

## THE INFLUENCE OF DIGITAL SUPPLY CHAIN TECHNOLOGY ON RETAIL PERFORMANCE



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### Abstract

This study aims to examine the effect of supply chain digitalization on retail performance using supermarkets as the research object. The research method used includes quantitative analysis. This study used Google Forms to create a questionnaire using a Likert scale. The survey received 274 responses, and the data were also analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The results of this study concluded that digitalization, supply chain management, and implementation technology have a positive effect on retail performance by linking supply chain performance mediation.

**Keywords:** Digitalization, Supply Chain Management, Implementation Technology, Retail Performance, Supply Chain Performance

## INTRODUCTION

Retail is a business sector that involves selling products or services directly to end consumers (Salim et al, 2023). In retail, products are sold in small quantities, as opposed to wholesale, which typically sells in large quantities to retailers. Examples of retail include supermarkets, clothing stores, online stores, and so on (Zhou et al., 2023). This research is important because of the changing consumer behavior associated with the development of digital technology, which is increasingly changing the way consumers shop. For example, the shift from brick-and-mortar to online shopping has created new dynamics that impact the retail sector. Tight competition in retail, a highly competitive industry, especially with the presence of large e-commerce platforms, requires retail companies to continuously innovate in marketing strategies, customer experience, and operational efficiency (Hallikas et al., 2021). Innovations in customer experience, such as the use of technology to enhance interactions, are a major focus for retailers today. Examining how these innovations impact customer satisfaction and loyalty can be invaluable. This research is interesting because of its dynamic nature and its role in the economy, with its significant economic influence. The retail sector contributes significantly to economic growth, employment, and the supply chain (Perano et al., 2023). Retail research can provide insights into economic stability and business development opportunities. Adapting to new technologies such as digital payments, AI, and big data allows research to identify how these innovations can improve customer experience and business efficiency. (Gupta et al., 2021) Social and environmental changes are focusing on the role of retail, such as sustainability and social responsibility. Retail businesses are expected to be more environmentally friendly and pay more attention to ethics. The purpose of this research is to analyze consumer trends by understanding evolving consumer preferences and behaviors, thereby helping retailers develop more effective marketing and sales strategies. Innovations in the shopping experience provide insights into how technological innovations, such as augmented reality or digital payments, can enhance the shopping experience and increase customer loyalty. Sustainability and social responsibility help retail companies understand the impact of their practices on the environment and society, and find solutions to operate more effectively (Bigliardi et al., 2022). Therefore, research is needed to determine the influence of digitalization, supply chain management, and implementation technology mediated by supply chain performance on retail performance.

## LITERATURE REVIEW

### Digitalization

Digitalization is the application of digital technology to improve various aspects of operations and customer experience in the retail industry. This encompasses all forms of technology, from e-commerce and digital payment systems to the use of big data and the integration of artificial intelligence (AI) for personalized services (Bigliardi et al., 2022). Digitalization enables physical and online stores to operate more efficiently, improve customer engagement, and deliver a faster and more flexible shopping experience (Ardiansyah & Lesmana, 2024; Kartika et al, 2025). This digitalization is interesting to study because of the changes in consumer behavior that digitalization has significantly altered how consumers interact with brands and shop (Malenkov et al., 2020). This research is crucial for understanding emerging trends, consumer preferences, and expectations for faster and

easier shopping experiences. Fierce competition with the growing number of online retail players and large e-commerce platforms, digitalization can help identify effective strategies for competing in an increasingly competitive market.

### **Supply Chain Management**

Supply Chain Management is the process of managing the flow of goods and information, spanning from raw material procurement to the distribution of finished products to end consumers. SCM encompasses various activities such as planning, procurement, production, distribution, and inventory management (Kurdi et al., 2022). In the retail context, SCM plays a crucial role in ensuring products are available in stores or online platforms at the right time, at an efficient cost, and with the right quality. Supply chain management is a crucial aspect to examine. Efficiency in SCM can support retail companies in optimizing every process in the supply chain, from material procurement to product delivery to consumers. With proper management, production and distribution costs can be reduced, thereby increasing profit margins (Perano et al., 2023).

### **Technology Implementation**

Technology Implementation is the process of adopting, integrating, and using new technology in an organization's operations. This includes planning, installation, training, testing, and evaluation to ensure that the technology implemented can support or improve business efficiency, productivity, and effectiveness. In the retail context, Technology Implementation is very important and relevant because this industry is growing rapidly, especially in the digital and e-commerce era. Technology Implementation is very important to research because it can Increase Operational Efficiency. By implementing technologies such as Enterprise Resource Planning (ERP), automated inventory management systems, or robotics in the warehouse, retailers can improve operational efficiency, minimize human error, accelerate business processes, and reduce expenses. Technology can help retailers manage business processes more quickly and accurately, from procurement to delivery, Data Collection and Analysis (Mondol, 2021).

### **Supply Chain Performance**

Supply Chain Performance is a measure of how well a supply chain functions in meeting business objectives and needs. It includes evaluating and monitoring the efficiency, speed, cost, quality, flexibility, and reliability of all processes involved in the supply chain, from raw material procurement to the distribution of final products to customers (Zhao et al., 2023). Supply Chain Performance is crucial in retail because an efficient supply chain ensures product availability, reduces costs, and improves service quality for consumers. Studies in this area help retailers understand how to improve efficiency, manage risk, respond quickly to market dynamics, and innovate to achieve a competitive advantage. (Gupta et al., 2021).

### **Retail Performance**

Retail performance is a measure of how well a retail business is achieving its operational, financial, and strategic goals. It encompasses aspects such as sales, profitability, customer satisfaction, inventory management, operational efficiency, and marketing effectiveness (Hallikas et al., 2021). Retail performance is measured using various key performance indicators such as revenue, profit margin, sales growth, customer satisfaction, and employee productivity. Retail performance is crucial because it provides insight into how retailers can increase sales, optimize operations, and enhance the customer experience

(Perano et al., 2023). By measuring and analyzing performance across multiple dimensions, retailers can adapt their business strategies to be more competitive in an ever-evolving market and face challenges such as changing consumer preferences, technological advancements, and economic dynamics.

### **Relationship Among Variables**

#### **Digitalization of Supply Chain Performance**

Digitalization in the supply chain is characterized by maximizing operational performance in the supply chain aspect, by accelerating the flow of information, increasing transparency, and supporting faster, data-driven decision-making (Hallikas et al., 2021). In this context, digital technologies, such as the Internet of Things (IoT), big data, and cloud-based supply chain management systems, can enable companies to manage and monitor the flow of goods and information in real time (Zhao et al., 2023). This helps reduce delays, minimize errors, and increase efficiency in distribution (Perano et al., 2023). Through digitalization efforts, companies can also be more responsive to fluctuations in demand and market conditions, while establishing balanced and effective coordination between suppliers, manufacturers, and distributors (Zhou et al., 2023). Research conducted by Gumpa et al. (2021) shows that digitalization has a significant positive impact on supply chain performance, both in terms of speed, cost, and customer satisfaction.

H1: The Relationship between Digitalization Has a Significant Positive Influence on Supply Chain Performance

#### **Supply Chain Management on Supply Chain Performance**

Effective and efficient supply chain management can directly influence the overall performance of the supply chain (Kurdi et al., 2022). SCM includes planning, managing, and coordinating activities involved in the production and distribution process of goods, from the procurement of raw materials to the final product reaching the hands of consumers (Gupta et al., 2021). With the existence of good SCM strategies and policies, such as optimal inventory management, selecting the right suppliers, and smooth communication between related parties, companies can reduce costs, increase delivery speed, and improve product quality (Asamoah et al., 2021); (Lee et al., 2022). This, in turn, contributes to improved supply chain performance, which is reflected in metrics such as on-time delivery, customer satisfaction levels, and operational efficiency (Perano et al., 2023).

H2: The relationship between Supply Chain Management has a significant positive effect on Supply Chain Performance.

#### **Implementation Technology on Supply Chain Performance**

Technology Implementation is the process of adopting, integrating, and using new technology in an organization's operations. (Kayikci et al., 2022) This includes planning, installation, training, testing, and evaluation to ensure that the technology implemented can support or improve business efficiency, productivity, and effectiveness. (Fatorachian & Kazemi, 2021) The presence of technology implementation in an organization's operational activities is characterized by its ability to improve operational performance, including in terms of supply chain management (Soni et al., 2022; (Widyarini, 2024). This is because the use of technology can increase the efficiency of cost use and improve the quality and speed of operations. (Gu et al., 2021).

H3: The relationship between Implementation Technology has a significant positive effect on Supply Chain Performance.

### **Digitalization on Retail Performance**

In this context, digital technologies, such as the Internet of Things (IoT), big data, and cloud-based supply chain management systems, can enable companies to manage and monitor the flow of goods and information in real-time (Zhao et al., 2023). This helps reduce delays, minimize errors, and increase efficiency in distribution (Perano et al., 2023). Through its digitalization efforts, the company can also be more responsive to fluctuations in demand and market conditions, while also establishing balanced and effective coordination between distributors and retailers.(Zhou et al., 2023); (Malenkov et al., 2020)This indicates that the presence of digitalization implemented by the organization can improve its retail performance (Batsakis et al., 2023).

H4: The relationship between Digitalization has a significant positive effect on Retail Performance

### **Supply Chain Management on Retail Performance**

In the retail context, SCM encompasses all processes that manage the flow of goods from suppliers to store shelves, including inventory management, procurement, distribution, and logistics (Kurdi et al., 2022); (Lee et al., 2022). With good supply chain management, retailers can ensure the availability of the right product, at the right location, at the right time, at an efficient cost (Asamoah et al., 2021). This also contributes to better retail performance, as measured by factors such as operational efficiency, cost reduction, delivery speed, and customer satisfaction and loyalty.(Gupta et al., 2021).

H5: The relationship between Supply Chain Management has a significant positive effect on Retail Performance

### **Technology Implementation on Retail Performance**

Technology enables retailers to automate various processes, such as inventory management, transaction processing, and customer data analysis, which can reduce operational costs and improve accuracy (Kayikci et al., 2022). Through digitalization efforts, companies can also be more responsive to fluctuations in demand and market conditions, while also establishing balanced and effective coordination between suppliers, manufacturers, and distributors (Zhou et al., 2023). For example, technology-based inventory management systems can help retailers avoid stockouts or overstocking, while e-commerce platforms and mobile apps can provide a faster and more convenient shopping experience for customers (Soni et al., 2022); (Shankar et al., 2021). In addition, technologies such as data analytics and artificial intelligence (AI) enable retailers to understand customer shopping patterns, predict demand trends, and adapt marketing strategies more effectively.(Gu et al., 2021);(Yin & Wang, 2023).

H6: The relationship between Implementation Technology has a significant positive effect on Retail Performance.

### **Supply Chain Performance Mediation of Digitalization on Retail Performance**

In this context, digital technologies, such as the Internet of Things (IoT), big data, and cloud-based supply chain management systems, can enable companies to manage and monitor the flow of goods and information in real-time (Zhao et al., 2023)This helps reduce delays, minimize errors, and increase efficiency in distribution, which are indications of good supply chain performance (Perano et al., 2023). Improving supply chain performance can foster an indication of retail performance, which can enable companies to establish balanced and effective coordination between distributors and retailers (Zhou et al., 2023);(Malenkov

et al., 2020). This indicates that the presence of digitalization implemented by the organization can improve supply chain performance as well as retail performance (Batsakis et al., 2023).

H7: The relationship between Supply Chain Performance and Digitalization mediates a significant positive effect on Retail Performance.

#### **Supply Chain Performance mediates the relationship between Supply Chain Management and Retail Performance**

In the retail context, SCM encompasses all processes that manage the flow of goods from suppliers to store shelves, including inventory management, procurement, distribution, and logistics (Kurdi et al., 2022);(Lee et al., 2022)With good supply chain management, retailers can ensure the availability of the right product, in the right location, at the right time, at an efficient cost, as an indication of good supply chain performance (Asamoah et al., 2021). This also contributes to better retail performance(Gupta et al., 2021); (Perano et al., 2023).

H8: The relationship between Supply Chain Performance and Supply Chain Management has a significant positive effect on Retail Performance.

#### **Supply Chain Performance Mediates the Relationship between Technology Implementation and Retail Performance**

In the retail context, SCM encompasses all processes that manage the flow of goods from suppliers to store shelves, including inventory management, procurement, distribution, and logistics (Kurdi et al., 2022); (Lee et al., 2022). With good supply chain management, retailers can ensure the right product, in the right location, at the right time, with efficient costs, as an indication of good supply chain performance (Asamoah et al., 2021). This also contributes to better retail performance(Gupta et al., 2021);(Perano et al., 2023)

H9: The relationship between Supply Chain Performance and Implementation Technology has a significant positive effect on Retail Performance.

#### **Supply Chain Performance Mediates the Relationship between Technology Implementation and Retail Performance**

Technology can enable retailers to automate various processes, such as inventory management, transaction processing, and customer data analysis, which can reduce operational costs and improve accuracy (Kayikci et al., 2022). For example, technology-based inventory management systems can help retailers avoid stockouts or overstocking, while e-commerce platforms and mobile apps can provide a faster and more convenient shopping experience for customers, thus indicating good supply chain performance (Soni et al., 2022); (Shankar et al., 2021). In addition, technologies such as data analytics and artificial intelligence can facilitate retailers to understand customer shopping patterns, predict demand trends, and adjust marketing strategies more effectively, which indicates good retail performance (Gu et al., 2021);(Yin & Wang, 2023).

H9: The relationship between Supply Chain Performance and Implementation Technology has a significant effect on Retail Performance.

#### **Supply Chain Performance on Retail Performance**

Supply Chain Performance is marked to have a very significant impact on Retail Performance because efficiency and effectiveness in the supply chain can directly affect the retailer's ability to meet market demand, manage costs, and improve customer experience (Gupta et al., 2021); (Kurdi et al., 2022). When Supply Chain Performance is running well, for example, in terms of optimal inventory management, high distribution speed(Gawankar

et al., 2020). In addition, it can indicate efficient supplier management, where retailers can ensure products are always available on time in optimal condition, which increases customer satisfaction (Mondol, 2021); (Perano et al., 2023).

H10: The relationship between Supply Chain Performance has a significant positive effect on Retail Performance.

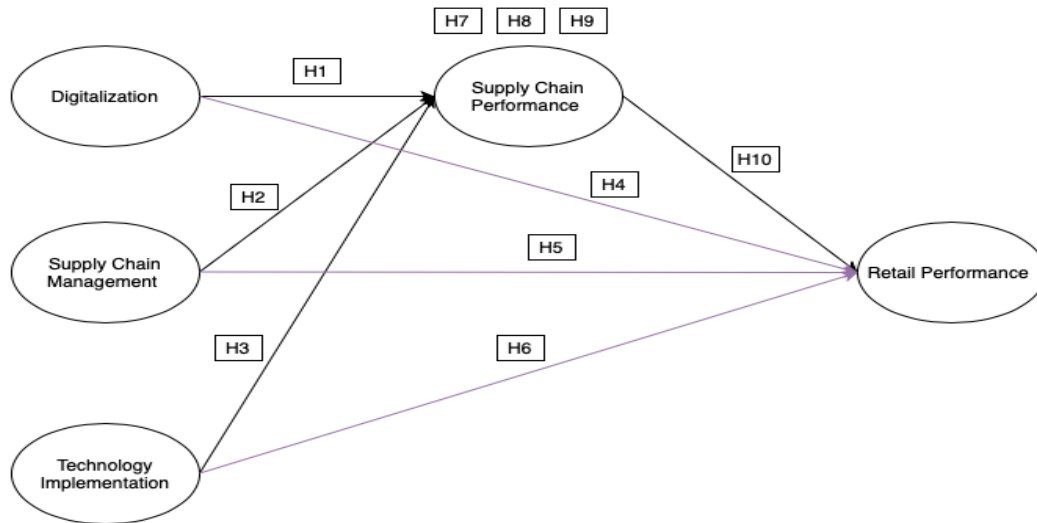
### **Hypothesis Development**

The theory used in this study is the Resource-Based View (RBV). This theory is characterized as a conceptual framework that explains how a company can achieve its competitive advantage through the process of utilizing resources and directing the company towards long-term success and sustainability (Lubis, 2022). The main approach of this theory involves activities that understand the relationship between capabilities, resources, profitability, and competitive advantage is crucial, especially in analyzing how competitive advantage can be sustained over time. This approach was first introduced by Wernerfelt (1984) in his work entitled "A Resource-based View of the Firm." This idea was then further developed by Barney (1991) in his paper entitled "Firm Resources and Sustained Competitive Advantage." In this work, Barney explains that company resources play a crucial role in increasing operational efficiency and effectiveness (Utami & Alamanos, 2016).

Based on this theory, a company's resources, which are characterized as tangible assets such as machinery and technology, along with intangible assets including patents, organizational knowledge, and brand reputation, are the main sources of competitive advantage (Valaei et al., 2022). In this context, this theory suggests that for companies to achieve such an advantage, they must possess a set of valuable, inimitable, rare, and non-substitutable resources. Resources that meet these criteria generally make it more likely for a company to outperform its competitors in the long run (Lubis, 2022).

In the context of this research, this theory is considered relevant because digital technologies, such as cloud-based supply chain management, automation, and data analytics, can be a strategic resource that maximizes operational efficiency and responsiveness in responding to existing market demands. By utilizing digital technologies, research companies can maximize supply chain visibility, minimize logistics costs, and accelerate decision-making (Khourouh et al., 2020). This can provide a competitive advantage that is difficult to imitate, which can maximize retail performance in terms of profitability, customer satisfaction, and long-term competitiveness (Widyarini, 2024).

The key to adapting a digital supply chain (DSC) lies beyond investing in the latest technology. Today, every company is realizing the potential of modern DSC technology. This can lead to improved retail performance and a strong foothold in domestic and international competition (Setyodewi et al., 2021). Adopting digital methods in supply chain systems is a crucial step for companies to achieve optimal organizational performance (Yuswantoro et al., 2022), although many companies are determined to improve their supply chains, the adoption rate of digital technologies is still low.



**Figure 1.**  
**Conceptual Framework**

## RESEARCH METHOD

The research method used in this study was quantitative, using a 5-point Likert scale to measure respondents' perceptions and opinions regarding the variables studied. The data came from 274 respondents who submitted an email survey questionnaire via the internet. This widely used scale requires respondents to rate their level of agreement with a series of research questions. The independent variable was digital, which encompassed three main sections.

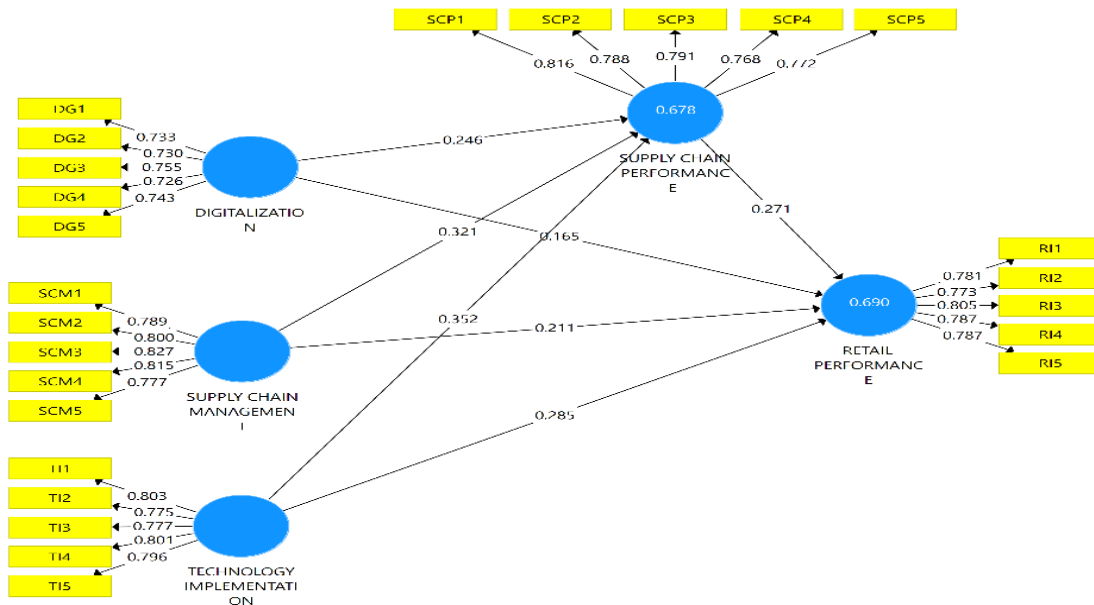
This study focuses on the relationship between digitalization, Supply Chain Management (SCM), and Technology Implementation (IT) in the context of Retail Performance (KR). The variables involved include 25 items measuring retail performance, with Partial Least Squares Structural Equation Modeling (PLS-SEM) used as the primary analysis method. Utilizing SmartPLS software, this study evaluates reliability, convergent validity, composite reliability (CR), discriminant validity, and heterotrait-monotrait ratio (HTMT), as well as testing the proposed hypotheses. PLS-SEM is used to understand the strong influence of digitalization, SCM, and IT implementation on retail performance, providing in-depth insights into how technology and supply chain management can improve operational and strategic outcomes in the retail industry.

## RESULTS AND DISCUSSION

### Convergent Validity

Convergent validity in the context of factor analysis or structural equation modeling (SEM) describes the extent to which a latent variable (construct) is well reflected by the measurement items in a study. Two key indicators for measuring convergent validity are Average Variance Extracted (AVE) and Composite Reliability (CR). According to Fornell & Larcker (1981), the expected AVE value to reach a satisfactory level is at least 0.50, indicating that more than half of the variation in the latent variable can be explained by the measurement items used. Meanwhile, CR measures the internal consistency of measurement

items in measuring the same construct; the higher the CR value, the more reliable the measurement of the latent variable. Ensuring that AVE and CR meet the required standards is crucial to ensuring that data analysis and interpretation of the results are well-founded and credible within the context of the research being conducted (Fornell & Larcker, 1981).



**Figure 2.**  
**Test Results of Convergent Validity**

The figure above shows the influence of each variable, how digitalization, supply chain management, and technology implementation impact retail performance, which is then mediated by supply chain performance. Based on data processing from a questionnaire distributed online to 274 respondents, the results of the data processing are shown below.

**Average Variance Extracted (AVE)**

Testing the suitability of the external model, looking at external loadings, discriminant validity factors, and composite reliability. Ideal discriminant legitimacy is achieved when the AVE value exceeds the coefficient of the relationship between the unemployed factors. Discriminant legitimacy is considered solid if the coefficient exceeds 0.5. The AVE test shows a value of 0.544 for Digitalization, 0.619 for Retail Performance, 0.643 for Supply Chain Management, 0.620 for Supply Chain Performance, and 0.625 for Technology Implementation. 0.5, indicating adequate validity for each variable. Thus, overall, the validity of the five variables can be said to be valid.

**Table 2.**  
**AVE Test Results**

	<b>Average Variance Extracted (AVE)</b>	<b>Information</b>
Digitalization	0.544	Valid
Retail Performance	0.619	Valid
Supply Chain Management	0.643	Valid
Supply Chain Performance	0.620	Valid
Technology Implementation	0.625	Valid

### Reliability Test

According to Ghozali, composite reliability (CR) is a measuring tool used to test the reliability of indicators in a variable. A variable is said to have good reliability if its composite reliability value exceeds 0.6. CR indicates how consistent the measurement indicators are in measuring the same construct. In addition, reliability testing can be strengthened by using Cronbach's alpha value, which functions to assess internal consistency between indicators in a measurement. The combination of CR and Cronbach's alpha provides a strong indication of the reliability and consistency of variable measurements in the context of the research being conducted. Composite reliability testing is conducted to ensure the accuracy, consistency, and precision of the measurement tool in measuring a construct. There are two main methods used to assess the reliability of a construct. First, utilizing the Cronbach's alpha value, where the expected alpha value indicates good internal consistency is greater than 0.70. Cronbach's alpha measures how well the measurement items are interrelated and measure the same construct. Second, by measuring composite reliability (CR), which must also have a value of more than 0.70 to ensure that the construct measurement indicators can be consistently relied upon.

Based on the table, the composite reliability calculation results for all constructs show values above 0.60. This indicates that respondents provided consistent answers to the questions posed. In other words, all constructs in this study have a good level of reliability. Therefore, it can be concluded that all variables analyzed in this study meet the reliability criteria and have sufficient reliability to be used in further analysis and interpretation of the research results.

**Table 3.**  
**Reliability Test Results**

	<b>Cronbach's Alpha</b>	<b>Composite Reliability</b>	<b>Information</b>
Digitalization	0.791	0.856	Valid
Retail Performance	0.846	0.890	Valid
Supply Chain Management	0.861	0.900	Valid
Supply Chain Performance	0.846	0.891	Valid
Technology Implementation	0.850	0.893	Valid

### R-Square

R-Square provides valuable insights in testing structural models. In the context of research data, internal model testing can be conducted by considering the R-Square value. According to Chin (1998), an R-Square value exceeding 0.67 is categorized as strong. Based on Table 4, the R-Square value for Retail Performance is 0.690, and the Adjusted R-Square is 0.685. This indicates that the model is able to explain 69% of the variation in Retail

Performance, which means the influence of the independent variables on Retail Performance is very strong. Meanwhile, the R-Square value for Supply Chain Performance is 0.678, and the Adjusted R-Square is 0.675. This indicates that the model is able to explain 67.8% of the variation in Supply Chain Performance, which also indicates a very strong influence of the independent variables on Supply Chain Performance.

**Table 4.**  
**R-Square**

	<b>R Square Adjusted</b>
<b>Retail Performance</b>	0.685
<b>Supply Chain Performance</b>	0.675

**Heterotrait-Monotrait (HTMT)**

A HTMT limit of less than 0.90 indicates that the value is within a statistically acceptable range. The HTMT (Heterotrait-Monotrait Ratio) is used to measure convergent validity in confirmatory factor analysis or structural equation modeling. A low HTMT value indicates that the constructs being measured are simultaneous. The validity test results of the HTMT values obtained from all constructs are less than 0.90, indicating that all tested constructs have good convergent validity.

**Table 5.**  
**Heterotrait-Monotrait Ratio (HTMT Ratio) Test Results**

	<b>Digitalization</b>	<b>Retail Performance</b>	<b>Supply Chain Management</b>	<b>Supply Chain Performance</b>	<b>Technology Implementation</b>
Digitalization					
Retail Performance	0.834				
Supply Chain Management	0.824	0.863			
Supply Chain Performance	0.849	0.896	0.877		
Technology Implementation	0.809	0.887	0.861	0.886	

**Hypothesis Testing**

The next test is conducted through a hypothesis test using the T-statistic test method. If the results of the external model test show significance, this indicates that the indicators can function well as a variable measurement tool. According to Latan & Ghozali, the hypothesis test aims to assess the value of the T-statistic using a significance level of 95% ( $\alpha = 0.05$ ). The value used as a reference for testing significance is 1.96, which is the value from the t-distribution table with a significance level of 95%. In this context, for a proposed null hypothesis (H0), if the calculated T-statistic value is greater than 1.96, then the H0 hypothesis will be rejected. Conversely, if the T-statistic value is less than 1.96, the H0 hypothesis is accepted. This means that to reject the null hypothesis at the 95% significance level, the T-statistic must reach or exceed the critical value of 1.96 (Perdana et al, 2018).

The following is a table of coefficients for each hypothetical path (Path Coefficients) and the T-Statistics values obtained from the SmartPLS bootstrapping output:

**Table 6.**  
**Path Coefficients**

	Original Sample (O)	T Statistics ( O/STDEV )	P Values
Digitalization -> Retail Performance	0.165	2,433	<b>0.015</b>
Digitalization -> Supply Chain Performance	0.246	3,286	<b>0.001</b>
Supply Chain Management -> Retail Performance	0.211	2,737	<b>0.006</b>
Supply Chain Management -> Supply Chain Performance	0.321	4,404	<b>0,000</b>
Supply Chain Performance -> Retail Performance	0.271	3,939	<b>0,000</b>
Technology Implementation -> Retail Performance	0.285	3,445	<b>0.001</b>
Technology Implementation -> Supply Chain Performance	0.352	5,021	<b>0,000</b>

## CONCLUSION

This study evaluates the relationship between digital supply chain (DSC) and supply chain performance. It shows that DSC, consisting of three main components—digitalization, supply chain management, and technology implementation—has a positive impact on supply chain performance, as found in the results of this study. As a mediating variable, it helps companies develop business, improve supply chain services, achieve competitive advantage, and eliminate inefficiencies. This mediation explains the inconsistency of previous findings regarding the direct relationship between independent variables and DSC. In conclusion, DSC implementation is important for maintaining credibility and competitive advantage in the competitive retail market. Willingness to face new challenges and technological developments is key to company's progress. A similar study by Racher et al. (2018) also found that supply chain digitalization not only contributes to improved supply chain performance but also influences overall company performance. However, many companies still have not fully utilized this potential. Understanding the benefits of DSC in their business operations.

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