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Supply Chain Management Practices and Supply Chain Performance: Empirical Evidence from the Retail Sector of Oman

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Abstract- The purpose of this study is to examine the effect of supply chain management practices on supply chain performance in the retail industry of Oman. In this study, six supply chain man-agement practices such as strategic supplier relationships, customer relationships, information sharing, information technology, employee training and internal operations have been taken as independent variables for supply chain performance. The quantitative research method has been used in this study. The primary data has been collected with the help of a structured question-naire from 71 retail industry professionals of Oman. The Cronbach's alpha method has been used for reliability testing, and the hypotheses of the study have been tested through Pearson correlation method. The findings indicated that the five SCM practices, namely customer rela-tionships, information sharing, information technology, employee training, and internal opera-tions, have a statistically significant and positive impact (R^2 = .673; Adjusted R^2 = .581) on supply chain performance. Strategic supplier relationship practice was found to have a non-statistically significant impact, which is in contrast with most of the literature, and this is a poten-tial research gap for future studies. This study fills the literature gap in the relatively unexplored Omani retail sector and offers some guidelines for retailers who want to improve their operation-al performance, lower their costs, and increase their competitive advantage.

Keywords: "Supply chain management practices"; "supply chain performance"; "Oman"; "information sharing"; "information technology"; "employee training, regression analysis".

I. INTRODUCTION

The literature points to supply chain management (SCM) as a critical strategic tool for the firm in turbulent and competitive markets. An often-quoted definition of sup-ply chain management is coordinating and controlling the movement of goods, in-formation, and resources from the procurement of raw materials to the consumption of finished goods. Supply chain management involves a set of SCM practices. These practices have been found to affect supply chain performance (Min, Zacharia, & Smith, 2019; Kitaw, 2014). In the retail industry, where high profit margins do not exist, consumer expectations are high, and demand variability exists, supply chain management has been posited to be of strategic importance in attaining competitive advantage.

Sultanate of Oman, in specific, is a unique but less explored country for supply chain management (SCM) study. In line with economic diversification through Vision 2040, the retail industry is experiencing a massive transformation in Oman due to urbanization, infrastructure investment, and e-commerce penetration. Against this backdrop, Omani retailers are facing an enormous challenge to enhance their supply chain (SC) capabilities to fulfill the demands of the customer for future survival. Even though empirical studies related to SCM in Omani context are scarce, which is a knowledge gap.

The literature has acknowledged some of the key SCM practices that are essential to accomplish SCP, including strategic supplier relationships (Thongrawd et al., 2020), customer relationship management (Vanichchinchai, 2021), information sharing (Baah et al., 2022), information technology adoption (Sundram, Chhetri, & Bahrin, 2020),

employee training (Sutia, Riadi, & Fahlevi, 2020), and internal operational efficiency (Masa'adeh et al., 2022). However, the literature results were not con-sistent and the significance of the relationship, particularly the Omani retail sector, has not been empirically validated. The general research question that guides this study is: What is the effect of SCM practices (strategic supplier relationships, custom-er relationships, information sharing, information technology, employee training, and internal operations) on SCP in the retail industry of Oman?

This study aims to fill this research gap by examining the empirical effects of six identified SCM practices on supply chain performance in the Omani retail industry.

1. To examine the effect of strategic supplier relationship on supply chain per-formance in the Oman retail industry.
2. To assess the effect of customer relationship management on supply chain performance.
3. To assess the effect of information sharing practices on supply chain perfor-mance.
4. To investigate the effect of information technology adoption on supply chain performance.
5. To assess the effect of employee training on supply chain performance.
6. To assess the effect of internal operational practices on supply chain perfor-mance.

This quantitative research examines the six proposed directional hypotheses through survey data from 71 retail practitioners. Theoretically and practically, the study is expected to provide useful insights for practitioners and policymakers of the retail industry in Oman.

II. LITERATURE REVIEW

Supply chain management is defined as the planning and management of all ac-tivities involved in sourcing, procuring, converting, and logistics management of products, services, and information from raw materials to end customers, including managing and coordinating with partners who play a role in the supply chain such as suppliers, intermediaries, third-party service providers, and customers (Jacobs and Chase, 2018).

Supply chain performance is a multidimensional construct and is usually meas-ured in terms of cost minimization, sales maximization, profit maximization, inven-tory investment minimization, return on investment, fill rate, product lateness, and customer response time (Gawankar, Gunasekaran, and Kamble, 2020; Anand and Grover, 2015).

In the retail context, the performance of the supply chain is dependent upon the extent to which the retailer is able to efficiently coordinate activities in the upstream and downstream parts of the retail supply chain to satisfy customer requirements in a timely, accurate, and cost-effective manner.

For retail markets such as Oman, however, the challenges are more daunting due to spatial constraints, reliance on imported goods, and shifting customer de-mographics, thus rendering the SCM performance an essential part of these markets (Theeb et al., 2023). Although literature on the SCM has grown significantly in the past twenty years, empirical studies on the subject, in particular within the GCC retail market setting, are limited. This study attempts to contribute to this limited literature with quantitative evidence from the Omani retail market.

III. THEORETICAL FRAMEWORK

The study's theoretical underpinnings are rooted in two interdependent theories. Firstly, from the perspective of supply chain management (SCM) practices, the re-source-based view (RBV) of the firm suggests that the organizational capabilities are firm-specific strategic resources that can create sustained competitive advantage (Barney, 1991). In this study, therefore, the firm's investments in information tech-nology, employee training, and organizational excellence are classified as capability-building investments that yield supply chain performance. Secondly, the inclusion of the supplier and customer relationship constructs in this study is grounded in relation-al theory, which suggests that interorganizational relationships are a source of value creation external to the firm's boundaries (Dyer & Singh, 1998).

IV. SCM PRACTICES: REVIEW AND HYPOTHESES

Strategic supplier relationships involve the creation of enduring, cooperative alli-ances with key suppliers, characterised by mutual trust, shared information, joint planning and congruent goals (Narayanan, Narasimhan, & Schoenherr, 2015). Strategic supplier relationships are assumed to enhance supply reliability, product quality and cost-effectiveness. Thongrawd et al. (2020) showed that strategic supplier part-nerships have a positive effect on supply chain performance, via the mediating role of customer relationship management. Sjoerdsma & van Weele (2015) also stress the importance of structured supplier management for new product development and business agility.

H1: Strategic Supplier Relationships have a positive effect on Supply Chain Per-formance.

In retail industry, the demand for maintaining customer relationships is crucial for managing SCM effectively, which in turn facilitates demand sensing, inventory man-agement, and effective service delivery (So et al., 2016). Customer relationship management is important for managing supply chain management (SCM) in retail sector as it enables demand sensing, inventory management, and service delivery. Vanich-chinchai (2021) empirically proved the relation between customer relationship man-agement and supply chain performance, where downstream side of supply chain integration plays an important role of performance driver.

H2: Customer Relationships have a positive effect on Supply Chain Performance.

Among them, information sharing, i.e., the extent to which sensitive and critical in-formation is being shared among the supply chain members has been identified as the core of a successful SCM (Panahifar et al. , 2018). The positive impact of infor-mation sharing in SCM includes enhanced supply chain visibility, demand forecast-ing, reduced bullwhip effects, and co-ordination among supply chain members (Nilaish, 2016). Moreover, Baah et al. (2022) found that information sharing has a direct and positive impact on the supply chain performance, especially with regards to its impact on operational transparency among supply chain members.

H3: Information Sharing has a positive effect on Supply Chain Performance.

IT is an enabler of operationalizing the SCM practices. In the retail sector, exam-ples of IT in the context of SCM practices include enterprise resource planning sys-tems, warehouse management systems, point-of-sale data analytics, GPS tracking systems, and e-commerce systems (Ben-Daya et al., 2019; Han et al., 2017). Sun-dram et al. (2020) proved empirically that the use of IT systems for SCM practices, when associated with information sharing practices and supply chain integration, improves the performance of the SCM practices. In the Omani retail sector, the in-creasing application of IT in the operationalizing of retail operations is providing a new platform for performance improvement.

H4: Information Technology has a positive effect on Supply Chain Performance.

Another contemporary enabler of SCM performance is employee training, as complex supply chains demand increasingly skilled employees. Employees can use inventory systems, interface with the SCM system, manage logistics, etc. Employees can also respond to supply chain disturbances in a flexible way. Bag et al. (2020) have also highlighted the importance of workforce capacity as a crucial driver for supply chain responsiveness. Sutia, Riadi, & Fahlevi (2020) have also validated the positive impact of employee capacity on SCP. Hence, human capital investment is an essential supply chain management practice that generates high returns.

H5: Employee Training has a positive effect on Supply Chain Performance.

The internal dimension covers warehousing, transportation and inventory man-agement, order processing, which are all internal operations, and all of these affect the speed of flow of goods from suppliers to customers (Prajogo, Oke, & Olhager, 2016; Copacino, 2019). Masa'deh et al. (2022) demonstrated the effect of internal supply chain integration on operational performance in the four dimensions of cost, quality, delivery, and flexibility. Optimizing internal supply chain processes is a key

and easily affected supply chain dimension for improvement.

H6: Internal Operations have a positive effect on Supply Chain Performance.

Table 1: Research Hypotheses and Supporting Literature

Hypothesis	Statement	Key Reference
H1	Strategic Supplier Relationships → SCP	Thongrawd et al. (2020)
H2	Customer Relationships → SCP	Vanichchinchai (2021)
H3	Information Sharing → SCP	Baah et al. (2022)
H4	Information Technology → SCP	Sundram et al. (2020)
H5	Employee Training → SCP	Sutia et al. (2020)
H6	Internal Operations → SCP	Masa'deh et al. (2022)

V. METHODOLOGY

The research design adopted for this research is quantitative, cross-sectional and based on a quantitative research approach, which in turn is based on a positivistic philosophy of science. A quantitative research approach is used for this research because it is deductive and hypothesis testing, and because it is also suitable for sta-tistical analysis of the inter-relationship between variables, such as in the case of the sample of the retail sector population that this research has sampled. The primary data for this research is collected by using a structured, self-completion questionnaire devised specifically for this research.

The questionnaire consisted of two parts. Part A consisted of demographic data: gender, age, education, and working experience. Part B consisted of 29 items of the Likert scale that measured the six independent variables and one dependent variable. All items measuring the variables were adopted from the existing validated scales in the SCM literature. Items measuring the variables Strategic Supplier Relationships (SR, 5 items), Customer Relationships (CR, 5 items), Information Sharing (IN, 4 items), Information Technology (IT, 5 items), Employee Training (ET, 5 items), In-ternal Operations (IO, 5 items), and Supply Chain Performance (SCP, the dependent variable) were incorporated. Content validity for the items of the questionnaire was guaranteed, since all items measuring the variables were based on the existing con-structs in the SCM literature.

The unit of analysis for this study was retail professionals in the Sultanate of Oman. A combination of simple random sampling and convenience sampling was employed to collect the data from the retail organizations in the Omani market (Chow, 2017). 71 respondents were used for this study, which is considered adequate for reliability analysis, correlation, and regression analysis, with regards to the number of constructs used in the study. The study was carried out in November 2025-2026. The questionnaires were distributed among the retail professionals with an assurance that the information would be kept confidential and used for academic purposes only.

The profile of the 71 respondents is presented in Table 2. The majority of the re-spondents (80.28%) were males and 52.11% of them fell in the age group of 18-24 years, thus, representing the young retail workforce in the Sultanate of Oman. Fur-ther, 56.34% of the respondents were holding a Bachelor's degree and 64.79% of them had 1-5 years of work experience, thus, representing the relatively young sam-ple with firsthand knowledge of retail SCM at the grassroots level.

Table 2: Demographic Profile of Respondents (N = 71)

Variable	Category	Frequency	Percentage
Gender	Male	57	80.28%
	Female	14	19.72%
Age	18–24	37	52.11%
	25–30	12	16.90%
	31–35	8	11.27%
	36 and above	14	19.72%
Qualification	Diploma	15	21.13%
	Bachelor's Degree	40	56.34%

	Master's Degree	4	5.63%
	Ph.D./Doctorate	4	5.63%
	Undergraduate	8	11.27%
Work Experience	1–5 years	46	64.79%
	6–10 years	10	14.08%
	11–15 years	4	5.63%
	16+ years	11	15.49%

The collected data were analysed using IBM SPSS Statistics. The analysis involved the following steps. Firstly, the Cronbach's Alpha reliability analysis was run for each of the construct to check the reliability of the measurement scale. According to Nun-nally (1978), the cut-off value for Cronbach's Alpha to be accepted for analysis is 0.70. Secondly, the Pearson correlation analysis was run for each pair of variables to examine the bivariate relationship between the variables. Finally, the multiple regres-sion analysis was run with dependent variable being the Supply Chain Performance and the six constructs of SCM practice as independent variables.

VI. RESULTS

The results of the Cronbach's alpha are presented in Table 3. All variables exceed-ed the threshold level of 0.70 and, thus, the instrument was internally consistent. In-formation Sharing (0.889) and Employee Training (0.881) had the highest values of Cronbach's alpha, suggesting that there was high level of internal consistency among the items measuring each variable. Internal Operation (0.798) and Strategic Supplier Relationship (0.761) also scored satisfactory values. Although Information Technol-ogy (0.706) and Customer Relationship (0.716) presented low values of Cronbach's alpha, the results of the survey were generally satisfactory.

Table 3: Reliability Analysis — Cronbach's Alpha Coefficients

Variable	Cronbach's α	No. of Items	Assessment
Strategic Supplier Relationship (SR)	.761	5	Acceptable
Customer Relationship (CR)	.716	5	Acceptable
Information Sharing (IN)	.889	4	Excellent
Information Technology (IT)	.706	5	Acceptable
Employee Training (ET)	.881	5	Good
Internal Operations (IO)	.798	5	Good

In table 4, Pearson correlation for all the variables used in this study are presented. The relational SCM practices cluster has strong internal consistency as SR is positive-ly correlated with CR ($r = .496$, $p < .01$) and Information Sharing ($r = .620$, $p < .01$), and CR is positively correlated with Information Sharing ($r = .449$, $p < .01$). Signifi-cant intercorrelation is also observed among the set of operational practice variables as IT, ET, and IO are highly and positively intercorrelated. The r values of IT & ET, IT & IO, and ET & IO are .831, .610, and .671 respectively, and all are significant at $p < .01$. This suggests that the set of operational and technology-based SCM practices forms another cluster of strong intercorrelations, where improvements in one practice is likely to be associated with improvements in other practices. On the contrary, the relational practices cluster including SR, CR, and IN are negative but insignificantly correlated with the operational cluster including IT, ET, and IO.

Table 4: Pearson Correlation Matrix. ** $p < 0.01$ (2-tailed). N = 71.

Variable	SR	CR	IN	IT	ET	IO
SR	1	.496**	.620**	-.048	-.015	-.049
CR	.496**	1	.449**	-.195	-.206	-.178
IN	.620**	.449**	1	-.170	-.136	-.075

IT	-.048	-.195	-.170	1	.831**	.610**
ET	-.015	-.206	-.136	.831**	1	.671**
IO	-.049	-.178	-.075	.610**	.671**	1

Multiple regression analysis was conducted to assess the extent to which the six SCM practices collectively predicted supply chain performance. As can be seen, R^2 = .673, suggesting that 67.3% of the variance in supply chain performance is explained by the six SCM practices collectively. This is further supported by Adjusted R^2 = .581, which is above the benchmark 0.5. As can be seen from Table 5, out of the six independent variables, five were found to be statistically significantly related to supply chain performance.

Among the six independent variables, Employee Training was the most significant predictor (β = .533, t = 3.702, p = .002), followed by Customer Relationships (β = .475, t = 4.469, p < .001), Internal Operations (β = .444, t = 4.261, p = .001), Information Sharing (β = .417, t = 3.307, p = .002), and Information Technology (β = .308, t = 2.446, p = .001). The least predictor was Strategic Supplier Relationships (β = .020, t = .169, p = .167), which is well above 0.05.

Table 5: Multiple Regression Coefficients. Dependent

Variable	β	R^2	Adj. R^2	t-value	Sig.
Strategic Supplier Relationship (SR)	.020	—	—	.169	.167
Customer Relationship (CR)	.475	—	—	4.469	.000***
Information Sharing (IN)	.417	—	—	3.307	.002**
Information Technology (IT)	.308	—	—	2.446	.001**
Employee Training (ET)	.533	—	—	3.702	.002**
Internal Operations (IO)	.444	.673	.581	4.261	.001**

The results of hypothesis testing that tested the research hypotheses are presented in Table 6. The results indicate that out of the six hypotheses, five hypotheses were supported while H1, which hypothesized a positive relationship between Strategic Supplier Relationships and SCP was not supported because the p value is not signifi-cant at .167.

Table 6: Hypotheses Testing Results. *** p < .001 ** p < .01

Hypothesis	Statement	p-value	Decision
H1	Strategic Supplier Relationships → SCP	.167	Rejected
H2	Customer Relationships → SCP	.000	Supported ***
H3	Information Sharing → SCP	.002	Supported **
H4	Information Technology → SCP	.001	Supported **
H5	Employee Training → SCP	.002	Supported **

H6	Internal Operations → SCP	.001	Supported **

VII. DISCUSSION

The study's finding that Employee Training has become the strongest predictor of SCP (β = .533) is one of the most intriguing outcomes. It shows the significance of the human capital in the retail sector for the implementation of the SCP improvements. Indeed, as the inventory management systems, demand planning tools, and digital technologies get more sophisticated, the ability of the workforce to work with these tools becomes a crucial enabler of SCP in the retail sector. This is consistent with the work of Jacobs, Yu, and Chavez (2016) that connected the workforce capability with SCP integration and the work of Bag et al. (2020) that considered workforce capabil-ity as an enabler of SCP responsiveness and flexibility in a turbulent environment.

Internal Operations (.444) was yet another strong predictor that was highly signifi-cant, once again reinforcing that the effectiveness of warehousing, inventory man-agement, order fulfilment and logistics management within the firm will have positive impacts on supply chain performance. This is consistent with the findings of Masa'deh et al. (2022) and Prajogo et al. (2016), since in fact, for the Omani retailers, many of them will have to deal with complex supply chains for imports.

The second predictor was Customer Relationship Management (β = .475), which once more corroborates the evidence that customer engagement ensures the accura-cy of demand forecast, inventory management and service delivery, which are the fundamental key performance indicators of a supply chain. In the context of Omani retail industry, where a heterogenous and digitalized consumer base is emerging, cus-tomer relationship management is a profitable SCM practice. This result is consistent with Vanichchinchai (2021) and So et al. (2016) where the downstream side of the supply chain is proved to be an important enabler of supply chain performance.
Information Sharing (β = .417) was another significant variable; thus, confirming the long-held truth in the domain of supply chain management (SCM) that infor-mation (about inventory level, demand, performance etc.) transparency is a corner-stone for supply chain integration (Panahifar et al., 2018; Baah et al., 2022). The variable is, therefore, suggestive that those retailers who have invested in collabora-tive technology have been rewarded in the Omani market.

IT (β = .308) also came up with a significant and positive impact toward SCP simi-lar to the findings of Sundram et al. (2020) and Ben-Daya et al. (2019). The use of IT applications such as Enterprise Resource Planning (ERP), tracking and tracing sys-tems, and Artificial Intelligence (AI) based applications for forecasting demand ap-peared to facilitate the retailers in Oman to efficiently manage their businesses and also to be responsive to the changes in the environment. Even though IT came up as the least significant among the five significant antecedents, its role in facilitating the other four SCM practices (ranging from information sharing to the internal opera-tional practices) cannot be ignored. The performance payoff due to the adoption of IT is expected to increase in the growing retail market in Oman.

Perhaps the most theoretically interesting, and complex, non-significant finding is that of the Strategic Supplier Relationships construct (β = .020, p = .167) as it is con-trary to the entirety of the literature on this topic in the SCM discipline, including the studies by Thongrawd et al. (2020) and Pérez-Salazar et al. (2019) which both found supplier relationships to be significant to firm performance.
There are a number of contextual reasons that may also account for this finding. Firstly, the retail industry in Oman is characterized by the presence of imported goods, largely through distribution rather than strategic supplier relationships.

It may be that the notion of supplier relationship management is not present enough to have a significant quantitative impact on the organizational

level. Secondly, the age and first job characteristics of the sample may indicate a lack of exposure to the practice of supplier relationship management, further adding noise to the measurement of the construct. Thirdly, the sample's responses to supplier relationship questions may be characterizing non-strategic supplier relationships, and this may further reduce the predictive power of the construct. It may be that these three explanations are inter-related and that future research using different methodological techniques may re-veal the mechanisms by which supplier relationships may impact organizational performance in the future.

VIII. CONCLUSION

This study contributes to the literature by investigating the association of SCM practices with SCP in the Omani retail industry, which has received little attention in the global SCM literature. The findings of the quantitative survey of 71 retail practi-tioners indicate that the five SCM practices, namely customer relationship manage-ment, information sharing, information technology, employee training and internal operations, have significant positive impacts on SCP, and together they account for 67. 3% of the variance. However, strategic supplier relationships were insignificant. This requires more contextual investigation without jeopardizing the robustness of the findings.

The findings have theoretical contributions to RBV and relational theory that ca-pability-building practices, such as information technology, employee training and internal operations, as well as relational practices such as customer relationship man-agement and information sharing, have significant positive effects on SCP. The study adds another unique empirical evidence to the global SCM literature to confirm that the association between SCP and the respective practices is common at the global level but contextual at the local level.

The above results suggest the following policy implications for retail manag-ers/supply chain practitioners in the Omani economy:
Employee Development: The need for ongoing training of employees in the differ-ent areas of SCM practice (inventory management, demand planning, etc.) should be an important strategic priority given that training of employees is the best predictor of supply chain performance. Customer Relationship Systems: Investment in Customer Relationship Management (CRM) systems should be an important priority as such systems help retailers to gain a deeper understanding of their customers thus enabling the provision of improved customer service. IT infrastructure:

The adoption of En-terprise Resource Planning (ERP) systems, artificial intelligence, etc. should have a multiplier effect on the performance of all the areas of SCM practice. Internal opera-tions: The improvement of internal operations (warehousing, order management, etc.) should be an important priority, especially for retailers with complex supply chains that are heavily reliant on imports. In addition, the following suggestions are proposed for future research: Create a culture of information sharing: Creating a culture of information sharing among partners is believed to reduce supply chain uncertainty. Gradually develop supplier relationships: Although strategic supplier relationships were not found to be supported by this study, retailers should be en-couraged to invest in formalizing supplier relationships, as the literature as a whole suggests a positive influence on supplier relationship performance.

Despite the contributions of this study, there are some limitations that are pertinent to the study's results and directions for future research. The study's context is in the Oman context. The results may not be generalizable to other GCC or developing markets retail contexts. The convenience sampling method and the relatively small sample size of 71 are issues of statistical power and representativeness of the popula-tion. The study is of a cross-sectional nature and thus may not lend itself to making any causality inferences. The H1 finding could be as a result of response bias in par-ticular on strategic supplier relationship practices.

Future research should look to repeat the study using a larger representative group of respondents and possibly from more GCC countries to facilitate

comparative analysis. Further, longitudinal research will enable the analysis of the practice-performance relationship in SCM in the Omani retail context over time as the sector matures. Moreover, qualitative analysis, using the leading retailers in the sector, may offer an understanding of the underlying reasons for the non-significance of supplier relationships in the Omani context. Finally, the emerging digital technologies such as blockchain, artificial intelligence and big data present themselves as potential moder-ators and mediators in the SCM context and represent a key area for future research in the region.

REFERENCES

1. Anand, G., & Grover, V. (2015). Enhancing supply chain performance through information sharing: A theoretical synthesis and empirical validation. Interna-tional Journal of Operations & Production Management.
2. Baah, C., Opoku-Agyeman, D., Acquah, I. S. K., Agyabeng-Mensah, Y., & Afum, E. (2022). Examining the correlations between stakeholder pressures, green pro-duction practices, firm reputation, environmental and financial performance. Journal of Cleaner Production, 379.
3. Bag, S., Wood, L. C., Xu, L., Dhamija, P., & Kayikci, Y. (2020). Big data analytics as an operational excellence approach to enhance sustainable value chain per-formance. Resources, Conservation and Recycling, 153.
4. Barney, J. (1991). Firm resources and sustained competitive advantage. Journal of Management, 17(1), 99–120.
5. Ben-Daya, M., Hassini, E., & Bahroun, Z. (2019). Internet of things and supply chain management: A literature review. International Journal of Production Re-search, 57(15–16).
6. Chow, S. C. (2017). Sample size calculations in clinical research (3rd ed.). CRC Press.
7. Copacino, W. C. (2019). Supply chain management: The basics and beyond. CRC Press.
8. Dyer, J. H., & Singh, H. (1998). The relational view: Cooperative strategy and sources of interorganizational competitive advantage. Academy of Management Review, 23(4), 660–679.
9. Fernie, J. (2018). Logistics and retail management: Emerging issues and new challenges in the retail supply chain (5th ed.). Kogan Page.
10. Gawankar, S. A., Gunasekaran, A., & Kamble, S. (2020). A study on investments in the big data-driven supply chain, performance measures and organisational performance in retail sector. International Journal of Production Economics, 228.
11. Han, C., Wang, Y., & Naim, M. (2017). The role of information technology in retail supply chain management. International Journal of Physical Distribution & Logistics Management.
12. Jacobs, F. R., & Chase, R. B. (2018). Operations and supply chain management. McGraw-Hill.
13. Jacobs, M. A., Yu, W., & Chavez, R. (2016). The effect of internal communica-tion and employee satisfaction on supply chain integration. International Journal of Production Economics, 171, 60–70.
14. Kitaw, D. (2014). Supply chain management: A learning manual. Addis Ababa University.
15. Masa'deh, R., Muheisen, I., Obeidat, B., & Bany Mohammad, A. (2022). The impact of supply chain integration on operational performance: An empirical study. Sustainability, 14(24), 16634.
16. Min, S., Zacharia, Z. G., & Smith, C. D. (2019). Defining supply chain manage-ment: In the past, present, and future. Journal of Business Logistics, 40(1), 44–55.
17. Narayanan, S., Narasimhan, R., & Schoenherr, T. (2015). Assessing the contingent effects of collaboration on agility performance in buyer–supplier relationships. Journal of Operations Management, 33, 140–154.
18. Nilaish, N. (2016). A review of technological advancements of supply chain man-agement in retail sector. Asian Journal of Applied Sciences.
19. Nunnally, J. C. (1978). Psychometric theory (2nd ed.). McGraw-Hill.
20. Panahifar, F., Byrne, P. J., Salam, M. A., & Heavey, C. (2018). Supply chain collaboration and firm's performance: The critical role of information sharing and trust. Journal of Enterprise Information Management, 31(3), 358–379.

21. Pérez-Salazar, M. d. R., Aguilar-Lasserre, A. A., Cedillo-Campos, M. G., Juárez-Martínez, U., & Posada-Gómez, R. (2019). Processes and measurement of knowledge management in supply chains. International Journal of Production Re-search, 57(7), 2136–2159.
22. Prajogo, D., Oke, A., & Olhager, J. (2016). Supply chain processes: Linking supply logistics integration, supply performance, lean processes and competitive perfor-mance. International Journal of Operations & Production Management, 36(2), 220–238.
23. Sjoerdsma, M., & van Weele, A. J. (2015). Managing supplier relationships in a new product development context. Journal of Purchasing and Supply Manage-ment, 21(3), 192–203.
24. So, K. K. F., King, C., Sparks, B. A., & Wang, Y. (2016). Enhancing customer relationships with retail service brands: The role of customer engagement. Journal of Service Management, 27(2), 170–193.
25. Sundram, V. P. K., Chhetri, P., & Bahrin, A. S. (2020). The consequences of in-formation technology, information sharing and supply chain integration, towards supply chain performance and firm performance. Journal of International Logis-tics and Trade, 18(1), 15–31.
26. Sutia, S., Riadi, R., & Fahlevi, M. (2020). The influence of supply chain perfor-mance and motivation on employee performance. International Journal of Sup-ply Chain Management, 9(2), 1–6.
27. Theeb, K. A., Mansour, A. M. d., Khaled, A. S., Syed, A. A., & Saeed, A. M. (2023). The impact of information technology on retail industry: An empirical study. In-ternational Journal of Productivity Management, 16(4), 549–568.
28. Thongrawd, C., Skulitsariyaporn, C., Sirisopana, S., & Chatchom, N. (2020). The impact of the strategic supplier partnership and strategic outsourcing on the sup-ply chain performance. International Journal of Supply Chain Management, 9(2), 456–473.
29. Vanichchinchai, A. (2021). The linkages between supplier relationship, customer relationship and supply performance. Journal of Business & Industrial Marketing, 36(8), 1520–1533