2026). In the present study, profitability represents the dependent variable reflecting the financial outcomes associated with merchandise inventory optimization. The selected profitability indicator should remain consistent with the company's financial records and the operational definition applied in the regression analysis (Hardiansyah et al., 2025).

The Relationship Between Merchandise Inventory Optimization and Profitability

The relationship between merchandise inventory optimization and profitability can be explained through working capital management theory and operational efficiency principles. Inventory represents capital invested in merchandise before sales revenue is realized. Inefficient inventory allocation may increase holding costs, reduce liquidity, and expose businesses to inventory obsolescence (Alsoussi & Tahboub, 2026). Conversely, effective inventory optimization can improve stock availability, reduce unnecessary operating costs, and strengthen the utilization of financial resources. Previous empirical evidence provides a foundation for examining this relationship. (Sulastri, 2023) identified an association between inventory holding periods and corporate profitability, emphasizing the financial implications of working capital efficiency. Similarly, (Cheng, 2023) demonstrated that inventory turnover performance is related to retail operating characteristics, including gross margins and sales fluctuations. Collectively, these studies suggest that inventory management and financial performance are interconnected, although their relationship may depend on organizational characteristics and market conditions (Nafayta & Saleh, 2024).

In the digital retail environment, improved inventory information and more accurate stock monitoring may further support operational efficiency (Prayoga & Mulyono, 2024). Digital systems can facilitate timely replenishment decisions, reduce recording errors, and strengthen coordination between merchandise availability and customer demand (Fathoni et al., 2024). These capabilities may help retailers control inventory-related costs while maintaining sales opportunities, thereby supporting profitability (Nasib et al., 2026).

However, existing findings do not imply that reducing inventory always improves financial performance. Inventory optimization requires maintaining sufficient stock to satisfy demand while avoiding excessive investment in merchandise (Muteti & Makhamara, 2026). Moreover, profitability is influenced by factors beyond inventory management, including pricing, operating expenses, and market conditions. Consequently, the relationship between inventory optimization and profitability requires empirical examination within specific retail settings (Khan et al., 2025).

METHODOLOGY

Research Design and Data Sources

This study employed a quantitative explanatory approach to examine the relationship between merchandise inventory optimization and profitability at PT Gramedia Asri Media Medan, Indonesia. Primary data were obtained through direct observations, interviews, and questionnaires where applicable, while secondary data included company financial statements, inventory records, sales reports, and relevant literature. A single-company case study design was adopted to investigate inventory management practices and their association with financial performance in the digital retail environment.

Research Variables and Measurement

The study examined merchandise inventory optimization as the independent variable (X) and profitability as the dependent variable (Y). Inventory optimization was operationalized through inventory system effectiveness, digital technology utilization, stock record accuracy, inventory turnover, and dead stock reduction. Profitability was evaluated using relevant financial indicators, including return on assets (ROA), net profit margin (NPM), return on sales (ROS), cost efficiency, and profit growth. The final regression analysis required consistently defined and matched observations for both variables.

Validity and Reliability Testing

For questionnaire-based measurements, instrument validity was evaluated using Pearson item–total correlations, considering statistical significance ($p < 0.05$) and correlation strength. Reliability was assessed using Cronbach's alpha, with values ≥ 0.70 indicating acceptable internal consistency. These tests were applied only to multi-item questionnaire measures, not to financial ratios derived directly from company records.

Data Analysis Techniques

Data were analyzed using descriptive statistics, correlation analysis, and simple linear regression. Descriptive analysis summarized inventory management practices and profitability indicators, while Pearson correlation assessed the strength and direction of their linear relationship. Simple linear regression was employed to estimate the association between inventory optimization and profitability using the following equation:

$$Y_i = \alpha + \beta X_i + \varepsilon_i$$

where Y represents profitability, X denotes merchandise inventory optimization, α is the intercept, β is the regression coefficient, and ε is the error term.

Hypothesis Testing and Model Evaluation

The regression coefficient was evaluated using a two-tailed t-test at a 5% significance level ($p < 0.05$). The coefficient of determination (R^2) was used to assess the proportion of variation in profitability explained by inventory optimization. Regression assumptions, including linearity, residual normality, homoscedasticity, and independence of observations, were considered to ensure appropriate statistical interpretation. Given the observational research design, the findings were interpreted as statistical associations rather than definitive causal effects

RESULTS and DISCUSSION

RESULTS

Respondent Characteristics

The study involved 10 employees of PT Gramedia Asri Media Medan who completed questionnaires assessing merchandise inventory optimization and perceived profitability. As presented in Table 1, eight respondents (80%) were aged 31–40 years, while two (20%) were aged 41–50 years. Female respondents accounted for 60% of the sample, compared with 40% male respondents. Regarding educational attainment, five respondents (50%) held bachelor's degrees, three (30%) held three-year diplomas, and two (20%) had completed senior high school. These characteristics indicate that the sample consisted primarily of employees aged 31–40 years with tertiary education

Table 1. Respondents by Age and Gender

Characteristic	Category	Frequency	Percentage (%)
Age	31–40 years	8	80
	41–50 years	2	20
Gender	Male	4	40
	Female	6	60
Education	Senior high school	2	20
	Three-year diploma	3	30
	Bachelor's degree	5	50
Total respondents		10	100

Descriptive Percentage Analysis

Descriptive analysis was conducted to examine respondents' assessments of merchandise inventory optimization and perceived profitability. Inventory optimization was measured using seven

questionnaire items covering digital inventory systems, automated stock monitoring, point-of-sale integration, inventory accuracy, inventory turnover, dead stock reduction, and interdepartmental information integration. As presented in Table 2, positive responses (strongly agree and agree) ranged from 50% to 70%, indicating generally favorable perceptions of digital inventory management practices. However, inventory turnover received the lowest positive response (50%), suggesting potential opportunities for improving merchandise circulation and stock efficiency

Table 2. Respondents' Assessment of Merchandise Inventory Optimization

Indicator	SA	A	SD*	D	StD	Positive Responses (%)
Digital inventory management system	2	4	2	2	0	60
Automated stock monitoring	2	5	3	0	0	70
POS–inventory integration	3	4	3	0	0	70
Inventory record accuracy	3	3	3	1	0	60
Inventory turnover efficiency	2	3	4	1	0	50
Dead stock reduction	2	4	3	1	0	60
Interdepartmental system integration	3	4	2	1	0	70

Perceived profitability was assessed using five items reflecting improvements in return on sales, return on assets, net profit margin, operating cost efficiency, and inventory turnover contributions. As shown in Table 3, positive responses ranged from 60% to 70%. The highest positive assessments concerned operating cost efficiency and inventory turnover contributions (70% each), suggesting that respondents generally perceived inventory digitalization as beneficial to financial performance. Nevertheless, these findings represent employee perceptions rather than independently verified changes in accounting-based profitability ratios

Table 3. Respondents' Assessment of Perceived Profitability

Indicator	SA	A	SD*	D	StD	Positive Responses (%)
Improvement in return on sales	3	3	2	2	0	60
Improvement in return on assets	3	3	3	1	0	60
Improvement in net profit margin	2	4	2	2	0	60
Reduction in operating costs	4	3	3	0	0	70
Inventory turnover contribution to profitability	3	4	2	1	0	70

Regression Diagnostics

The regression diagnostic results are presented in Table 4. The Kolmogorov–Smirnov normality test yielded a significance value of 0.502, exceeding the conventional threshold of 0.05, indicating that the null hypothesis of normality was not rejected. Furthermore, the Glejser test reportedly produced significance values greater than 0.05, suggesting that no statistically significant evidence of heteroscedasticity was detected. Nevertheless, these findings should be interpreted cautiously because the study involved only 10 respondents, limiting the statistical power of the diagnostic tests. Additionally, the absence of detailed test statistics and residual plots prevents independent verification of the reported results. Therefore, the regression findings should be considered preliminary and interpreted within the limitations of the available data

Table 4. Regression Diagnostic Test Results

Diagnostic Test	Statistical Result	Criterion	Interpretation
Kolmogorov–Smirnov Normality Test	Sig. = 0.502	$p > 0.05$	No significant deviation from normality detected
Glejser Heteroscedasticity Test	Sig. > 0.05 (reported)	$p > 0.05$	No statistically significant heteroscedasticity detected
Sample Size	$n = 10$	—	Small sample; results require cautious interpretation

Simple Linear Regression Analysis

Simple linear regression was employed to examine the relationship between merchandise inventory optimization and perceived profitability. As presented in Table 5, inventory optimization was positively and significantly associated with perceived profitability (B = 0.798, β = 0.984, t = 15.679, $p < 0.001$). The estimated regression equation was $Y = -2.060 + 0.798X$, indicating that a one-unit increase in the inventory optimization score was associated with a 0.798-unit increase in the perceived profitability score. The model explained approximately 96.8% of the observed variation in perceived profitability ($R^2 = 0.968$). Although the model demonstrated a strong statistical association, its exceptionally high explanatory power and small sample size warrant cautious interpretation

Table 5. Summary of Simple Linear Regression Results

Statistical Indicator	Value
Multiple correlation (R)	0.984
Coefficient of determination (R^2)	0.968
Adjusted R^2	0.965
Standard error of estimate	0.929
Regression coefficient (B)	0.798
Standard error of B	0.051
Standardized coefficient (β)	0.984
t-statistic	15.679
F-statistic	245.825
Significance (p-value)	< 0.001
Number of observations (n)	10

DISCUSSION

The findings indicate a positive and statistically significant relationship between merchandise inventory optimization and perceived profitability at PT Gramedia Asri Media Medan, supporting H1. This result is consistent with the working capital management perspective, which emphasizes the importance of efficient inventory utilization in supporting financial performance. (Alnaim & Kouaib, 2023) demonstrated the relevance of inventory holding periods to corporate profitability, while (Salim & Santoso, 2025) highlighted the relationship between inventory turnover and retail operating characteristics.

The descriptive findings further suggest that digital inventory systems, automated stock monitoring, and information integration are perceived as important components of inventory management. However, inventory turnover received comparatively weaker assessments, indicating potential inefficiencies in merchandise circulation. These findings suggest that improved inventory visibility and stock coordination may support operational effectiveness, although the study does not independently establish their effects on actual financial ratios.

The exceptionally high coefficient of determination ($R^2 = 0.968$) should be interpreted in light of the limited sample size and reliance on self-reported questionnaire measures. Common-method effects, overlapping measurement content, and sampling variability may contribute to the observed association. Therefore, the findings provide preliminary firm-level evidence rather than definitive causal proof. Future research should incorporate larger samples and objective inventory and financial performance records to strengthen the validity and generalizability of the results.

CONCLUSION

This study provides empirical evidence of a positive and statistically significant association between merchandise inventory optimization and perceived profitability at PT Gramedia Asri Media Medan (B = 0.798, $p < 0.001$). The regression model demonstrated substantial explanatory power ($R^2 = 0.968$), accounting for 96.8% of the observed variation in perceived profitability. These findings support the proposed hypothesis and underscore the relevance of inventory management efficiency to perceived financial performance in the digital retail environment. The study contributes firm-level evidence to the inventory management literature by highlighting the relationship between digital

inventory practices and perceived profitability in Indonesian book retailing. From a managerial perspective, improving inventory accuracy, stock turnover, and information system integration may strengthen operational efficiency and support financial decision-making. Nevertheless, the small sample size (n = 10), reliance on self-reported measures, and single-company setting limit the generalizability and causal interpretation of the findings. Future studies should employ larger samples, longitudinal designs, and objective financial indicators to validate these relationships and assess their broader implications for retail profitability.

REFERENCES

Alfira, T., Cecilia, E. I., Siregar, Y. B., Sinaga, A. N., & Pane, Y. (2026). Determinants of SME Tax Compliance : The Role of Accounting Knowledge and Taxpayer Attitudes. *Journal of Finance Integration and Business Independence*, *2*(1), 64–77. https://doi.org/10.64276/jofibi.v2i1.91

Ali, A., Ali, A., Fayad, A. A. S., & Alomair, A. (2024). The Role of Digital Supply Chain on Inventory Management Effectiveness within Engineering Companies in Jordan. *Susatainability*, *16*, 1–25. https:// doi.org/10.3390/su16188031

Alnaim, M., & Kouaib, A. (2023). Inventory Turnover and Firm Profitability: A Saudi Arabian Investigation. *Processes*, 1–14. https://doi.org/10.3390/pr11030716

Alsoussi, A., & Tahboub, K. (2026). Inventory Management Practices and Challenges: An Exploratory Study. *Natural Sciences*, *40*(1), 43–58.

Aulia, N., Husna, N., Indriani, S., Sharing, L., Syariah, P., & License, I. (2025). Analisis Faktor Yang Mempengaruhi Pembiayaan Musyarakah Di Perbankan Syariah. *Applied Multidisciplinary Science*, *1*(2), 1–9.

Berlinski, E., & Morales, J. (2024). Digital technologies and accounting quantification: The emergence of two divergent knowledge templates. *Critical Perspectives on Accounting*, *98*(December), 1–20. https://doi.org/10.1016/j.cpa.2023.102697

Bouazizi, E., Technology, I., Arabia, S., Elfaioumy, S., Khedr, A., Technology, I., Arabia, S., & Belal, M. (2024). Inventory Optimization Using Data Science Technologies for Supply Chain 4 . 0. *The International Arab Journal of Information Technology*, *21*(6), 996–1005.

Cheng, K. (2023). Intermediary or no intermediary in the electronic markets: The case of the U.S. airlines distribution industry. *Social Sciences and Humanities Open*, *8*(1), 1–18. https://doi.org/10.1016/j.ssaho.2023.100496

Dewi, P., Amelia, R., Febrina, D., Kelana, J., & Tambunan, D. (2025). Service Quality and Customer Satisfaction in Ethnic Cuisine : Insights from a Nasi Kebuli Restaurant in Indonesia. *Journal of Business Integration and Competitive*, *1*(2), 42–54.

Fajaryati, H., Nurazi, R., & Indriani, R. (2026). Enterprise Risk Management , Capital Structure , Financial Performance , and Firm Value. *Journal of Finance Integration and Business Independence*, *2*(1), 39–53. https://doi.org/10.64276/jofibi.v2i1.89

Fathoni, M., Sumardi, H., & Lpm, P. U. (2024). Algoritma Keprimitifan Dari Suatu Digraph. *Muhammad Fathoni Hari Sumardi*, *18*(3), 657–664.

Hardiansyah, H., Amelia, R., Harianto, A., & Syahlina, M. (2025). Digital Transformation and Its Impact on Production Improvement : A Case Study at PT Gajah Mada Plastik. *Journal of Business Integration and Competitive*, *1*(2), 108–115. https://doi.org/10.64276/jobic.v1i2.21

Harianto, A., Azman, N. S., Fadila, Z., & Ayuni, T. W. (2025). Enhancing Financial Decision-Making in SMEs : The Role of Accounting Systems and Human Resource Competence in North Medan Impact of Accounting System Implementation on Financial Decision-Making. *Journal of Business Integration and Competitive*, *2*(1), 1–7. https://doi.org/10.64276/jobic.v2i1.25

Idemudia, S. O., Chima, O. K., Ezeilo, O. J., Ojonugwa, B. M., Ochefu, A., & Olumuyiwa, M. (2023). Digital Infrastructure Barriers Faced by SMEs in Transitioning to Smart Business Models. *International Journal of Scientific Research in Science, Engineering and Technology*, *10*(4), 353–370.

Ifeanyiwa, N. T., & Ajayi, S. A. (2026). Effect of Inventory Management Techniques on Customer Satisfaction of Online Retail Stores in Abuja , Nigeria. *JENER Journal of Empirical and Non-Empirical Research*, *2*(7), 418–428. https://doi.org/10.4898/jener.v2i7.a54

Khan, S. A., Mohammed, A., Al, H., Abdelzaher, M., & Leila, E. (2025). Optimizing Inventory

Management Performance Through a Mediated Perspective of Demand Uncer-tainty : Business Models for Supermarkets. *Journal of Cultural Analysis and Social Change*, *10*(4), 3052–3062.

Ma, X., Wang, Z., Ni, X., & Ping, G. (2024). Artificial intelligence-based inventory management for retail supply chain optimization : a case study of customer retention and revenue growth. *Journal of Knowledge Learning and Science Technology*, *3*(4), 260–273. https://doi.org/10.60087/jklst.v3.n4.p260

Muteti, J. N., & Makhamara, F. (2026). Effect of Digital Inventory Management Strategy On Performance of Naivas Supermarkets in Nairobi City County, Kenya. *Journal of Business Systems Innovation and Management Science*, *3*(1), 1–18.

Nafayta, E., & Saleh, A. (2024). Advances in Applied Accounting Research Evaluation of Sales Accounting Information Systems in Improving the Effectiveness of Accounts Receivable Control. *Advances in Applied Accounting Research*, *2*(3), 196–210. https://doi.org/10.60079/aaar.v2i3.314

Nasib, Salqaura, S. A., Azman, N. S., & Fathoni, M. (2026). *Perilaku Konsumen Digital*. PT. Pena Persada Kerta Utama. https://penapersada.id/buku/detail_buku.php?id=4124

Prayoga, R. A., & Mulyono, N. B. (2024). Optimizing Inventory Management of MFD Studio to Reduce The High Lost. *Journal Integration of Management Studies*, *2*(1), 49–60. https://doi.org/10.58229/jims.v2i1.135

Rahman, M. H. A., & Karim, D. N. (2022). Organizational justice and organizational citizenship behavior: the mediating role of work engagement. *Heliyon*, *8*(5), 1–13. https://doi.org/10.1016/j.heliyon.2022.e09450

Ramadan, A., Alkhodary, D., Alnawaiseh, M., Jebreen, K., Morshed, A., & Ahmad, A. B. (2024). Managerial Competence and Inventory Management in SME Financial Performance: A Hungarian Perspective. *Journal of Statistics Applications and Probability*, *13*(3), 859–870. https://doi.org/10.18576/jsap/130301

Salim, W., & Santoso, W. (2025). The Effect Of Inventory Turnover And Debt-To-Equity Ratio On Profitability With Inflation As Moderation. *Journal of Accounting, Entrepreneurship, and Financial Technology (JAEF)*, *06*(02), 175–196.

Sauri, S., & Suteja, D. (2024). Evaluation of Inventory Accounting Information Systems Using Pieces Method : A Study on SIMED i ' s Application Evaluasi Sistem Informasi Akuntansi Persediaan Menggunakan Metode PIECES : Kasus Aplikasi SIMEDi. *Jurnal Manajemen Dan Organisasi (JMO)*, *15*(4), 385–396. https://doi.org/10.29244/jmo.v15i4.60622

Sridarta, Y. M., & Rondonuwu, Y. V. (2025). *Inventory Management Model for Batik Entrepreneurs in Laweyan Batik Village Based on Web Technology*. *13*(1), 345–356. https://doi.org/10.37641/jimkes.v13i1.3100

Sulastri, N. (2023). Consumer Engagement through Experiential Marketing : A Case Study of Kopi Chuseyo in Depok. *Jurnal Ilmiah Manajemen Kesatuan*, *11*(3), 775–782.

Yama, H. (2026). Enhancing Financial Management Efficiency : Improving Cash Internal Control Systems at Unggul Polytechnic LP3M through Digitization and Strengthened SOPs. *Applied Multidisciplinary Science*, *1*(3), 31–40. https://doi.org/10.64276/ams.v1i3.81.